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# Watching children: A history of America's race to educate kids and the creation of the 'slow-learner' subject

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WATCHING CHILDREN: A HISTORY OF AMERICA'S RACE TO EDUCATE KIDS  
AND THE CREATION OF THE 'SLOW-LEARNER' SUBJECT

VOL. I (CH I-IV)

BY

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DISSERTATION

Submitted to the University of New Hampshire

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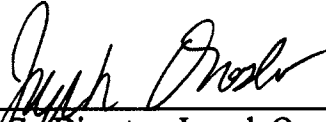
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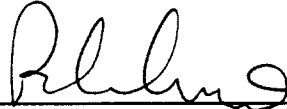
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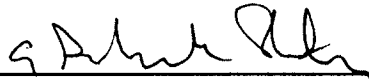
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## **ABSTRACT**

### **WATCHING CHILDREN: A HISTORY OF AMERICA'S RACE TO EDUCATE KIDS AND THE CREATION OF THE 'SLOW-LEARNER' SUBJECT**

By

Jeffrey C. Frenkiewich

University of New Hampshire, December 2012

On January 25, 2011, United States President Barack Obama delivered his State of the Union address to Congress and to the nation. As part of that address, President Obama articulated his vision for American education and stated that America had “to win the race to educate our kids” (Obama, 2011, state of the union). Mr. Obama’s speech and his “Race to the Top” policy stand as statements in a discourse that expects fast-paced education based on universal standards and quantitative measures. Tracing a history of American schooling, one sees that this discourse has been dominant in this society for most of the past hundred years. However, while policy makers often tout ‘science’ as the foundation for decisions in America’s race to educate children, a ‘science’ that employs a one-dimensional concept of universal time and linear progress is problematic when applied to human learning.

Drawing from Michel Foucault’s methodological ‘toolbox’, the current study is a critical ontology asking how American society has constructed education as a time-oriented endeavor in which we race to educate our children. A ‘Foucauldian analysis’ allows us to question our understandings of ourselves and helps us question the power

that rules over our lives, and in an examination of this history, the current study shows how notions of universal time and linear progress have gained power in American schools. As part of this history, the study illustrates how the American government, newspaper media, and academic journals have created a 'slow learner' subject as an object of power used to explain vast economic inequalities in society, justify dividing practices that sort students based on intellectual measures, and instill anxiety about the pace of education into American society. However, the current study also interrupts the discourse of universal time and linear progress now used in American schools in two ways. First, the current study highlights inconsistencies in the dominant narrative of 'fast-' and 'slow-' learners by illustrating a broader understanding of these subjects than how they are characterized in the discourse. Second, the current study problematizes the constructed binaries made possible with notions of universal time and linear progress by introducing alternative models of time and progress (e.g., relativity theory; quantum theory; chaos theory) that are more accurate in describing the phenomenon of time and arguably are more appropriate for use in American schools. The significance of the dissertation emerges when we realize that in considering education policies, we must question the discourse of time that shapes how we view our students and ourselves, and we must question why we race to educate our kids.

## INTRODUCTION

*The Hare was once boasting of his speed before the other animals. "I have never yet been beaten," said he, "when I put forth my full speed. I challenge any one here to race with me."*

*The Tortoise said quietly, "I accept your challenge."*

*"That is a good joke," said the Hare; "I could dance round you all the way."*

*"Keep your boasting till you've beaten," answered the Tortoise. "Shall we race?"*

*So a course was fixed and a start was made. The Hare darted almost out of sight at once, but soon stopped and, to show his contempt for the Tortoise, lay down to have a nap. The Tortoise plodded on and plodded on, and when the Hare awoke from his nap, he saw the Tortoise just near the winning-post and could not run up in time to save the race. Then said the Tortoise: "Plodding wins the race." (Aesop, 1909 / original date unknown)*

### **"Our Sputnik Moment"**

On January 25, 2011, United States President Barack Obama delivered his State of the Union address to Congress and to the nation. As part of that address, President Obama articulated his vision for American education and outlined his initiative to put America back on a course to "win the future" (Obama, 2011, state of the union). To the point, he states,

Maintaining our leadership in research and technology is crucial to America's success. But if we want to win the future — if we want innovation to produce jobs in America and not overseas — then we also have to win the race to educate our kids (Ibid).<sup>1</sup>

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<sup>1</sup> As I speak of education, I keep in mind Hannah Arendt's conceptual distinction between 'education' and 'learning'. She writes, "Education, as distinguished from learning, must have a predictable end. In our civilization this end probably coincides with graduation from college...it no longer aims to introduce the young person to the world as a whole, but rather to a particular, limited segment of it. One cannot educate without at the same time teaching; an education without learning is empty and therefore degenerates with great ease into moral-emotional rhetoric. But one can quite easily teach without education, and one can go on learning to the end of one's days without for that reason becoming educated" (Arendt, 1968, p. 195-196). This distinction between 'education' and 'learning' is important for the reader to keep in mind because it becomes part of a key premise in the discourse of the race to educate, particularly in the context of efficiency. For example, Chester Arthur Gregory writes, "The purpose of the school is not that the child shall learn, for he will learn without the school. Learning is a spontaneous process which no lack of  
*Note continued on next page.*

As part of President Obama's plan to win the future, he proposed putting 100,000 more science, technology, and math teachers into America's schools, permanently allowing college students to take a \$10,000 tax credit for their tuition, and expanding his favored education grants program called Race to the Top (Paulson, 2011, Jan. 26). As part of the grant program, schools and state departments of education were required to draft plans to improve students' performances on standardized-tests, integrate data tracking systems for monitoring students' 'progress' (Song, 2010), tie teacher evaluations to students' standardized test scores (Khadaroo, 2010, Jul 29), and add time to the school year (Gabrieli, 2010). Though some of these requirements presented controversial changes into America schools, at a time of economic uncertainty, it is hard to argue against an influx of money. Thus, by the night of the president's speech, forty states had already raced to meet federal deadlines and eleven states, plus the District of Columbia, had won monies to implement their new educational regimes.

For those Americans who were not yet convinced that we needed a race to educate our children, President Obama's State of the Union address communicates a historical justification for the race. Conjuring an image that appeals to Americans' nationalist and economic anxieties, he said,

Half a century ago, when the Soviets beat us into space with the launch of a satellite called Sputnik, we had no idea how we would beat them to the moon. The science wasn't even there yet. NASA didn't exist. But after investing in better research and

---

schooling can stop and no extent of schooling can do more than modify. Its purpose is to furnish conditions under which the child, through systematic and economic effort, will accomplish more for himself, and that which is accomplished will be of a better quality, and the product will be obtained by him in shorter time and with less expenditure of energy than if he learned it under other conditions" (Gregory, 1922, p.18). We must consider whether the best purpose of schools is as institutions for education, or as institutions for learning.

education, we didn't just surpass the Soviets; we unleashed a wave of innovation that created new industries and millions of new jobs. This is our generation's Sputnik moment (Obama, 2011).

In short, according to Mr. Obama, the United States is once again in a race: not an arms race, not a space race, but an economic race; a Race to the Top. And just as we raced to educate kids in our desire to reach the moon half a century ago, we are now racing to educate our kids to meet the challenges of the twenty-first century - according to some we are already behind. This race to educate children has been a narrative in American education for well over a century, but President Obama is America's newest coach and his powerful voice has brought this discourse to places it has not touched before.

### **Racing Tortoises**

When I listen to the discourse concerning education in America today, I cannot help but think of Aesop and his ageless tale of the Tortoise and Hare. With calls to have 'No Child Left Behind', government programs to give kids a 'Head Start', and now a 'Race to the Top', it is hard to ignore the dominant metaphor in the discourse promoted by the United States government – America is in a race to educate our kids, and the young are expected to learn as fast as possible. Yet, there are many reasons why we ought to question this discourse and its notion that it is right to race children in their education.

Many people know Aesop's fable of the Tortoise and the Hare; the version printed at the start of this introduction was published in a 1909 grade school reader but different translations and moral interpretations of this story have been published continuously throughout the course of United States history. The tale is thus; the *slow and steady* Tortoise plods along to victory while the *fast and erratic* Hare sprints to the lead and rests with confidence, only to stumble in defeat. The stated moral of this fable,

to paraphrase Tortoise, is *slow and steady, wins the race*; the underdog can beat anything so long as she maintains her integrity and keeps her course.

The aforementioned moral may influence the behavior of some readers; yet, the power of this fable is not captured in Tortoise's mantra. Rather, it is captured in Aesop's use of binary concepts and a corresponding hierarchy of ethical assumptions. With Tortoise and Hare as respective representatives, Aesop presents four normative subject positions. The Tortoise and Hare respectively represent 'slow and steady' and 'fast and erratic', but lying hidden are Aesop's two other subject positions of 'slow and erratic' and 'fast and steady'. Slow and steady did win the race in Aesop's tale, but on this continuum, a fast and steady competitor would have done better.

While some may interpret the story to privilege slow and steady behavior, the full power of the moral comes when one considers the fast and steady competitor missing from Aesop's race. Yes, the slow and steady Tortoise illustrates the failure of the erratic Hare, but we need not stretch our imagination to see who would have won if Hare had stayed awake and remained steady in his trajectory. Thus, steady behavior is privileged, but a fast pace is required if one wishes to gain the top position in the race with all competitors present.

This privileging of a fast and steady pace in education is well illustrated by recent government policies such as President George W. Bush's 2002 No Child Left Behind Act. With No Child Left Behind, lawmakers aspire to have every student in America 'proficient' in reading and mathematics skills by the 2013-2014 school year. To keep students from 'falling behind', the law calls for each state to set standards and administer yearly standardized-tests to determine students' and schools' 'progress' toward reaching



those goals. The federal government not only expects all students to pass an arbitrary finish line by 2014, but they expect a steady trajectory with constant ‘progress’.

In an effort to motivate teachers and principals to keep students ‘progress’ steady, the No Child Left Behind Act introduced a new term into the educational lexicon – ‘School Failure.’ Starting in the 2004-2005 school year, schools that do not show a satisfactory percentage of students making “adequate yearly progress” toward the 2014 deadline are required to offer their students a transfer to a “higher performing school” or to pay for tutoring. If a school continues to miss the quotas, they have to adopt standardized curricula premised on “scientifically-based research,” and further failure leads to state take-over and termination of all staff. With No Child Left Behind, ‘science’ now controls schools, and government officials expect teachers across America to produce results at preset rates or the teachers, their schools, and their students are deemed ‘failures.’ The clock is set, and students now have a certain amount of time to race or they are ‘left behind’ – there is no time for slow learning and there is no room for erratic behavior.

Despite claims that No Child Left Behind would cure America of its education woes, it has only inspired controversy and prompted schools to adopt questionable education policies. In many cases, schools have narrowed curricula to focus on improving test scores, many times targeting disadvantaged students with rote test preparation (Toppo, 2011, Mar. 18; Taubman, 2009). To monitor student progress, an entire industry has been born providing educators with tools for checking even the smallest changes in student performance. Princeton Review, for example, has sold thousands of school licenses to a web-based product called Homeroom that allows

teachers to give mini-tests to check student skills on a daily basis (Kronholz, 2003, Dec. 24).

If focused test preparation does not educate kids fast enough, some school districts encourage teachers to retain students who are likely to fail the exam (McNeil, 2005). In many cases, after several retentions, students choose to drop out of school rather than face another year of failure (Lipman, 2003). Alternatively, there have been several cases in the last ten years in which teachers have modified students' test answers, filled in blanks, or otherwise modified testing procedures to benefit their school's image (Toppo, 2011, Mar. 18). In an effort to avoid the perception of failure, some states have lowered their standards to ensure more students pass with proficiency (Toppo, 2009, Dec. 30). The most recent push to race children in their education has driven many officials to ignore the means of education in pursuit of this powerful end.

All the while, the academic effect of this race remains in question. When quantified, students' reading abilities and math computation skills in the years since Congress enacted No Child Left Behind seem stagnant (Onosko, 2010, 2011). George W. Bush's No Child Left Behind has undoubtedly left many children behind, but a decade after Congress passed the law, students still race to meet national quantified targets and now states Race to the Top with plans to push students even faster.

Therefore, I wonder how Western civilization's two most famous racers would fare in today's school environment where fast and steady learning is privileged above all else. It seems that American culture in the early years of the twenty-first century has no room for a Tortoise who plods along, no room for a student who is not fast enough to make 'adequate yearly progress'. With Tortoise's pace, I wonder if she would be labeled

with a 'learning disability', I wonder if she would have to go to a special room every day for 'Response to Intervention'. Likewise, the current education discourse seems no better for Hare; sporadic leaps and jumps do not seem to fit with expectations of uniform progress. Would the Hare's apparent 'habit' of taking naps in the middle of his lessons gain him the label of 'behavior problem'? If Hare did not 'make progress' at the right moment would he be 'held back' in the same grade? Would others expect more from him and be disappointed in him even though he still finished the journey? Today's system of public education in America does not seem kind to either Tortoise or Hare.

### **Time to Question**

If our drive to race students' education has anything to do with preventing one from furthering her or his educational experience, we must pause and question how we came to this narrative. How did we come to believe that education ought to be a race? One part of the answer to how we came to expect a fast and steady pace to education is as old as time itself, literally. For, it is a discourse of universal time and linear progress that fertilizes 'Race to the Top,' 'No Child Left Behind,' and many other education reforms, dating back long before the Soviet's Sputnik reached orbit. And while its technologies of power are so visible (how many clocks do you own?), it is a knowledge so ingrained in our consciousness that few people question its truth, let alone the dubious way in which it affects our behaviors.

Thus, the current study traces the knowledge of 'time' that is used in the discourse of America's race to educate. In an examination of this history, we can see how notions of universal time and linear progress have gained power in American schools; we can see how the American government, newspaper media, academic journals, and grade school

teaching materials have instilled this value system into the American public. By tracing a history of 'time' in American education, we can also see a discourse littered with the bodies of millions of young people who are used to support this regime of truth. Children who are labeled 'backward', 'defective', 'retarded', 'slow learners', 'learning disabled', etc., who serve as proxies for Americans' concerns with everything from foreign invasions to street crime and economic collapse, and who are used as objects of power in promoting anxieties about the pace of education in American society.

Just as Aesop needs Tortoise to demonstrate the potential, and failings, of the Hare, society has created a 'slow learner' as a counterpoint for regulating the behaviors of the 'normal' child. One would not be so convinced to race faster if the Tortoise had defeated a steady Snail, or if the Hare had defeated a Tortoise who was equally erratic, and likewise, by creating the fast and steady 'gifted learner', we have someone whom the 'average' child can aspire to be. Thus, without the 'slow learner' juxtaposed to the 'fast learner', the discourse of racing to educate our kids loses power, and without the 'stable learner' juxtaposed to the 'erratic learner', the policies that segregate our children in American schools lose power. It is this fast/slow binary that premises statements made by authorities like George W. Bush, Barack Obama, and Arne Duncan who aim to speed up the pace of learning.

In short, without this language, and without the gaze of the clock, we are left to wonder what it means to be 'slow' or 'fast'; what it means to be 'gifted' or 'SPED'; what it means to be steady or erratic; what it means to race! And without these constructed binaries, the discourse of universal time and linear progress that shapes American

education policies loses power. It is my goal, therefore, to ‘trouble’ this discourse that pushes us to race children in their education.

The current study interrupts the discourse of universal time and linear progress now used in American schools in two ways. First, the current study highlights inconsistencies in the dominant narrative of ‘fast-’ and ‘slow-’ learners by illustrating a broader understanding of these subjects than how they are characterized in the discourse. I question the disciplinary technologies that reinforce the concepts necessary for a ‘race’, and I question the modes of objectification that have created the ‘slow learner’ as a trope for personal failure as well as national failure. Second, the current study problematizes the constructed binaries made possible with notions of universal time and linear progress by introducing alternative models of time and progress (e.g., relativity theory; quantum theory; chaos theory) that are more accurate in describing the phenomenon of time and may be more appropriate for use in American schools. In light of these arguments, when considering education policies, we must therefore question the discourse of time that shapes how we view our students and ourselves, and we must question why we race to educate our kids.

## CHAPTER I

### LITERATURE REVIEW: 'TIME' AND PRIVILEGE IN AMERICAN SCHOOLS

#### 'Time' and the Curriculum

Time has been a subject of inquiry since humans first looked at the stars. In fact 'time' is the most commonly used noun in the English language (Wajcman, 2008 citing OED 2006). Since the first time humans walked this earth philosophers and laypeople have questioned the meaning of seasonal cycles, movements of the sky, age, and death. Privileged philosophers of the physical and the metaphysical including Plato, Aristotle, Newton, Einstein, Bohr, Augustine, Kant, Marx, Derrida and Hawking have all contributed to slightly different conceptions of time leaving historian J.T. Fraser (1987) to call time "*the familiar stranger*". For the past century, time has been a concern of industrialists (e.g. Taylor's *scientific management* and Ford's *assembly line*), artists (e.g., Picasso's *cubism* or Dali's *surrealism*), psychologists (e.g. James' *time perception* or Mihaly Csikszentmihaly's *flow theory*), philosophers (e.g. Heidegger's *being and time* or Derrida's *differance*), and millions of people who unfortunately are silent here. These examples only how in the twentieth century, a discourse of universal time and linear progress has played on social anxieties and has been a power in shaping ideas and events (Kramer & Ikeda, 2001, p. 73 citing Gebser, 1949/1985, p. 22)

Research in the field of education has not avoided playing a role in this discourse of time. Education research has worked to affect, and has been affected by, a notion of time that is an ever-present theme, yet often remains hidden. In education research, time has been used “as a variable to be controlled, managed, or manipulated for the purpose of advancing instructional objectives, improving classroom management, and enhancing evaluation results” (Slattery, 1995, *Time and Education*, p. 4); in the dominant discourse, time can be divided, “wasted, blocked, saved, killed, displayed, and of course, measured” just as any other commodity (Kramer & Ikeda, 2001, p.73). Yet, few education scholars have questioned the disciplinary power of ‘time’ in shaping our subjectivities and influencing the educational experiences of students. Fewer educators have questioned the epistemological foundations of time, and only a small number of studies propose an alternative discourse of time for use in educational settings. Thus, Lofty (1992) states, “As a profession, educators do not know enough about how the quality of time in school influences how our students feel, think, and act” (p.4). The current study addresses this concern, and therefore serves as a needed addition to this field of literature.

For studies that even acknowledge time as a factor in shaping educational experiences, most of the existing literature in the field of education research assumes a conception of time as universal and linear, viewing ‘time’ as a quantitative independent variable. This assumption results in a plethora of educational writings that emphasize time management (e.g., Levine, M. 2002), assessment of time on task (e.g., Rief, 1993), quantification of learning objectives (e.g., Hirsch, 1996), due dates (e.g., Ancona et al. 2001; Ancona, Okhuysen, & Perlow, 2001), focus on schedules (e.g., Hottenstein, 1998, Gabrieli & Goldstein, 2008), motivation (e.g., Skinner, 1953), and an overall anxiety in

finding an efficient use of this abstract resource (for more examples see Slattery, 1995, p. 4). In short, it seems that many education researchers remain trapped as prisoners of time.

Ironically, a notable example of this body of 'research' is a 1994 report originally published by the National Education Commission on Time and Learning entitled *Prisoners of Time: Too much to teach, not enough time to teach it*. Updated in 2000, *Prisoners of Time* assumes the naturalness of time and urges educators to work around this variable. For example, the Commission offers a seemingly appealing recommendation for educators to "use time in new and better ways...so that time becomes a factor supporting learning, not a boundary marking its limits" (p. 58). Also, the Commission urges educators to "keep schools open longer to meet the needs of children" (p. 61) and "give teachers the time they need" by providing them with "the professional time and opportunities they need to do their jobs" (p. 62) – few teachers would balk at accepting these latter recommendations.

Yet, with its foundation on a notion of time as an independent variable, *Prisoners of Time* makes several recommendations for teaching that should be questioned. The Commission recommends that "many students will need more time; some will need less" (p. 61), under the assumption education is a time-oriented endeavor with a predetermined destination. Similarly, the book contains a question and answer section on year-round schooling (p. 57) assuming that student who work longer hours walk away with more knowledge. With apparent concern for the Tortoises and Hares among us, the Commission recommends that a key to "fixing the design flaw" of education is the employment of small homogeneous groupings "for the initial teaching or for



reinforcement of skills” (pg. 59). In *Prisoners of Time*, the efficient use of time is the priority, with extending time as the alternative for those who are ‘slow’. This policy document promotes dangerous conclusions about time, learning, and student differences.

Focusing on the expected pace of education, several authors have spoken out against this discourse of fast and steady education. “As a confessed slow reader,” Thomas Newkirk (2010) attracted national attention when he made, “a case for slowness” (p. 6; see also Newkirk 2012). Criticizing the notion that ‘fast readers equal better readers’, Newkirk asks his audience to reevaluate the qualitative role of speed in reading. The author celebrates the “real pleasure in downshifting, in slowing down” (p. 6), and argues that certain meanings and pleasures in reading can be gained in no other way than by slowing down the pace of reading by re-reading passages or even memorizing favorite verses.

Borrowing from a similar “slow” movement in the food industry, Newkirk’s voice is one amongst a growing number of writers who are challenging the race to educate. In 2002, Maurice Holt challenged readers to “start the slow school movement,” a philosophy of schooling that looked to bring back education that is “eclectic, imaginative, and socially stimulating” (p. 268). Positioning his work in the theories of John Dewey (1938) and Theodore Sizer (1986), Holt calls for a school where “understanding matters more than coverage” (p. 269). Without slowing down, according to this argument, the student may never experience the full bouquet of flavors offered by the written word, or topic of inquiry. Accordingly, Newkirk calls on schools to “take a stand” against the discourse that creates a “hectic digital environment” for reading and writing (2010, p. 8).

Citing the work of Neil Postman (1979), Newkirk calls on schools to act as a thermostat to prevailing cultural norms. The author questions norms promoted in works by authors such as Jennings & Haughton (2002) who argue that speed can be used as a competitive advantage in a business world in which *it's the Fast that eat the Slow*. Newkirk's rebuttal to arguments such as this is that "schools should act to check – and not to imitate – some tendencies in the wider information environment" (Newkirk, 2010, p. 8). For Newkirk, fast-paced life is a value that should be checked in schools.

Other authors have argued for a slowdown based on ontological grounds. Virilio (1995, 2000), for example, argues that due to technology speeding up the world, and humans' inability to absorb the abundance of information, our very conceptions of reality are starting to disappear. Eriksen (2001) further argues that human notions of past and future are threatened by a "tyranny of the moment" in which information is expected simultaneously with actual events (p. 3). Because of these perceived changes in the quality of human existence, Virilio, calls for a slow-down to protect the lived human experience from the invasion of technology (Wajcman, 2008, p. 61). Eriksen (2001) also calls for a reconceptualization of knowledge acquisition, stating, "The point is no longer to attend as many lectures as possible....On the contrary: the overarching aim for educated individuals in the world's rich countries must now be to make the filtering of information a main priority" (Eriksen, 2001, p.19). A discerning taste for information, according to Eriksen, is more important than the acquisition of all that can be reached – the consequences of holding any other value results in no less than the very extinction of human identity.

One method for understanding how notions of time have come to dominate the discourse of education scholarship is through the discipline of curriculum history. A historian of curriculum and instruction would be remiss if she or he did not discuss curriculum theories that competed for a privileged position in American schools and then try to make connections between current statements and those curriculum narratives. For instance, one may position the authors of *Prisoners of Time* within a social efficiency curriculum discourse whereas one may position Newkirk within a learner-centered curriculum discourse. Thus, an examination of this literature within the discipline of curriculum history may help one understand how educators came to race their students, but because one can trace these curriculum theories to temporally influenced discourses, they do not provide a satisfactory answer for how we came to race in our education. If anything, articulations of these curriculum theories, themselves, stand as statements within the discourse under investigation.

Often conceptualized as four differing discourses, each narrative for curriculum may have some grounding in the disciplinary power of time. For example, one may conceptualize the curriculum theory that one historian calls scholar academic (Schiro, 2008<sup>2</sup>) as falling under a discourse of time as a static structure, where ‘original’ ideas remain permanent fixtures in a society. The scholar academic curriculum holds that society has accumulated knowledge over the centuries, and that the purpose of education is to transfer that knowledge to the next generation (Schiro, 2008, pg. 4). Thus, knowledge and human learning, for the scholar of academic curriculum theory, carries a

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<sup>2</sup> Curriculum models similar to the scholar academic philosophy are identified as academic rationalism (Eisner, 1974); intellectual traditionalist (Schubert, 1996); liberationist (Fenstermacher & Soltis, 1992); constructing understanding & connecting to the canon (Joseph et al. 2000); knowledge centered (Ellis, 2004); or humanist (Kliebard, 2004).

perception of timelessness and the direction of learning is most often oriented towards the past.

A second curriculum theory that historians discuss is one called learner-centered (Schiro, 2008<sup>3</sup>). In this discourse, the present needs of the students come first, and one may view the past and future as reference markers for developing lessons relevant to the individual in the present moment. Similarly, a curriculum theory labeled social efficiency (ibid<sup>4</sup>) has a temporal orientation in the present. This discourse of education calls for schooling based on the current needs of society; students train to perform a function with hopes of becoming a productive member of the community. In terms of the race in education, this is the curriculum theory that receives the most attention because Taylor's revolutionary use of the stopwatch to judge effective procedures in manufacturing was brought into schools (O'Malley, 1990). Thus, educators who create lessons in this discourse base their teaching on the needs of the present with a gaze at the future problems that society may encounter.

One may refer to the fourth curriculum discourse conceptualized in the literature as social reconstruction (Schiro, 2008<sup>5</sup>). Perhaps most oriented toward the future, this discourse looks to facilitate and construct a new society based on justice and the redefinition of cultural assumptions (ibid, p. 6). Students in this discourse work to solve the problems of the present with a clear focus on a vision of the future.

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<sup>3</sup> Curriculum models similar to the learner-centered philosophy are identified as self-actualization (Eisner, 1974); experientialist (Schubert, 1996); therapist (Fenstermacher & Soltis, 1992); developmentalist (Zeichner, 1993); developing self and spirit (Joseph et al., 2000); or child study (Kliebard, 2004)

<sup>4</sup> Curriculum models similar to the social efficiency philosophy are identified as technology & cognitive processes (Eisner, 1974); social behaviorist (Schubert, 1996); executive (Fenstermacher & Soltis, 1992); training for work and survival (Joseph et al., 2000); or scientific management (Kliebard, 1999)

<sup>5</sup> The social reconstruction curriculum model is similar to others identified as critical reconstructionist (Schubert, 1996); confronting the dominant order & deliberating democracy (Joseph et al., 2000); society centered (Ellis, 2004); or social meliorist (Kliebard, 2004)

However, as much as these conceptions of curricula help us understand the discursive themes in the scholarly debate concerning education, they fall short of providing a satisfactory answer to how we came to race our children's education. While an understanding of scientific management and the scholarship of social engineers such as Frederick Winslow Taylor is certainly part of this story, this disciplinary procedure is only an artifact of a larger discourse of time and progress. To position an answer for how we came to race solely within an explanation of scientific management is not satisfactory. A history of scientific management in American schools *is not* the entire answer, but we must address its power and the power of the notion of time it employs.

### **Discourses of Disability**

Along with studies in curriculum theory, research on how society positions subjects as objects of power can help us answer how we came to race in our education. The identification of less-privileged students has been widely researched, and in many cases, authors have shown how such identifications have reinforced the prevailing discourses that work to marginalize the subject (e.g., Apple, 2004). Attention to the language of marginalization is important because it can help one identify discursive power hidden by labels imposed on purportedly threatening subjects, and studying the 'slow learner' label, for example, lets us see how the power of universal time plays in shaping school policies. More importantly, perhaps, an examination of the language of marginalization prompts questions about the ethics of such school policies – questions that we cannot ignore.

Many important studies have focused attention on the language of 'special needs'. Corbett (1996), for example, states, "In order to more fully understand why some learners

are marginalized and given an inferior status, it is important to explore the way in which language has been used” (p.3). While it is easy to point the finger, or sign the I.E.P, labeling a student ‘slow’, ‘retarded’, or ‘special’, Corbett reminds us that we are all fragile beings and that there are some times in everyone’s life when we are ‘idiots’, ‘morons’, or ‘fools’ (p. 5). In a world where kids depend on adults for food, clothing, physical and emotional protection, and healthcare, and a culture in which adults take responsibility for structuring the lives of their children to meet expected norms of behavior, we must be especially vigilant to the social ramifications of certain medical and educational diagnoses (Rafalovich, 2001, p. 373). Furthermore, examination of ‘special needs’ language help illustrate how the power of these labels affects those who are not targeted.

Additionally, Fulcher (1989) and Corbett (1996) examine the discourses that shape characterizations of students with ‘special needs’. Fulcher (1989) identifies five narratives that shape characterizations of ‘disability’, while Corbett (1996) shows how statements in the fields of psychology, sociology, philosophy, and politics have influenced social reactions to the subject (Corbett, 1996, p. 17-18, citing Fulcher, 1989, p. 260). This line of research deconstructs the language of disability to show how the politics of identity and difference shape social treatment of the subject. However, these authors also show how social identifications of subjects with ‘special education needs’ are “ambivalent” and “full of oscillations, contradictions and uncertainty” (Allan, 1996, p. 231; see also Branson & Miller, 1989, Shakespeare, 1994; Davis, 1995; Thomson, 1997; Corker & Shakespeare, 2002; Tremain, 2005). For these authors, the construction of a subject comes from discursive statements that shape society’s treatment of the

individual, and officials position the subject as an object of power, used to treat anxieties held within the larger society.

Attention to the language of marginalization is important, but we must also be mindful of structural forces that reinforce discourses in education. Abberley (1987) and Apple (1986, 2004) show how the processes of material reproduction acted out in institutions like schools work to shape the economic opportunities to which students have access. These studies suggest that society creates these labels through sovereign power as a means for securing the continuation of the dominant power structure. Stone (1984), for example, traces the governmentality of 'disability' categories in social policy and laws in Western countries such as the United States, Britain, and Germany and comes to similar conclusions about the role of governments in shaping education policy and in establishing discriminatory practices (see also Diedrich, 2005; Moffatt, 1999; Morgan, 2005).

Similarly, Berger (2005) examines the practice of "school tourism" that started during the early 1800s, a period when institutions were built across the North for the 'education' of deaf people. Berger argues that because these individuals were segregated from the general population, society in antebellum America had no way of communicating the dominant discourse of 'deafness' to the students in these institutions and thus, with the dual purpose of socializing deaf people into a discourse of deficit and providing a binary to establish the privilege of hearing, the institutions opened their doors for outsiders to examine the inmates. Berger even reports how guidebooks were published in the early nineteenth century that led potential 'tourists' to deaf schools in and around New York City (Berger, 2005, p. 162 citing Blunt, 1818). The disciplinary

techniques used in these early nineteenth century institutions are the same as those employed in institutions for the 'feeble minded' (Trent, 1994). And when those institutions began to close at mid-century, these techniques were, and still are, used in public schools across America.

As I show with the case of the 'slow learner', the dividing practices of this discourse appear in three ways. First, institutions separate individuals with less-desired traits from those with desired characteristics; second, authorities educate the less-privileged individuals into the normative requirements for attaining status as mainstream; third, authorities introduce these less-privileged bodies to 'others' as examples of pathology and introduce the privileged bodies to 'others' as examples of normalcy (Foucault, 2006/1961, *History of Madness*). In terms of the race in education, the gaze of outsiders comes in many forms throughout the twentieth century. The internalized power of this discourse starts with the internal examination stemming from the gaze of Heavenly Judgment, but the stimulus for self-examination eventually comes from education officials, community volunteers, and the robotic determinations made by computers. Thus, the race to educate American children would not have power without the use of 'slow learners' as objects of power.

After reading works like these, and other writings with similar themes (e.g., Franklin, 1994; Foucault, 2006/1961 *History of Madness*), it seems impossible for one not to question the identities we ascribe to ourselves and others today. However, while there has been significant research like this done focusing on 'disabilities' and the creation of privileged bodies (e.g., Tremain, Ed., 2005) there is a seeming gap in the literature dealing with a subject identity that was powerful for much of the twentieth



century (see Appendix: table 1). Heretofore, scholarship has neglected study of a label that was commonly used throughout the twentieth century and still exists today - 'slow learner'. By tracing the language of 'slow learner', we can see how this classification has been used to frame less-privileged bodies as the cause of social ills, and how it has protected privileged subjects from discriminatory policies. Most importantly, a history of the 'slow learner' allows us to survey how this subject is an object of power used to promote a race in education. Furthermore, when one traces the history of this label, one exposes the power of a discourse of universal time and linear progress that influences our lives, and the lives of our children. Thus, to answer how American society came to race their children in learning, we must not only explore the language of 'disability' but also we must explore discourses of time and examine how these discourses have been used in school settings.

### **Disciplinary Technology of Time**

The field of education studies sorely needs research that analyzes the time norms that affect educational settings. Lofty (1995) calls on researchers to "examine institutional and classroom practices to discover their embedded time values" (p. 37). The author states that this research is needed because the notion of a monolithic structure of time is so powerful that most have not yet thought that systems of time are social constructs. Time, after all, is what anthropologist Edward Hall (1969) described as "that variety of culture in which the rules are: known to all, obeyed by all, but seldom if ever stated" (p. 230, quoted in Vinton 1992, p. 8). We must question the assumptions that govern educational practices and privilege some students over others. We must question

the 'naturalness' of this universal time, and highlight the absurdities in a paradigm that holds itself superior to any other (Slattery, 1995, *Time and Education*, p. 24).

In this line of research, several scholars have shown how individuals navigate the power of this time discourse. Several histories of the clock tell of the arbitrary nature of this technology and show how this mechanism came to symbolize time itself (e.g., Mansfield, 2010; Barnett, 1998; Bartky, 2000; O'Malley, 1990; Buckley 1996; Zerubavel, 1985). Additionally, several studies have examined cultural time norms and the expectations for behavior amongst the members of the particular society (e.g., Bluedorn & Denhardt, 1988; Zerubavel, 1979; Blount & Janicik, 2001; Gebser, 1949/1985; Mumford, 1934/1963; Lewis & Weigert, 1981, Gonzales & Zimbardo, 1985; Levine, 1988; Rutz, 1992; Waller et al. 2001). Similarly, several studies have explored how career and social timetable norms influence individuals' morale and their sense of fulfillment in life. Lawrence (1991), for example, studies the effects of career timetable perceptions on worker morale and workers' sense of accomplishment. Similarly, Bailyn (1980) and Thomas & Gabarro (1990) study differences in the career pathways of minority and white executives and found that individuals often have very different experiences in climbing the career ladder. Additionally, Cowe (1998) and Moody (1998) found cultural differences in timetable norms and argued that the pace of career achievement is variable based on the setting and culture. From this research, it seems that time discourses influence daily life, and lifestyle choices, in every human culture.

One must note, however, that individuals may interrupt the time-narratives that their cultures supposedly live-by, and there are studies that demonstrate this point. For example, Roy (1959) examines a group of industrial workers who carved out their own

time norms within the larger factory discourse. Outside of what their managers expected of them, these workers found “banana time,” “peach time,” “coffee time,” etc.; showing that time expectations were not necessarily universal within an organization.

Furthermore, in a landmark study, Smith (1997) shows how people in the antebellum South were *Mastered by the Clock* in a place and time that many people assume was not influenced by the discourse of industrial time. Yet, the author also provides evidence to show how, though time was used as an instrument of force to control the lives of enslaved people, the planter classes were more subject to this power than were the individuals it was intended to control. Subjugated peoples, whether they struggle on a plantation, in a factory, or in a school, seem very capable of modifying time discourses to meet their own needs, and though the dominant discourse urges us to race in our education, we must be aware of the many tactics students use to shape this power.

In the field of education, some authors have turned to explore the disciplinary technologies employed within schools, and have questioned how a privileged discourse of time shapes education for students (e.g., Tozer, 1993, p. 15; Good and Brophy, 1990, p. 19). O’Malley (1990) is a notable example in that his study takes the much-needed step of connecting the clock with scientific management of students’ educations (p. 164). O’Malley also discusses the role of education materials (e.g. *McGuffey’s Readers*) in socializing children into this discourse. Another notable example of research with this focus in the field of education is by John Lofty (1992; 1995), who studies how time norms affect student writing, but also how conflicting notions of time between differing cultures create conflict within learning environments. Lofty (1992) invites educators to “look at the ways in which the culture of time may influence their own students’

responses to literacy” (p. 5) and argues that “the culture of time will always be a constraint on learning, [however] we cannot predict how its influence will play out in different arenas” (p.3). Much of the conflict involving time and education concerns individuals’ positions within time codes (1995, p. 17). These internalized norms of time, according to Lofty, shape the cultures of schools creating dynamics where those who adhere to the privileged norms survive and excel as students, while those who are not ‘disciplined’ to the code, do not know or accept the expectations of the environment (1995, p. 17). Edward Hall (1969), similarly, argues this line of reasoning with his conceptualization of cultural “temporal styles.” According to Hall, individuals positioned within a “monochronic style” organize time and space in a linear framework to focus on one thing at a time; individuals positioned within a “polychronic style,” however, reject rigid adherence to linear time structures and address tasks with a sense of expediency. In a similar argument, Olsen (1965) states, “Our schools stress the future...If a youngster does not exhibit this concern for the future, teachers tend to regard him as lacking in ambition and intelligence” (p. 81). One’s knowledge of time and one’s orientation to the purposes of time may well influence a student’s success in school. Similarly, James Jones (1988) argues that misunderstandings of time-cultures are an underlying feature of racial conflict in the United States (see Vinton, 1992, p. 9). It seems that a wise educator would be conscious of the differing time-cultures represented by students in the classroom, yet routinely, officials position students who live under differing time norms as examples of deficit within the prevailing narrative of academic success.

Lofty uses the term ‘timescapes’ to describe the different environments students encounter as they go about their days (1995, p. 17). The timescapes students may

experience include activity time, natural time, school time, social time, television time, sacred time, existential time, and of course, clock time. For each of these discourses, individuals must be “in rhythm” if one hopes to be considered a member of the privileged social group (Kramer & Ikeda, 2001, p. 74). As Davis, Smith, & Leflore (2008) explain, students who enter school knowing the codes and rhythms for each one of these timescapes enter with a privileged position, in that they are not put in a position of learning two curricula at the same time. Focusing on the role of time norms in intelligence assessments, Lofty states,

The democratic value of equal access to education is undermined by our failure to recognize how the identification of intelligence with fast performance can work against equitable assessment. The many who cannot demonstrate their intelligence under this assessment are more likely to be advised toward job training than toward additional formal education (pp. 36-37).

Furthermore, students who do not challenge the discourse of time employed in schools, or who are able to negotiate the codes necessary for success in this environment stay immune from identification and disciplinary ‘correction’.

While Lofty’s and other studies (e.g., Willis, 1981) focus on students at the secondary level, I believe we must look for other places where we may see “students’ resistance to and attempted disruption of the temporal control of their school lives” (Lofty, 1995, p. 32). The pace of work, attention to instructions, and overall acceptance of time norms are questions students must deal with from the first days they enter school, and historically, it is the youngest students who have been early targets of disciplinary technologies (e.g., intelligence testing) and governmentality (e.g., IEPs) meant to enforce certain privileged timescapes. With this knowledge, one should heed Lofty’s challenge

to question the “gatekeeping system” that excludes many individuals from participating in higher education and our democratic society.

An important study that deals directly with discourses of time and the creation of subjects as objects of power is *Act Your Age!* by Nancy Lesko (2001). Lesko examines a discourse of evolutionary time and questions how the identities of ‘adolescents’ have been created and how their bodies have been used as proxies for societal concerns about masculinity and racial superiority. The author examines the role of ‘panoptic time’ in subjecting bodies to this biopower, and shows how power relations use binaries to enforce gender and age norms with the purpose of shaping a certain social role for young people. Similarly, Baxter (2008) follows Lesko’s work in writing about the creation of ‘adolescence’ at the turn-of-the-twentieth century and adds evidence to support a conclusion that a racially-based discourse is one foundation for the concept of ‘adolescence’.

Trent’s (1994) study of ‘feeble-mindedness’ is another important example of a critical ontology of subject identities in educational contexts. The author traces the creation of ‘mental retardation’ in the United States, and like Lesko and Baxter, he focuses on the social-Darwinian discourse and subsequent eugenics movements as themes for how society created and dealt with a population labeled ‘feeble-minded’.

While the scholarship cited above serves as models for the current study and they add focused conceptual support for an examination of the power structures that affect bodies in schools, I would be missing the proverbial forest for the trees if I did not highlight the monumental work of Michel Foucault. For studies that question identities and question the role of power in creating those identities, there are perhaps no better

models than his works. Foucault, who proclaimed that “man is only a recent invention” (1970, p. 422, *Order of Things*), and who devoted his career to problematizing the classification of subjects, challenges the reader to question the truths we hold, and search for the mechanisms that make humans into objects. His articulation of disciplinary technologies in *Discipline and Punish* (1977), and his observation that “power is articulated directly onto time” (p. 160), serve as the theoretical foundation for the current study. With an entire chapter devoted to conceptualizing the epistemology and methodology employed in the current study, in which Foucault has a dominant voice, I will not elaborate here, however, one should note that Foucault’s work only serves as a building block upon which I question the ontology and epistemology of time and ‘slow learners’.

### **Questioning the Epistemology of Time**

Foucault’s model of critical ontology is helpful for tracing the disciplinary power that shapes American’s race to educate, but this methodology can only bring us so far in our attempt to dislodge the metanarrative of fast-paced education and its related subjectivities such as the ‘slow learner’. Similar to the scores of authors who have argued for emancipatory theories for education based on social injustice<sup>6</sup> many of Foucault’s strongest and most cogent arguments against oppressive practices in schools are silenced by charges that his research is not scientific. Thus, none of the discourses

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<sup>6</sup> e.g., Daly and Cobb, 1989 and Kozol, 1991, 2005 focus on economic inequalities; Oakes, 1985, McNeil, 1986, Weis, 1988; Page, 1991, and Anyon, 2005 focus on the educational impact of segregation and tracking; Stannard, 1992, Gay, 2000, West, 2001, and Watkins, 2001 focus on the impact of racism on students’ learning; Gilligan, 1982; Lerner, 1986; Grumet, 1988b and Diller et al. 1996 question the role of gender; Apple, 2000, 2004; Giroux and McLaren, 1989; Apple and Christian-Smith, 1991; Wexler, 1992 and Spring, 2005 examine political conflicts.

promoted by critical theorists gain enough power to achieve dominance in American schools.

Foucault's work serves as a standard for research into power relations and discourse narratives that guide human behavior; however, it was not until the very end of his abbreviated career that he began to play with the interconnection of space and time in the creation of identity. He states,

Our epoch is one in which space takes for us the form of relations among sites...In any case I believe that the anxiety of our era has to do fundamentally with space, no doubt a great deal more than with time. Time probably appears to us only as one of the various distributive operations that are possible for the elements that are spread out in space" (Foucault & Miskowiec, 1986, p.23)

Surprisingly, Foucault gives very little attention to 'time' in his archaeology of the human sciences in *The Order of Things* and in his later *Discipline and Punish*, he treats time as a disciplinary mechanism, but he does not give adequate attention to its role as a discourse.

It seems that Foucault, just like most authors in Western thought, sees 'time' as a natural phenomenon, and fails to treat it as both a discourse *and* disciplinary mechanism. Yet, it is this understanding of time (i.e., as a disciplinary mechanism) that can help interrupt the current power in schools today. Disciplinary practices, such as the objectification of the 'slow learner' subject, support the discursive race in education, but removing those buttresses only inspires calls for more powerful reinforcements – the building still stands. It is only when we undermine the foundation on which the discourse is built that we may hope to gain influence in building the new structures. Thus, while the current study illustrates the oppressive practices and injustice in America's education race, it also problematizes the reader's understanding of its foundational premise – universal time.



As one traces a history of 'time', one finds truths about time and space that have been silent in American education theory. Slattery (1995a, 1995b, 1996) and others (e.g., Whitehead, 1933, Dewey, 1938, Doll, 1993) have challenged educators to rethink the role of modern conceptions of time in education, and they have especially been vocal in the literature calling for a reconceptualization of time in curriculum and instruction. In a history of American education, one finds centuries-old ideas about time that were never adopted by authorities that run American schools, but these ideas hold a privileged status in the disciplines of theoretical *and* empirical science. Relativity theory is one such example, and an understanding of this discourse may prompt one to question the very notion of learning speed.

Quantum physics and Einstein's theories of Special and General Relativity reframe time and space from notions of such phenomena promoted in Classical Newtonian physics and they have problematized notions of universal time and linear progress for almost a century. However, a quantum understanding of time and space remains dormant under the power/knowledge that governs American schools – survey any elementary or secondary school in America and most teachers would not be able to tell you one concept from quantum science, the American population as a whole would probably fare no better. Yet, one should not promote a race in education without considering the various models of time that we have in hand.

There are but a few studies in the education literature that deal with a quantum discourse of time, and they remain a murmur amongst the overwhelming chorus of studies that reinforce the dominant regime of truth. Most notably, Slattery (1995a, 1995b, 2006) has given voice to a quantum conception of curriculum. He outlines a

possible reason for why this conception of time remains silent in education and some of the consequences of such a position when he states,

On a daily basis we can deliberately remain oblivious to the quantum and cosmic phenomenon. Unaware of this dimension of space-time, we can convince ourselves that classical physics, traditional time management practices, extended school days or school calendars, and modern curriculum development paradigms, if perfected, can solve the epistemological, ecological, sociological, and educational crises of society. We fail to recognize complexity and the interrelatedness of action (Slattery, 1995, *Time and Education*, p.26-27)

By remaining locked into what Slattery calls the discourse of, “classical physics,” educators remain ignorant of the choices we have for understanding our children and the pace at which they learn; we base educational programs on biased samples and incomplete data. We refuse to acknowledge that learning takes a lifetime; that we cannot measure knowledge in discrete units, and that intelligence can be quantified by measures other than speed. Only with such an interdisciplinary epistemology can one hope to problematize our race to educate, *and* promote alternatives for how to teach our children.

### **Summary of the Study**

In tracing a history of American schooling, one sees how we came to frame education as a race. Using notions of universal time and linear progress as ‘scientific’ justification for dominant narratives in our society, this discourse employs a one-dimensional notion of time that frames human learning as a temporal endeavor. Seeding temporally oriented binaries (e.g., ‘slow’ vs. ‘fast’) with normative values, this discourse frames less-privileged individuals as threats to American society. The ‘slow learner’ subject, in particular, becomes an object of power used to instill anxiety about the ‘future’ into the minds of the American people. With the many negative characterizations of this

subject communicated through the media and various other disciplinary technologies, Americans race their education as a way of alleviating stress about an uncertain future.

However, this model of time as a premise for educational policy becomes problematic when one considers alternative models of time that may be more scientifically valid in the context of human learning (e.g., relativity theory and quantum theory). Furthermore, the many individuals who have disrupted these subject narratives, and the many inconsistencies in the statements that promote this power should prompt one to question the appropriateness of an education race in American schools. We ought to (re)frame all learners as valuable members of society and consider using an educational model that respects the non-linear and scientifically uncertain pace of learning.

With the discourse of this education race currently dominant in American schools, educators continue to search for those who learn at deviant paces and we continue to mistakenly label the ‘slow’ Tortoises as ‘bad’, hoping one-day to turn them into *fast and steady* learners. Additionally, those of us who currently identify as ‘slow learners’ continue to struggle against a system that does not recognize, let alone respect, the advantages in a differing pace to education. As a student and as a practicing teacher, I see how this power affects learners of all ages, and I would not wish this education upon anyone. It is time we dislodge this regime of power that dominates American schools, and the current study works towards that end with the following six chapters.

In *Chapter II*, I outline my reasons for employing a critical ontology in educational research and curriculum theory. In this chapter, I open Michel Foucault’s ‘toolbox’ and explain why his research model is appropriate from this project. I also

address the dominant concerns other authors have with this methodology, and I reach for the ‘toolbox’ of Pragmatism to ask John Dewey and William James for help in calming anxieties amongst those who claim that Foucault cannot stand alone.

*Chapter III* traces a history of how universal time and linear progress have become dominant in American schools. After I present a brief history of the dominant discourse of universal time and linear progress, this chapter traces the power of universal time and linear progress in American schools and looks at the disciplinary technologies that shape our understanding of education as a temporal endeavor. Specifically, I examine the invention of time and consequential impact of the clock and calendars in American schools. Additionally, I address the role curriculum theory, teaching texts, and government statements and policies have played in cementing this discourse into American society. I finish this chapter with a presentation of the many theories of time that challenge the dominant discourse now in American school. With an understanding of alternative notions of time, we may play with other narratives of human learning that we do not currently acknowledged in American society.

*Chapter IV* traces the invention of the ‘slow learner’ subject and explores how society uses dividing practices and normalization procedures in creating this subject as an object of power. First, we look at how society has framed education as a temporal endeavor, then examine the narratives with which society frames individuals labeled ‘slow learners’ and show how these characterizations are used as rationale for America’s education race. The discursive theme I bring forward in this chapter is one of society creating the ‘slow learner’ subject as a threat to evolutionary ‘progress’ and national security, and by understanding this theme we see how society assigns differing levels of

privileged to various rates of learning. Most importantly, we see that this narrative has many contradictions and I highlight pertinent cases that interrupt a discourse that presents itself as a ‘natural’ fact.

*Chapter V* explores a second discursive theme in the race to educate, that of society creating the ‘slow learner’ subject as a ‘problem to be solved’. This chapter delves into the surveillance of the subject both inside and outside of schools and I trace a history of a society haphazardly defining the criteria for identifying ‘slow learner’ threat, a society anxiously searching for individuals who fall under this criteria, and a society desperate to find causes for why this threat persists. However, again, the reader hears how this search does not exist in a smooth continuous flow of history, but rather, how it is a disruptive and often times a random assortment of events that create the pathology assigned to millions of students today. This history shows how the locus of pathology has changed over time as power in America’s race to educate has become increasingly hidden. With over a century of work, the ‘slow learner’ subject remains a ‘problem to be solved’ in a society that dreads uncertain ‘progress’.

*Chapter VI* elaborates on the discursive themes explored in the previous two chapters and traces a history of how the ‘slow learner’ subject is used as an object of power in American schools. This chapter allows the reader to hear the voices of ‘experts’ who promote all types of remedies for the ‘defective child’ only to find that no one cure satisfies a society demanding more speed. In our desire to sooth away our anxieties about social progress, we employ technologies of power that act as surveillance over less-privileged subjects, that act as dividing practices in promoting this power, and work to instill an internal gaze that creates a self-subjectivity unable to question the

power acting on the subjects' bodies. American schools are the centers of power in the race to educate, but again we see how this discourse is divided against itself, and it should not be immune to criticism. The various treatments for 'slow learning' employed in American schools often contrast the narratives by which the subject is framed, and this history helps us understand how the race to educate only masks anxieties about individuals already marginalized in society.

I conclude the study with *Chapter VII* in which I interrupt the race to educate by proposing alternative conceptions of time that are both scientifically accurate and beneficial for education. Most notably, I challenge the understanding of human learning now dominant in American schools by bringing forward notions of time and progress as framed by Relativity Theory, Quantum Theory, and Chaos Theory. While some (e.g., Slattery, 2006; Davis, Smith, & Leflore, 2008; Mason (Ed.), 2008) conceptualize education research and curricula theories around concepts related to chaos and complexity theory, there is still a paucity of publications in this field, and a distinct lack of understanding about these theories in the education research literature. Additionally, with emerging research concerning the quantum physics of consciousness (e.g. Tuszyński (ed.) 2006; Stern 1994; Joseph 2011; Mensky et al. 2011; Clark et al. 2011) an expanded territory of knowledge is required for valid scientific inquiry in the field of education. The current study adds to this body of research by conceptualizing a vision of what education might look like if we privilege these discourses. If we are to trouble the race to educate, we must explore the margins of knowledge in an attempt to bring forth alternative theories of learning that now rest silent in American schools.

Throughout these chapters, I highlight the many artifacts that give discursive support to the race to educate, but I also amplify the many voices that contradict the prevalent assumptions found in this discourse. Throughout the text, I position quotations that speak against the dominant narrative described therein. These statements interrupt a discourse that has power even within these pages and when considered with the sum of my argument, I hope they help you, the reader, to question your own temporal identity, and question the labels we assign to others - it is time we did.

## CHAPTER II

### CRITICAL ONTOLOGY: EPISTEMOLOGY, ETHICS, METHODS

#### The Epistemology of Critical Ontology

##### The Art of Racing

Steve Prefontaine is, perhaps, one of the most famous runners in America today, even with more than thirty years since his passing. At the time of his death on May 30, 1975, Prefontaine held the American records in running 2,000 meters, 3,000 meters, 5,000 meters, 10,000 meters, 2 miles, 3 miles, and 6 miles. Despite not winning a medal in the 1972 Munich Olympics, many sports analysts expected him to set international records at the 1976 Games in Montreal, Canada – an Olympics he unfortunately did not attend. The world never got the chance to see ‘Pre’ run in those Games due to a tragic automobile accident that took his life – Prefontaine was too quick to die.

I start this chapter with a case study of Steve Prefontaine for two reasons. First, he represents a paradox in the discourse of time in American education. It seems ironic that the fastest runner in America would call himself a ‘slow learner’ (Moore, 1975, Jun 8, p. 202), yet just like many other children who have trouble articulating their thoughts, who struggle to ‘keep up’ with their peers, or who speak a

*Pre would astonish those who thought of him as a jock with his knowledge of art, cars, photography, and carpentry. He was constantly on the go, visiting both track and nontrack friends all around Eugene (Jordan, 1997, p. 156).*



marginalized dialect of English, Prefontaine had no other language with which to identify himself. Thus, Prefontaine, like millions of other American children, positioned himself as 'slow', using athletics (i.e., running) as his only chance of escaping his living situation in Coos Bay, Oregon.

While some might quip that there is no irony in Prefontaine's story because fast-running is different than fast-thinking, we must remember that 'Pre' not only ran faster than most Americans but he also used his brain in many important civic projects. For example, as an alumnus of the University of

Oregon, Prefontaine traveled to the Oregon State Legislature to testify in the Oregon field-

*Steve would recall that he had been teased in grade school because of his hyperactivity, and because he was a slow learner (Jordan, 1997, p. 6)*

burning controversy. His unconventional articulation of the gruesome experience of inhaling burning smoke while running was more effective in turning public opinion towards his side than any data presented by his colleagues on the floor that day.

Prefontaine was also an outspoken critic of the Amateur Athletic Union rules barring professional athletes from competition in the premiere events in track and field (Moore, 1975, Jun. 8).

Steve Prefontaine left a long-lasting legacy in Oregon, where an annual race is still dedicated to his memory. In the wider world of athletics, athletes feel his efforts when they compete in the Olympics; Prefontaine is one reason why Olympians can now compete for money during the 206 weeks between Olympic competitions. Thus, it seems counterintuitive that we would promote such a stigmatizing identity for a young man, who would go on to do great things in his own time.

The second reason Steve Prefontaine is important to the current study, and the reason that I have illustrated his case at the start of a chapter on research epistemology, is because of his unwavering advocacy for the aesthetic assessment of achievement. Competing in a sport that is determined by hundredths of seconds, and one that is often meticulously analyzed by statisticians attempting to cut fractions of seconds off runners' times, Prefontaine never saw victory as the sole aim of racing. Like anyone, he preferred to win, but he also stated, "I'm not afraid of losing, but if I do, I want it to be a good race. I'm an artist, a performer. I want people to appreciate the way I run" (quoted by Amdur, 1975, May 31, p. 19). In this race to educate our children, are we too afraid of losing that we neglect to think about the artistry of our run. Have educators become the statisticians in the booth, playing with mathematical models as if they are real bodies only to forget the humans that we try to manipulate? Is there a model for education that views students as artists and performers rather than winners or losers?

At the same time that Steve Prefontaine made these remarks, there was a writer half-a-world away articulating this same ethic; his name is Michel Foucault. While academics throughout the world know Foucault as a proponent of aesthetic ethics and an architect of post-structural epistemology, in places like Eugene, Oregon, the philosophy of 'Pre' is much more famous than any French scholar's. Thus, while Foucault is the one cited throughout this text, individuals like the aforementioned 'slow leaner' from Coos Bay, Oregon inspire me to teach people about the dangers of racing kids through their education.

## **Privileging Foucault**

In searching for how American society came to race children in their education, the current study employs the epistemology and methodology of critical ontology. This research framework privileges the oeuvre of Michel Foucault as a model of scholarship; however, the reader must recognize the caveats that come with naming 'Foucault'. If one who reads Michel Foucault's works learns no other lesson, it should be that there is "a danger in speaking for and above others about their situation" (Yates, 2005, p. 75 citing Foucault, 1991, Remarks on Marx). Thus, the reader must know that I hold a privileged position when working with Foucault's studies: I can only claim literacy in the English language (and some may even question that). Therefore, while Foucault spoke, wrote and did much of his thinking in French, the works I cite in this study are the English translations, some of which were only done after his death.

Foucault was very conscious of how his thoughts would translate into English and he reminded audiences to be careful of misinterpreting his ideas when he spoke with an Anglo-tongue (Dillon & Foucault, 1980, Conversation). Therefore, while I litter Foucault's name like confetti throughout this essay, we must be wary not to confuse Foucault's meaning with that of the translators' or my own. Similarly, previous scholars have translated works by most of the other philosophers I cite in this text into English for my privileged eyes, most notably the mathematical languages of Newton, Bohr, Planck, Heisenberg, and Einstein, but also the philosophical works of writers such as Plato, Aristotle, Marx, and Derrida. While I claim little knowledge of French, German, Greek, Latin, or Mathematics, my aim is to communicate the sense of the ideas rather than the proof of their validity; therefore, one should note that while the names of these esteemed

scholars are associated with certain lines in this text, the meaning of their work is my own. Thus, my intention in naming Isaac Newton, Michel Foucault, and others is not to speak for them, but rather to orient the reader towards the discursive traditions with which they are associated. In all cases, the reader should *not* generalize the lines cited in this text to represent the oeuvre of the particular authors' beliefs.

This violence in naming the subject, and generalizing her or his beliefs was felt by Michel Foucault (and his contemporary Jacques Derrida) who is often accredited with contributing to the epistemological schools of analysis called post-modernism or post-structuralism (e.g., Fletcher, 2000; Slattery 2006). While neither Foucault nor Derrida accepts such affiliations, the apparent difficulty in attempting to classify the work of these authors provokes frustration, fascination, and down-right contempt for their ideas (Kessl, 2008, p. 92). Foucault, himself seemed to be perpetually swatting away the labels that others affixed to his work. For example, he states, "I have never been a Freudian, I have never been a Marxist, and I have never been a structuralist" (Foucault, 1998, p. 437, *Structuralism and Poststructuralism*). Speaking directly to English-speaking readers, Foucault states,

In France, certain half-witted 'commentators' persist in labeling me a 'structuralist.' I have been unable to get it into their tiny minds that I have used none of the methods, concepts, or key terms that characterize structural analysis...But it is only too easy to avoid the trouble of analyzing such work by giving it an admittedly impressive-sounding, but inaccurate, label (Foucault, 1970, pg. xv, *The Order of Things*).

With apparent humor in his voice, Foucault later states,

I think I have been situated in most squares on the political checkerboard, one after another and sometimes simultaneously: an anarchist, leftist, ostentatious or disguised Marxist, nihilist, explicit or secret anti-marxist, technocrat in the service of Gaullism, new liberal etc. An American professor complained that a crypto-marxist like me was invited to the US, and I was denounced by the press in Eastern Europe for being an accomplice of the dissidents. None of these descriptions is important by itself; taken together, on the other hand, they mean something. And I must admit that I rather like what they mean (Foucault, 1994, p. 113, *Polemics, Politics, and Problematisations*).

In short, the attempts to classify 'Foucault' have only shown our inability to come to consensus on the meaning of the subject – precisely his thesis (see also Derrida, 1976, *On Grammatology*).

Scholars' misrepresentation of Foucault's work may come from their use of a binary logic, the very way of thinking which he worked to interrupt. For instance, while many commentators classify Foucault's work as either 'archaeology' or 'genealogy', these identifiers have little practical use and distract from the overarching conceptual aim of his work. To the point, though I cite many authors who employ such labels, and though many readers may identify the current study under one of these categories, I do not believe such classification helps further the discussion in any way. Foucault, does not give much value to the classification of his methods as 'archaeology' or 'genealogy' and instead he argues that his work can be divided into three themes, or modes of objectification that transform human beings into subjects. The three modes are (1) practices of classification; (2) dividing practices; and (3) self-subjectification practices (Hughes, 2005, p.86, citing Foucault, 1982, *The Subject and Power*). In short, to name the subject only serves to put up walls that limit the different meanings we may gain from interacting with it; classification has only lead to violence against individuals and the ideas that they hold; thus, I implore the reader to not let my own classifications of subjects go unchecked (see Foucault, 1970, *The Order of Things*).

Pragmatically, with an author whose own works rival many encyclopedias in his overall volume of writing, it seems impossible to put one label on such a diverse body of scholarship. Indeed, it seems foolhardy to mold a study by trying to articulate some

unifying essence of this literature, and it seems limiting to borrow insights and methods from only a small moment (if we can even define what a small moment is) in an author's writings. Instead of focusing on these labels, and naively attempting to shape the current study to conform exactly to some universalist notion of post-modernism, post-structuralism, deconstruction, or 'Foucault', I wish to highlight some of the discursive themes in these writings and position Foucault's work as a model for the epistemology and methodology of my research in the field of education. His model serves as an exemplar of investigation in the discourse of critical ontology, but it does not stand alone.

While a study that uses critical ontology must stay faithful to many of the premises articulated by Foucault (e.g., emphasis on questioning subjectivities), the discourse requires one to deform and play with the works of the 'expert' to meet the current needs of the investigation. One of the paradoxical twists in using Foucault's model is that if one wishes to stay faithful to the master, one must diverge from, and question his methodological structure, for the master himself strayed away from his predecessors. For example, in responding to criticism concerning his unfaithful adaptation of Nietzsche's works, Foucault states, "The only valid tribute to thought such as Nietzsche's is precisely to use it, to deform it, to make it groan and protest" (1980, p. 53-54, *Power/Knowledge*). Taking conceptual fragments from masters such as Marx, Kant, Nietzsche, and Heidegger, Foucault developed his unique line of enquiry without much concern for establishing consistency among them (Turkel, 1990, p. 171). Thus, Foucault continued what he saw as the inescapable tradition of historians using, "a whole range of concepts directly or indirectly linked to Marx's thought" (1980, p. 53,

Power/Knowledge; see Weeks, 1982, p. 108). In short, scholarship uncovers no new territory if we stay perfectly faithful to our predecessors.

However, he admits, “I quote Marx without saying so, without quotation marks, and because people are incapable of recognizing Marx’s texts I am thought to be someone who doesn’t quote Marx” (1980, p. 52, Power/Knowledge). He goes on to scoff at people who are honored for aligning themselves with a certain label, while equally qualified others go on without acclaim (ibid). While some may balk at the idea of borrowing knowledge without giving due credit, or some may criticize an author for using and deforming knowledge from differing paradigms, this idea of a hybridized knowledge can uncover perspectives in the world that are previously unconsidered, and if nothing else, it serves as impetus in the questioning of dominant lines of reasoning.

The discourse of critical ontology sees knowledge and theory in a state of constant non-linear movement and fluctuation, and thus, in this line of reasoning, one can never repeat or reapply knowledge in the same way twice; ideas are in a process of perpetual recreation – or becoming. Also, regimes of truth are in flux and old notions can always double back to reemerge – there is a healthy skepticism in one’s discovery of final truth, thus, the academic goal is to survey the discourses available and play with knowledge one might perceive as universal (Sprinker, 1980, p. 87).

A critical ontology assumes no constant and there is no assumption of linear progress; even the master’s discoveries and methods are subject to modifications and differing meanings (Thiele, 1990, p. 916). If there *is* a discipline of archaeology, or a paradigm of post-modernism or post-structuralism, the outlines of such theories in Foucault’s, or any other authors’, books change with each written word (Sprinker, 1980,

p. 88). With each moment of creation, it is unwise to remain static and uncritically committed to one particular thought; one must remain open to new possibilities of interpreting the world in ever-complex ways. Likewise, the context in which one reads a text, even a single syllable could bring different meanings to a reader; for example, the writings of John Dewey brought different meanings to Nel Noddings (2003) than they did to Theodore Sizer (1986), even though both scholars have similar backgrounds in reading his works. Similarly, an observer of Karl Marx' writings can see how his works have inspired a great variety of actions despite the supposed singularity of meanings. Thus, the current study works to create a theory of education without the pretense of facsimile.

The current study, therefore, deforms and twists texts in line with Foucault's model. The reader may not agree with my interpretation of Foucault's, or any other authors' works, but I do not write under the pretense of extracting the same meaning from his words that others may interpret. He is an inspiration for my conception of critical ontology, not the guardian of its rules; and anyone who claims sovereignty, authority, or even expertise over Foucault's scholarship is a false prophet. Similarly, while I privilege Foucault as an inspiration for the research methods I employ here, I cite authors who are not often associated with this scholarship (e.g., Dewey; James) to show that he does not stand alone. Additionally, I 'quote' from many authors more often than I given them credit. However, I implore the reader not to search for the labels on my sentences, but rather to seek meaning from this text on its own merits.

### **Critical Ontology: An Introduction**

Having referred to critical ontology in the previous section, we should explore the premises of this philosophy in more detail before we move on. Critical ontology



examines the ideas and principles that push individuals into certain ways of thinking and acting, with the goal of providing means by which one may think and act differently (Wong, 2008, p. 73). Critical ontology is not a theory or a doctrine, and this philosophy does not necessarily align to one permanent body of knowledge, but as Foucault (1984) states,

it has to be conceived as an attitude an ethos, a philosophical life in which the critique of what we are is at one and the same time the historical analysis of the limits that are imposed on us and an experiment with the possibility of going beyond them (p. 50, *What is Enlightenment*).

The self in this conception is multiple, shifting, contradictory and ironic in its articulation of identity (Besley, 2008, p. 58).

A critical ontology asks us to question how we constitute ourselves as certain types of subjects, how we assign meaning to certain behaviors and actions, and how those ideas shape our conduct (Foucault, 1987, *History of Sexuality, vol. II*). Critical ontology challenges us to be self-aware and it enables us to see how the “accidents and quirks” of history shape our being, and how the mechanisms of power work to shape us in the present (Brocklesby & Commings, 1996, p. 750). With critical ontology, we need not reach conclusions about who we are, or what needs to be done; instead, we are questioning beings who seek knowledge while surviving within dominant regimes of power. It invites scholars to “abandon established modes of thinking and turn accepted perspectives on their head” (Pongratz, 2008, p. 29). In Foucault’s words, “It doesn’t have to lay down the law for the law...It is a challenge directed to what is” (1978, p. 13, *Questions of Method*). While a writer may feel forced to articulate certain discursive truths within an argument, and while there is an irony inherent in discussing the truth of critical ontology as a valid research method, critical ontology is a process of critique, not

a theory of truth. The truth of this text is left unfinished – an uncomfortable reality for some.

I have privileged the discourse of critical ontology for the current study because of its central focus on the question, “How do things happen?” Foucault’s work traces the development of ‘moral technologies’ or the systems of thought that work to create and sustain certain types of knowledge. Moreover, his writings serve as a revolution for many by changing the historiographical question from a history of ideas to an examination of how society constitutes human beings as subjects (Foucault, 1982, p. 777 *Subject and Power*; see Brocklesby & Commings, 1966, p. 748). He stresses the false continuity created by the “inertia of language, which both masks and retards the total shift of meaning that distinguishes one period from another” (Stempel, 1981, p. 389). While a history of American education and a history of time are certainly histories of ideas, the current study also examines how society uses these ideas to create subjects who yearn to race. The ‘critical’ piece of scholarship in this study comes in challenging this subjectivity by tracing the arbitrary and discontinuous events that join in its creation and in exploring other possibilities for how we understand ourselves.

A critical ontology challenges the notion that humans are pre-determined entities, and posits a conception of individual identities as “the product of a relation of power exercised over bodies, multiplicities, movements, desires, forces” (Foucault, 1980, pp. 73-74, *Questions of Geography*). Foucault states that the problem in his investigations is “the effects of power and the production of ‘truth’” (1977, p. 157, *Power and Sex*; see Sprinker, 1980, p. 88), and his project analyzes how the Western social sciences (e.g.,

economics, psychiatry, medicine, penology) develop knowledge and techniques for people to understand themselves (1988, *Technologies of the Self*).

In articulating the effects of power and production of truth, Foucault deals with the modes by which humans transform themselves into subjects (Foucault, 1982, *The Subject and Power*). Foucault's earlier works concentrating on conceptions of 'madness' (e.g., *Madness and Civilization*, 1967) and the creation of scientific discourses (e.g., *The Archaeology of Knowledge*, 1972; *The Order of Things*, 1970) show how certain modes of enquiry have established themselves and how they have come to dominate conceptions of truth in the present era. Other works such as *Discipline and Punish* (1977), and *The History of Sexuality, vol. I-III* (1978, 1987, 1986), show how dividing practices are employed and how subjects modify their behaviors after they come to internalize certain privileged discourses. As Lacombe (1996) writes, "To write today about punishment and classification without Foucault 'is like talking about the unconscious without Freud'" (1996, p. 332 quoting Cohen, 1985, p. 10). Thus, I cite his work because of its power – I stand on his shoulders so that *my* voice can be heard.

An investigation into the 'truths' employed in American education today could lead a researcher to ask several different types of questions. The common analysis of Race to the Top comes from an economic perspective asking "why" states and local authorities can succumb to these national mandates – their answer in this materialist perspective is money, \$4 billion, in fact. For example, citing Martin O'Malley's (Gov., MD) Race to the Top proposal, which called for using standardized test scores as criteria for teacher tenure, Anderson and Birnbaum (2010) state, "the lure of \$4 billion in federal funding at a time of fiscal peril has driven state after state toward school reforms long

considered politically unlikely, undoable or unthinkable” (p. B1) (see also King & Martinez, 2010). According to this economically disciplined line of reasoning, states ‘race’ to change local education policies and conform to President Obama’s vision in hopes of receiving the infusion of federal funds. However, while that analysis is valuable and needed, the question of how some members of society, including Mr. Obama and Secretary of State Duncan, came to internalize and accept racing our children remains unanswered. As previously stated, the question of “how” is exactly what Foucault’s model can help us explore.

Critical ontology does not eliminate the questions of “what” or “why” but presents the inquiry in a different way. With the question of “how,” the author can analyze the sequence, abilities, and relationships of events and authors in forming certain discourses and one can question the epistemological legitimacy of analyses that unite “what,” “why,” and “how” into one concept. Foucault argues that one loses some “extremely complex configurations of realities” by engaging exclusively in the questions of “what” and “why,” and by privileging the “how” question one can enter a study with skeptical awareness of assumed notions of truth (Foucault, 1982, p. 785-786, *The Subject and Power*). Using a conception of knowledge and power that recognizes the interrelationship of the two forces, we are able to inquire into how power operates and how society uses different strategies and procedures to exercise power (Lacombe, 1996, p. 338).

### **Discourse**

To understand the production of knowledge, one must consider the discourses that shape human action. However, even this foundational term has several possible

meanings. Foucault states that he uses the term 'discourse' "sometimes as the general domain of all statements, sometimes as an individualizable group of statements, and sometimes as a regulated practice that accounts for a certain number of statements" (1972, p. 80, *Archaeology of Knowledge*). Thus, one accepts and is comfortable with the shape of a discourse fluctuating over the course of writing, however, the role of discourse in "the ordering of objects" seems to remain constant (ibid, p. 49). For example, in the education race, the value given to 'fast learning' seems constant, though the way in which we talk about that concept changes over time.

Discourse is the fluid through which power and knowledge operate (see Weeks, 1982, p. 11), and for those who are locked in its embrace, a discourse regulates what can be thought, who can speak, when, where, and the authority with which the speaker's words carry on to others (see Ball, 1994, p. 21). Foucault uses the term *episteme*, or discourse formation, to describe, "what, in the positivity of discursive practices, makes possible the existence of epistemological figures and sciences" (1972, p. 192, *Archaeology of Knowledge*). In other words, *episteme* refers to the rules by which one in any given society may create and disseminate knowledge in any given society. In terms of what is said, a discursive practice, as human activity, "embodies in technical processes, in institutions, in patterns for general behavior, in forms for transmission and diffusion, and in pedagogical forms which, at once, impose and maintain them" (Foucault, 1977, p. 200, *History of Systems of Thought*). In the race to educate, a very narrow definition of 'science' is allowed to speak and to dictate educational practices, certain understandings of human learning are silenced, and practices are organized for the

maintenance of this regime – the purpose of this critical ontology is to illustrate how these discursive practices have been created and show why they are flawed.

Moreover, one must be aware of what these rules allow one to speak. Foucault states,

One might say that it is the Name that organizes all Classical discourse; to speak or to write is not to say things or to express oneself, it is not a matter of playing with language, it is to make one's way towards the sovereign act of nomination, to move, through language, towards the place where things and words are conjoined in their common essence, and which makes it possible to give them a name (1970, p. 117, *Order of Things*)

In this way, the disciplinary practices that control who can speak and what may be said shape the meanings assigned to those who have little or no voice in the society. In the race to educate, education officials speak *about* children who do not keep pace; marginalized individuals are denied access to speak for themselves. Resultantly, the 'truth' of discourse does not necessarily represent the reality of objective facts, but instead it reflects the subjugated perceptions that form the objects about which the statements are made (Weeks, 1982, p. 111). In other words, perceptions of truth are merely a reflection of what society allows to be spoken – reflections on the cave wall, with only certain puppet masters being allowed to control the show.

While similar to the Marxist concept of 'ideology' and 'hegemony' (Olssen, 2004), the concept of discourse in critical ontology does not, in a sense, create 'false' consciousness, but rather it creates *a* consciousness of ideas shared by members of an immersed group (Doherty, 2008, p. 194). Discourse normalizes and naturalizes the values and assumptions that guide actions. Additionally, statements within a discourse must follow certain sets of rules to gain a voice amongst an intended audience. Thus, any statement is located and embedded in a discourse that constitutes a set of values and

beliefs, whether political, social, or ethical (Tremain, 2005, p. 13). Even acts of ‘liberation’ and proletarian ‘revolution’ must follow a certain set of rules found in the cultural environment (Foucault, 1988, pp. 50-51, *Aesthetics of Existence*). Resultantly, we may speak of an economic discourse, psychiatric discourse, quantum discourse, etc. to indicate the orientation of given statements (Doherty, 2008, p. 194), but we have to, along the way, question the discourses that shape the ‘revolution’ we wish to promote (Freire, 1993, *Pedagogy of the Oppressed*).

A key characteristic of discourses is the nodal geometry of their diffusion. Discourses do not simply grow in a continuous and universal manner from one center of authority; rather, they become dispersed from centers of origin (Foucault, 1978, *History of Sexuality vol. I*). Similar to the conception of knowledge articulated by William James (1909), “our knowledge grows in spots. The spots may be large or small, but the knowledge never grows all over; some old knowledge always remains what it was” (p. 167). Just as one can trace the spread of ‘fads’ from regional centers, the timing of the dissemination of knowledge and its eventual meaning does not affect all people evenly. For example, in some education settings, discussions of student differences follows a discourse of pathology (e.g., LD, MR, ADHD, EH), wherein teachers believe these classifications are real phenomena that exist within students, whereas in others, these labels do not hold significant value within the educational culture (Jordan, 2005, p. 129). The privileged “effects of truth” within a discourse are alone neither true nor false, but the dissemination of this knowledge influences individual perceptions of the world (Foucault, 1980, *Truth and Power*).

A critical ontology recognizes sovereign power, but it goes beyond this notion of blanket ideology to question how society regulates and disperses discourses. Discourses can be taken up and promoted by certain individuals with authority, but the representation and meaning in those statements have already been heavily modified by the time they reach the lips of the sovereign (Rowan & Shore, 2009, p.62 quoting Gandhi, 1998, p. 77). Foucault articulates this point when he states,

in every society the production of discourse is at once controlled, selected, organized and redistributed by a certain number of procedures whose role is to ward off its powers and dangers, to gain mastery over its chance events, to evade its ponderous, formidable materiality (1984, p. 109, *The Order of Discourse* quoted in Doherty, 2008, p. 194).

For example, Barack Obama's 'Race to the Top' is a statement of sovereign power that has an effect on individuals' behaviors, but in many ways, the President is just as much a subject to the power of this discourse as he is sovereign over it. Neither he, nor his speech writers, would have conjured the power of 'Sputnik' had this symbol not had preexisting power in our society.

In short, there is a constant struggle for control of dominant discourses in a society. However, dominant discourses are not intentionally, or unintentionally distorted mirrors of 'reality', but rather they are manifestations of underlying power relations that cannot be reduced to human intentionality (Brown & Cousins, 1986, p. 36; Fox, 1998, p. 418). What Foucault calls power/knowledge is what allows individuals to modify and link discourses to what would otherwise be 'non-discursive practices' – the 'real' historical events and human behaviors that come before meaning. Power/knowledge, thus, affects access to the *episteme* and makes it possible for one to speak about objects in a particular regime of truth. Otherwise, those statements that one could characterize as



non-discursive remain silent – they are in effect, outside of reality in a perceptual sense (Fox, 1998, p. 418). To understand the *episteme* that constitutes the race to education, therefore, we must acknowledge this power struggle and grapple with this concept of power/knowledge.

### **Power/Knowledge**

In exploring, “How are we constituted as subjects of our own knowledge? How are we constituted as moral subjects of our own actions?” Foucault articulates a conception of power that is important to understand if one is to follow this line of reasoning (1984, p. 49, *What is Enlightenment?*). Foucault did not aim to identify an overarching subjecting power, but he explores the spider web of power relations that act to constitute subjects through their own actions (1980, p. 97, *Two Lectures*). He urges us to analyze power on the small scale (1977, *Discipline and Punish*), and asks us to look for “points of resistance” where individuals begin to question the prevailing notions of truth (1978, *History of Sexuality, vol. I*). His methodology serves as a model for how researchers can uncover the silent voices of difference that are often veiled by a constructed unity of the subject (Erevelles, 2005, p. 48). When looking into the discursive race to educate, a conceptual and methodological framework based on Foucault’s writings seems valuable in figuring out how school policy-makers, teachers, parents, *and* students have come to adopt a scientific discourse of time. This framework is also valuable for helping us understand how subjects come to judge themselves based on arbitrary measures, such as learning speed (Peters & Besley, 2008, p. 7). Thus, this model challenges researchers to not only tell a history of thought, but to also to illuminate the discontinuities and oppositions within the privileged discourses (Allan, 1996, p. 225).

Recognizing a role for power in the creation of knowledge allows for a different type of analysis in which researchers can explore the instruments with which discourses create meaning (Paternek, 1987, p. 99). Critical ontology rejects a model in which one views language and categories as passive markers for understanding history. Instead, one sees violence in language and one must look to power for understanding how this violence plays on the creation of knowledge (see Foucault, 1980, *Truth and Power*; Dungey, 2001, pp. 468-471; Derrida, 1976, *Of Grammatology*).

The connection between power and knowledge is so entangled, that if one could measure these phenomena quantitatively, one would find a correlative relationship. In *Discipline and Punish* Foucault states,

There is no power relation without the correlative constitution of a field of knowledge, nor any knowledge that does not presuppose and constitute at the same time power relations (Foucault, 1977, p. 27, *Discipline and Punish*)

Elsewhere, he iterates,

There can be no possible exercise of power without a certain economy of discourses of truth that operates through and on the basis of their association. We are subjected to the production of truth through power and we cannot exercise power except through the production of truth (Foucault, 1980, p. 93, *Two Lectures*)

Though they appear intertwined in some form of unity, power and knowledge are not one in the same (Turkel, 1990, p. 178). Rather, they interplay in a synergistic sense resulting in the creation of new discourses over time. Power “designates relationships between partners” and that interaction, instead of zeroing out in effect, induces other actions and serves as catalysts for each other all the while modifying future statements (Foucault, 1982, p. 786, *Subject and Power*). In the race to educate, the knowledge of ‘slow learners’ is only made possible by certain disciplinary mechanisms based in existing power relations; these technologies of

power are further reinforced by the truths about 'slow learners' only made possible by such power. For a truly entrenched discourse such as universal time and linear progress, the play between power and knowledge is so hidden that few people recognize that power is present and only assume the truth of time.

A hidden nature is a fundamental characteristic of power. In some sense we are all trapped in a web of power relations that shape the discourses with which we make meaning of the world (Paternek, 1987, p. 99). Thus, a critical ontology recognizes that power is *always-already* present (see Brocklesby & Cummings, 1996, p.749). It is here that we see that one key to the establishment of truth is the presence of hidden mechanisms within power relations.

Some view Foucault as "the guy who said that knowledge merged with power, that it was no more than a thin mask thrown over the structures of domination and that those structures were always ones of oppression" (Foucault, 1988, pp. 264-265, *The Concern for Truth*). However, he is clear to articulate that the relationship between knowledge and power, truth and oppression, is much more complicated than this simplistic notion. In his words, the point "is so absurd as to be laughable" (*ibid*); knowledge and power are not identical and the two have many different relations between them. Thus, knowledge – the meaning we assign to certain truths - is consistently reshaped and reconstructed as power relations change (Qi, 1997, p. 14). For Foucault,

Knowledge is that of which one can speak in a discursive practice, and which is specified by that fact; the domain constituted by the different objects that will or will not acquire a scientific status...; knowledge is also the space in which the subject may take up a position and speak of the objects with which he deals in his discourse...; knowledge is also the field of coordination and subordination of statements in which concepts appear, and are defined, applied and transformed...; lastly, knowledge is defined by the possibilities of use and appropriation offered by discourse... (Foucault, 1972, pp. 182-183, *Archeology of Knowledge*)

In effect, knowledge is that which has a voice, the truths sanctioned by the prevailing discourse. Knowledge of the world is neither transparent nor visible by mere perception, it is not securely there for us to discover. Knowledge is organized, disciplined, categorized, and arranged; knowledge is distorted and deranged to conform to particular functions in the prominent power relations (see Sprinker, 1980, p. 86). Thus, only through the productive forces of power are new ways of speaking, *episteme*, allowed to take hold in the larger discourse of society (see Nettleton, 1992, p. 132).

The success of power comes with its ability to shield its own mechanisms from visibility, and one strategy for hiding power is in the production of pleasure. In short, power often produces what seem to be positive outcomes, but it is “tolerable only on the condition that it mask a substantial part of itself” (Foucault, 1987, p. 86, *History of Sexuality, vol. 2*). The struggle of power can contain repressive forces that limit individuals’ choices, but it is the productive capacity of power that allows certain discourses to take hold. Power, in this sense, traverses both positive and negative forces; it weighs down and says no, but it also induces pleasure, and allows for the formation of knowledge and new discourses (Foucault, 1980, p. 119, Truth and Power). The point that power is not always negative is one that must be emphasized if we are to grasp an understanding of how power works to establish discourses. Power produces reality, the domains of objects, and the rituals of truth (Foucault, 1980, The Confession of the Flesh; see Lacombe, 1996, p. 337); put another way, power produces codes of classification, the instruments of measurement, and the ways we look at the world and at ourselves (Foucault, 1982; The Subject and Power, see Verstraete, 2007, p. 59). Without the

positive attributes of these power relations it is hard to imagine a regime of truth taking hold in a society.

While schools, hospitals, prisons, etc. function as very visible institutions of power, most individuals do not recognize the constant surveillance and discipline that pervade our lives (Paternek, 1987, p. 104). Today, with many individuals constantly “plugged-in” to the internet and other media, these traditional icons of power seem less and less significant in the proliferation of certain discourses. Power, therefore, is “what displays itself the most, and thus what hides itself the best (Foucault, 1977, p. 157, *Power and Sex*).

Power is the relations that are invisible to most, but influence the entirety of the social body (ibid). For instance, I set my alarm clock every night – a very visible instrument of power – yet its subconscious effect on my life remains hidden until I begin to question. Likewise, Foucault saw how one group of people could declare truths about another group, and then work with those truths to convince people to change themselves. In the race to educate, authorities use all sorts of strategies to encourage students to learn ‘fast’, from games, to grades, to monetary reward or other privileges inside the school. The original source of knowledge may have been known at some time, but through a process of diffusion, the relations of power become hidden and individuals come to adopt the notions of truth as their own. For example, before I began to question the power in my clock, I had no idea that one can trace the invention of this technology to monastic orders signaling prayer times (Kramer & Ikeda, 2001). Until parents and students question the power of standardized tests, they will continue to look at their results as validation of their work.

Yet, if a discourse is secure, those relations of power are “perhaps among the best hidden things in the social body (ibid). Few people question the authoritative knowledge instilled in our notion of fast-paced education; however, a certain scientific discourse has come to dominate American public education maintaining a truth that claims to be superior to how individuals have known and described themselves. It is the conception of truth and knowledge as an act of social power that requires us to explore such notions and outlines the discourse that support such a regime (Danforth, 2000, p. 365). To explore the hidden power relations effecting discursive acts, we must partake in a discussion of the body.

### **BioPower**

Foucault’s model of power rests the locus of conflict on and in the body (Paternek, 1987, p. 112). The overall aim of power relations, in this sense, is the establishment of security through the production of docile bodies. As centers of power relations, human bodies become the target of diverse, and often hidden, mechanisms of control (Brenner, 1994, p. 690). The aim of control is to simultaneously render individuals bodies both docile and useful, and given the dominant discourse, the ideal bodies of the society can vary; however, in American public education, the ideal body seems to be one that can learn privileged knowledge as fast as possible.

Additionally, relations of power aim to reverse the energy created from whatever abilities do grow out of a discourse to create further subjection (Foucault, 1977, p. 138, *Discipline and Punish*; see Turkel, 1990, p. 184). With permission to affect her or his own body through the productive force of power, the individual may transform herself in

an effort to “attain a certain state of perfection happiness, purity, supernatural power” (Foucault & Sennett, 1982, p. 10, *Sexuality and Solitude*; quoted in Hughes, 2005, p.87). Effectively, the individual who endeavors to win a race can never be fast enough; once the individual succumbs to the regime of truth that one must race, one is open to additional modifications in the discourse and she or he performs the act. For an example of how the power in this race to educate affects bodies, look at how many students in America today are diagnosed stimulant medications so that they can keep-up with behavioral and temporal expectations in schools.

Each stakeholder in the conflict for knowledge uses, subjects, transforms, and improves bodies to meet the needs of the dominant regime of truth (Foucault, 1977, p. 136, *Discipline and Punish*). The search for knowledge, therefore, becomes an act “really seeking insight into what to do with our bodies” (Salvio, 2007, p. 25), and the object of criminal law, state power, penology, education and the human sciences become inscribed with deciding that question (Trukel, 1990, p. 179). In this light, research in the human sciences and education theory become about “decisions of the flesh” (Salvio, 2007, p. 25).

In this analysis, one must not look for the effects of power in some abstract sense, but we must look at how the exercise of power has actual effects on the bodies of individuals – especially those who offend privileged discourses (Paternek, 1987, p. 97). The policy decisions effecting bodies in modern public schools are the products of certain truths that have been transmitted and controlled by a great few political and economic structures in our society (Foucault 1977, p. 156-162, *Discipline and Punish*; see Chaput, 2009, p. 103). For example, Foucault traces privileged decisions of the flesh back to the

prison and states the reason for why this modality of power has gained influence is because of a “certain policy of the body, a certain way of rendering the group of men docile and useful” (Foucault, 1977, p. 305, *Discipline and Punish*). Focusing on the body requires a conception of knowledge and power in which the two overlap subjection and objectification and call for a new discourse of ‘humanity’ as an object of knowledge.

The power that certain regimes of truth hold on bodies may be conceptualized as ‘biopower’. Biopower refers to the notion that power relations in a society consist of a struggle to make individuals the subjects of observation and regulation in an attempt to construct docile, obedient bodies for the use, subjection, and transformation by the society (Morgan, 2005, p. 327). With a concept of biopower, power/knowledge is not an abstract notion of competing ideologies, but rather an agent affecting human life hidden under the notion of social progress (Foucault, 1977, p. 82, *Discipline & Punish*, cited in Paternek, 1987, p. 112). Biopower not only has an effect on the production of truth, but also is the mechanism managing “the whole space of existence” (Foucault, 1978, *The History of Sexuality, vol. I*). For example, Foucault traces the birth of demographics in the late eighteenth century, and shows how measurements of human activity combine with economic and political discourses to shape and control future activity (Foucault, 2003, p. 238-263, *Society must be Defended*). Through the interaction of knowledge and power, data is collected, analyzed, and reported back having an effect on social trends and individuals’ perceptions of reality. In relations of biopower, one assumes one can accurately measure, statistically estimate, forecast, and conclude with valid certainty the phenomena of human activity. Along with this assumption, these power relations assume the authority to prescribe norms, preserve averages, and manipulate variations to conform



with the ideal population (Tremain, 2005, p. 5). Data becomes the language of both measuring and prescribing discursive norms and bodies become the game pieces manipulated to meet some conception of reality.

While a critical ontology puts no claim to biopower being the only way of interpreting phenomena in the social world, when examining the creation of subjects, the notion of the influence of power/knowledge on bodies is useful (Isenberg, 1991, p. 306). Biopower helps us explore the phenomenon of resistance that takes place in American public schools and it reminds us to look for the counter-power that resides in places with dominant discourses. The concept of biopower also helps explain the simultaneously totalizing and individualizing aspects of discourse; a needed avenue if we are to accept that individual subjects, in Foucault's model, can claim the right to self-determination (Lacombe, 1996, p. 346). We must remember that while power/knowledge can have an absolute effect on individual bodies, even the strongest discourses do not have a universal effect on individual actions.

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A critical ontology conceptualizes the creation and manipulation of docile bodies through discourse as coming from two poles of biopower: disciplinary power and governmentality. Disciplinary power has a more individualized focus of manipulation, and this pole provides discourses with information from personal interactions in schools, hospitals, families, religious groups, counseling centers, etc. Governmentality, alternatively, provides discourses with data from financial reports, census records, and statistical analyses, and other policy documents that influence social actions (Tadros, 1998, p. 78). Both poles of biopower work to construct individuals as subjects so that

they can, 1) become subject to control and restraint of someone else, and 2) subjugate themselves with an identity and conscience constructed about the self-knowledge derived from the prevailing discourse (Foucault, 1982, *Subject and Power*; see Allan, 1996, p. 220<sup>7</sup>). To understand how American students can be identified, and identify themselves, as 'education racers' and as 'slow learners' one must incorporate discussion of both disciplinary power and governmentality.

As stated above, disciplinary power is exercised through institutions such as schools, military, and commercial establishments (Qi, 1997, p. 14). This power acts on everyone and it is diffuse in a way where it seems to come from everywhere (Morgan, 2005, p. 327). Unlike visible sovereign power that puts forward a head as symbol for resistance, disciplinary power is invisible, difficult to locate, and hard for individuals to resist. Additionally, while sovereign power can be avoided and escaped, disciplinary power employs technologies of surveillance that enforce norms at all moments of life (Covaleskie, 1993). As others have shown, the mechanisms of disciplinary power affect institutional practices in schools and make their way into the households of school children (Rafalovich, 2001, p. 390). We can see that disciplinary mechanisms, such as the clock, reinforce notions of time in the race to educate and can be seen in schools, homes, and even as close to the body as a student's wrist. One cannot measure how much pleasure school children feel when that last bell rings in the afternoon.

The systematic exclusion of people with disabilities from the workplace is an example of this type of power. For example, Foucault highlights how society bars many

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<sup>7</sup> See also De Certeau (1984, p. 35-37) for his conceptualization of strategies versus tactics. It seems that De Certeau's conception of strategies, in some ways, aligns to the conception of governmentality discussed here while his discussion of tactics, in some ways, aligns to the conception of border struggle discussed in a later section of this chapter.

people seen as unable to conform to the discourse of productivity during the nineteenth and early twentieth centuries, from participation in mainstream economic life. The disciplinary power of the factory shapes individuals' perceptions of 'others' and of themselves and divides groups within the society (Foucault, 1977, *Discipline & Punish*; see Morgan, 2005, p. 329). One can see the same power in the discourse that races children in their education. Students who are not able, or willing, to conform to a certain pace are marginalized in other areas of social life including economic life.

The concept of disciplinary power still leaves room for sovereign power and the role of government. These three forces act in conjunction with a target population, political economy, and apparatuses of security to shape human behaviors (Foucault, 1979, p. 18-19, *Governmentality*; see O'Neill, 1986, p.52). The central metaphor Foucault uses to describe disciplinary power is that of a pastoral power. The first characteristic of this power is that it is salvation oriented – “It is a form of power whose ultimate aim is Individual Salvation in the Next World” (Foucault, 1982, p. 783, *Subject and Power*). In this sense, salvation implies a secular meaning of security, protection, and sufficient standards of living (ibid, p. 784). In many cases, a discourse acts to save individuals from themselves, and asks for self-sacrifice “for the life and salvation of the flock” (ibid, p. 783). Society urges individuals to work hard, stay long hours, and emotionally commit to the betterment of the greater good, and because this power requires individual action, this discourse saturates the lives of individuals for their entire lifetimes (ibid); it assumes knowledge of people's minds and it assumes knowledge of their very identities (ibid).

This form of power may center from institutions that have preexisting privilege in the discourse such as government institutions, or it could come from welfare societies, or individual benefactors and philanthropists (ibid, p. 784). One may see this pastoral power in American public schools during the process of establishing IEPs for less-privileged students. Children become the subjects of intense public scrutiny with the promise that proper treatment will end in the individuals' inclusion into 'normal' society. However, few students ever leave these programs, and all the while intense power continues to affect the choices they can make.

Under these assumptions, pastoral power claims right to direct individual actions on behalf of the truths found through the internal gaze (ibid). Individuals in society, even the self, take on the role of judges in the society, acting to normalize behaviors. In this society, we have doctor-judges, teacher-judges, media-judges, etc. who continually monitor the gestures, behaviors, aptitudes, and achievements of bodies to see if they conform to the established norms (Foucault, 1977, p. 304, *Discipline and Punish*). It is through this gaze that notions of truth are produced, and the individual comes to know oneself (Foucault, 1982, p. 780, *Subject and Power*).

The other pole of biopower is governmentality. Foucault called governmentality the "contact between the technologies of domination of others and those of the self" (1988, p. 19, *Technologies of the Self*). In this sense, governmentality is both a strategy of disciplinary power, and an art of governing – a regime of truth dedicated to stabilizing and securing both population and economy (Foucault, 1991, *Governmentality*; see Qi, 1997, p. 14). To establish truth, society requires, "knowledge of the offence, knowledge of the offender, knowledge of the law" (Foucault, 1977, p. 19, *Discipline & Punish*), and

government provides apparently concrete rationalization for individuals' knowledge of these three factors. Thus, the concept of governmentality allows one engaging in critical ontology to examine how individuals and groups exercise power (Qi, 1997, p. 16).

Like disciplinary power, governmentality permeates all places in the social organization. To govern people, according to Foucault, is a "versatile equilibrium, with complementarity and conflicts between techniques which assure coercion and processes through which the self is constructed or modified by himself" (Foucault, 1993, p. 204, *About the beginning of the hermeneutics of the self*). One may find governmentality, therefore, in households, work places, schools, and government organizations, not as a force of domination but as a complex relationship between structure and agency (Lacombe, 1996, p.334). In relations of power between the self and the government, governors practice techniques (e.g., health screenings; IQ tests) to reason discourse, and individuals, over time, turn from overtly governed subjects, to "spontaneous problem-solvers" who practice "technologies on the self" in order to maintain cohesion in the discourse. Likewise, individuals engage in a dialogue with the state (e.g., opinion polling, course selections) to communicate what is reasonable for governors to do. Individuals in this way fall into a dual role as traditionally-governed and self-governed subjects (Qi, 1997, p. 15 citing Foucault, 1991, *Governmentality*). In the race to educate, for example, many students 'diagnosed' with a 'learning-disability' come to identify themselves as "SPED" or "ADHD" without anyone telling them they must do so. Similarly, the government requires few 'slow learners' to exile themselves away from the school, but many of these less-privileged learners drop out or socially isolate themselves in acts of self-governing the discourse.

There have been many studies of this phenomenon. For example, Nancy Lesko (2001) outlines the invention and maintenance of a narrative for 'adolescence' at the turn of the twentieth century. Lesko's study illustrates how institutions such as the juvenile justice system, Boy Scouts of America, and high school football reinforce anxieties that secure dominant notions of the teenage years of life as a time of 'storm and stress'. Similarly, Tremain (2005) illustrates the role of governmental practices in producing the "*illusion*" that disabled individuals "have a prediscursive, or natural" impairment (p. 11, original italics). In Tremain's words, "the category of impairment emerged and, in many respects, persists in order to legitimize the governmental practices that generated it in the first place" (ibid, p. 11). In short, the assumption of 'real' disability or deficit provides justification for the proliferation of the assumption – a circular rationale that can have 'real' effects on individuals' lives.

In American public schools, the special education process is perhaps the clearest example of governmentality. Doctors, psychologists, and teachers, over the course of the twentieth century, have promoted new ways for families to visualize and judge children. The 'normal' child is promoted as the natural child, while all others are objectivized as hosting some pathology. The center of the bell curve norm is often the privileged location, but in many cases, the individuals at the upper extremes of the Ogive curve hold status as the cultural ideal (Cadwallader, 2007, p. 387). Just as "tallness is preferable to shortness" and "high intelligence is preferred over low" (Davis, 1995, p. 33), we see that in many cases in American public schools, 'fast' is preferable to 'slow', and the faster one is, the more privilege she or he enjoys.

Governmentality in American schools looks at the Western notion of 'science' in identifying children and the resulting production and promotion of certain truths about childhood. In this discourse, 'experts' come to act as the judges of normality (Foucault, 1977, *Discipline & Punish*). In an effort to safeguard the 'normality' of the privileged child, 'experts' seek to label the child and impose authoritative power of the state onto the family. The imposition of power is usually manifested in a document called an 'individualized education plan', and this legal document comes to regulate the child, but also the teachers and other 'experts' who interact with the child. The narrative created about a child is then maintained through continuous scrutiny and regular updates to the solidifying documents in which the 'experts' and the family sit together to agree on the 'plan' for the child.

Governmentality shapes the truths that people come to form about themselves. However, just as he does with disciplinary power, Foucault's analysis questions the truths that create the authority of government and the rationalities that allow the state to have such influence on individual lives. To understand how disciplinary power *and* governmentality work to shape the truths individuals create for themselves, one must then examine the strategies, techniques, and methods used to solidify discourse (Doherty, 2008, p. 196).

### **Technologies of Power**

Biopower in the social world rests on the abilities of groups to enforce systems of self-subjectivity. This power requires individuals to assist discourses as they play for dominance in a society, and the most powerful discourses secure a level of self-subjectivity amongst member of society that individuals become docile in their adherence

to power. Think of a well-run classroom; twenty-five students all enter school in September with differing backgrounds and differing agenda, but within a few weeks a teacher can discipline the class to follow certain codes of conduct and to act as a unit (Denton & Kriete, 2000; Wong & Wong, 2001). Each member of the class is autonomous, but individuals soon develop certain labels by which they and others identify themselves, and they develop certain scripts for how to act when in relation with each other.

*Foucault was the first (or, the most persuasive at least) to describe how, through a supposed knowledge of the 'normal case,' differences among people became targets of power (Allen, 2005, p. 93)*

This process happens through the employment of disciplinary technologies; all members of society act to shape individuals behaviors and shape knowledge about each other and themselves. In a well-run classroom, some members of the class have more influence on the narratives that develop (e.g. the teacher or class bully), but discursive formation is chaotic.

The current study recognizes four disciplinary technologies that shape the discourses in society. These mechanisms of power work simultaneously to shape the knowledge members of society privilege. One such technology we call dividing practices, a mechanism that segregates society and promotes hierarchical power structures. In the classroom teachers use dividing practices to individualize instruction, to control communication between classmates, and to communicate privilege ascribed to different characteristics. Students employ the same technology amongst themselves in establishing social hierarchies and distancing 'friends' from 'others'.

Dividing practices work in conjunction with another disciplinary mechanism we call the establishment of norms. Norms establish basis for privileging certain



characteristics, and they rationalize the dividing practices based on those characteristics. Dominant discourses secure use dividing practices and norm setting to justify each other in a circular logic that entraps members of society in its logic. In a well-run classroom, the teacher may assign groups based on students assigned reading levels, however, groups soon take on differing levels of privilege due to the difference in instruction acted upon them and eventually the teacher assigns students' reading levels based on the group to which they belong.

The gaze and the examination are two other technologies used for enforcing the norms and social divisions privileged within a discourse. In schools, officials monitor students closely to ensure they do not violate 'rules', this surveillance is conducted by both teacher and student. While the most powerful individual in the relationship may introduce the 'rules', in time, students come to identify with these rule and they pleasure in their enforcement. The proverbial 'tattle-tale' or 'hall monitor' are artifacts of student self-regulation within a power structure that discriminates children. All members of society come to examine their own behaviors against the values of the norm and with a sense that a voyeuristic authority is watching them, individuals adhere to the narratives set in the discourse – we become docile bodies. By understanding the role of disciplinary technologies, we see how the race to educate has gained power over our bodies; we also see how this discourse watches children and turns certain subjects into objects of power. I go into more detail about each of these technologies of power below.

Foucault explains that societies where power becomes discrete and effective see those on whom it is exercised "more strongly individualized" (Foucault, 1977, p. 193, *Discipline & Punish*). In this "system of discipline," as Foucault calls it, "The child is

more individualized than the adult, the patient more than the healthy man, the madman and the delinquent more than the normal and the non-delinquent” (ibid)<sup>8</sup>. To individualize and discipline subjects in a society, the subject is either divided from others or divided inside herself (Foucault, 1982, p. 778, *Subject and Power*). Thus, through dividing practices, the establishment of norms, the gaze, and the examination, authorities are able to secure the self-subjective practices amongst individuals required for the maintenance of discourse. In the race to educate, the ‘slow learner’ is the target of each of these technologies of power.

As mechanisms of power, binaries play a role in the dividing practices that individualize the subject. By creating binaries, societies differentiate between ‘sick’ and ‘healthy’, ‘sane’ and ‘insane’, ‘criminal’ and ‘safe’, ‘independent’ and ‘dependent’, ‘fast’ and ‘slow’ and articulate the bodies that must become the sites for interventions (Foucault, 1977, p. 199, *Discipline and Punish*).<sup>9</sup> To remedy the ‘inherent flaws’ in the society, ‘experts’ examine these bodies and develop and organize new forms of knowledge and new institutions for the exclusion and confinement of less desirables under the guise of ‘finding a cure’ (Billington, 1996, 2000, 2002; Fraser & Gordon, 1994; Morgan, 2005, p.328). Marginalized subjects, once isolated and divided from society,

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<sup>8</sup> Remember this when we discuss “individualized education plans” and “individualized instruction” in later chapters

<sup>9</sup> Similarly, the taxonomies in biology, sociology, psychology, ethics etc. are dangerous because they rely on human values embedded within model-dependent discourse (Foucault, 1970, *Order of Things*). In a Darwinian model, one can perceive differences between ‘species’ of birds, mammals, fish, etc., but within this model one is apt to look for qualitative and quantitative differences amongst human ‘species’ (e.g., social Darwinism), and one can even categorize differences amongst human thoughts (e.g., Bloom’s taxonomy). Yet, these differences are only real within the normalized model of perception; using Darwin’s theory, a house cat can be seen as an entirely different species or a very distant cousin. This is not to say that there are no pragmatic differences between a house cat and a human (cats are much more intelligent), but the problem comes when this philosophy is applied to distinguish she who lives at Park Avenue & E 65<sup>th</sup> St from she who lives at Lenox & W 123<sup>rd</sup>. A history of American social science is filled with these characterizations of difference based on arbitrary measures. This is a history of power in our society.

become the objects of additional enquiry but lose a voice in determining the truth of subsequent knowledge.<sup>10</sup>

Foucault & Miskowiec (1986) add further conceptual complexity to dividing practices with their discussion of heterotopias. Heterotopias, such as boarding schools or military regiments, divide populations and serve to extend regimes of truth throughout a given population.<sup>11</sup> For those individuals on the less-privileged side of the chosen binary Foucault & Miskowiec (1986) discuss “heterotopias of deviation,” or places for those who deviate from the required mean or norm (p. 25). The authors put forward, “psychiatric hospitals,” and “prisons” as examples of these places where society exiles marginalized subjects, individuals who violate the norm. However, special education rooms in American public schools serve as an exemplar as well; special education serves as a depot for those bodies who represent deviant minds, and those bodies who are perceived as idle. As a dividing practice, the heterotopia of special education acts to split the subjects internally and distinguish them from others.

For dividing practices to be successful in the process of self-subjugation, society must normalize certain human characteristics. These normalizing discourses work in conjunction with the authority of governmental entities and the rationality of science to form connected patterns of power/knowledge. Through the procedures of normalization,

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<sup>10</sup> Danforth (2000, p. 364) illustrates this point in his portrayal of a meeting between school officials and parents for the determination of an individualized education plan. At the meeting, the student’s mother tells “interesting, provocative, heartwarming, hopeful, and tragic” stories about the life of her child, but these stories are inaudible compared to the numeric description of her son that comes from the ‘authoritative report’ held by the school staff. The actual student has little to no voice in the drafting of the education plan; however, his future performance is the source of “facts” used to determine future knowledge about other students categorized as in need of educational services.

<sup>11</sup> Lesko (2001) demonstrates such a space with her discussion of the Boy Scouts and their mandate to promote a particular version of masculinity outside the home.

disciplinary power is able to compare, differentiate, hierarchize, homogenize, and exclude in an effort to shape individuals to conform to the dominant discourse (Copeland, 1996, p. 382). Subjects who ally with a certain discourse look to fill valuable social roles and they attempt to project positive images onto society (Wolfensberger, 1983; Yates, 2005, p. 66).

This mechanism of biopower idealizes certain human strengths over others and conceptualizes an image of a physically and intellectually perfect body. For example, society comes to be obsessed with finding the 'fastest' body and resultantly modifies norms to fit that ideal. Just as the standard of training has changed to adapt to raising standards in competitive running, education practices have changed to adapt to perceived changes in educational standards. Yet, unlike times on the track, the normative ideal in education is a moving target. Since the discursive ideal is rare, if not impossible for most to achieve, society establishes norms to remind individuals of the fragility of their position in the society (Corbett, 1996, p. 5). In short, without normalizing standards, subjects cannot know the definitions of their pathology, criminology, or deviance (Turkel, 1990, p. 172). Without education standards, less-privileged learners cannot know their deficits, and privileged bodies cannot know the stigma they must work to evade. The 'slow-learner', and the mechanisms of power that act upon its body, is thus created to motivate both privileged and less-privileged individuals to adhere to the racing discourse.

Society creates norms through various procedures of governmentality and disciplinary power. In many cases, individuals in power relations attempt to construct texts to define the 'other'. In American public schools, the individualized education plan

is one document that helps develop texts about students. Using arbitrary 'cut-off' points, the education plan identifies and labels an individual student based on where she or he scores on an IQ test or an achievement test (Allan, 1996, p. 223). Intelligence quotients, themselves, identify students' abilities based on their comparison with 'normal' children; norm-references achievement tests act upon the same premise. Based on a subject's correspondence with those norms, a text is created for the individual prescribing the exercise of a certain function in society (Foucault, 1982, Subject and Power). To varying degrees, individuals then modify behaviors based on the texts they have available to them. By educating individuals as to where they fit along the normative spectrum, power relations are able to turn the disciplinary voice inward and make students aware of their own ignorance and incompetence (Coelen, 2008, p. 45). Students with an internal regulatory presence are open to further controls and adaptations required to further the discourse.

Discourses cement norms as 'natural' phenomena when individuals become the subjects of observation. With observation, the subject is decontextualized – the observer does not acknowledge the text which shapes individual acts – and the behaviors are normalized as naturally occurring phenomena in the subject. Additionally, meaning is assigned to behaviors and 'correct' behavior is determined due solely on the fact that it falls into the range of behaviors expected from the individual. Value is then assigned to, what is seen as discrete, behaviors and punishments and rewards are applied to acts based on their 'correctness' (Turkel, 1990, p. 185). Just as Foucault articulates the asylum as a space where "madness will be punished... even if it is innocent outside of it" (Foucault, 1967, p. 269, *Madness and Civilization*), education officials employ behavior

modification techniques in this manner to assure student conformity to the school rules whereas similar infractions would be fully acceptable at home or on the playground.

Once norms are established, society uses certain procedures to maintain the power relations in the prominent discourse. In a situation where sovereign power is present, society often uses threats of force, economic sanctions, and systems of surveillance to enforce privileged norms (Foucault, 1982, *Subject and Power*; see Paternek, 1987, p. 102). In a school, the principal and teachers hold sovereign power over students in many cases, and use various means to ensure continuation of cultural norms. At an institutional level, education practices maintain the prominent discourse with practices such as the creation of special education as a distinct department within the school. The segregating practices that result from this organization normalize students' abilities and pathologize those who deviate from the norm (Ball, 1990; Morgan, 2005, p. 326) – the 'SPED kids' become the objects of educational intervention. Through this process, individuals acquire a stigma that they, and the school community, internalize as a natural phenomenon. As several studies of 'tracking' in American public schools demonstrate, normalizations work to produce 'winners' and 'losers' in education and people with less privileged abilities tend to be on the latter side in the outcome (e.g., Corbett, 1993; Allan, 1996, p. 227).

Furthermore, professional 'experts' restrict access to these students, communicating identities they create for themselves, and they work to silence students' voices when creating identities (Corbett, 1993). Outside the dominant discourse of special education the child may be brilliant on her or his skateboard and a master with the guitar, but in a certain school environment, she or he is known exclusively as an

educational 'leper' and thus moved to that 'special room'. It is here that the vocal child with less privileged abilities falls into the double-bind. Denial of deficit may imply readiness for integration and requisite retraction of additional educational resources. However, self-advocacy for resources requires acknowledgement of the deficit and alignment with outwardly imposed labels. While these are not the only choices of action, the text in which individuals would assert the value of their perceived deficit, and thus demand that the difference be tolerated, accepted, and positively valued is not available to many students, especially in American grade schools (Allan, 1996, p.227 citing Oliver, 1992, p 25). Individuals may not have the same kind of relationship towards themselves in school as they do on the playground or at home, but their choices of identities becomes limited given the texts available to them in a given context (Foucault 1994, p. 10 Foucault). Consequently, those who have authority in the discourse and control the text to some degree, limit the positions individuals can take. As discussed, governmentality creates a cycle of classification and division that promotes this pathology as natural, thus cementing the discourse into the school culture. Without the establishment of norms, the race to educate would have no power.

However, those norms would not be secured without the disciplinary technology of the gaze (Foucault, 1978, p. 144, *History of Sex, vol. I*). Readers familiar with Foucault's work know that the embodiment of disciplinary technology and the concept of the gaze come in the form of Jeremy Bentham's panopticon: Foucault describes the panopticon thus:

At the periphery, an annular building; at the centre, a tower; this tower is pierced with wide windows that open onto the inner side of the ring; the peripheric building is divided into cells, each of which extends the whole width of the building; they have two windows, one on the inside corresponding to the windows of the tower; the other on the outside allows light to cross the cell from one side to the other. All that is needed then is

to place a supervisor in the central tower and to shut up in each cell a madman, a patient, a condemned man, a worker or a schoolboy (Foucault, 1977, p. 200, *Discipline & Punish*).

The panopticon presents a situation where each individual is in a world of isolation, yet a world in which the subject is visible to power at all times. Likewise, the subject of power perceives sight of the authority, but this illusion only acts to reinforce the power relation. In short, all are visible, and in this sense, visibility becomes a trap (ibid).

Visibility functions in a panoptic system by inducing the “automatic functioning of power” (p. 201). Surveillance in this system can be discontinuous, yet permanent in its effects. Visibility and invisibility have a reciprocal relationship in that for the subject to be disciplined the gaze must be visible, at least perceived to be such. However, because surveillance cannot be in all places at all times, the gaze must be invisible to ensure that subjects do not know the exact times of observation. The principles of operant conditioning are similar in this concept.

With power perceived to be ever-present, the subjects in such a system come to be the self-regulatory agents of power on themselves (Foucault, 1977, p. 201, *Discipline & Punish*). In the panopticon, bodies are visible and individuals play out their lives in a very public sense. Foucault states,

To write is thus to ‘show oneself,’ to project oneself into view, to make one’s own face appear in the other’s presence. And by this it should be understood that the letter is both a gaze that one focuses on the addressee (through the missive he receives, he feels looked at) and a way of offering oneself to his gaze by what one tells him about oneself’ (Foucault, 1997, p. 216, *Self Writing*)

Every aspect of life, from sexual orientation, intellectual affinities, hygiene practices, leisure activities, etc., come to be explored, interpreted, observed, judged, monitored, restricted and discussed in the public forum (McIntosh, 2002, p. 74). Individuals may



judge others, but also must regulate their own behavior with others in mind, and individuals consistently modify actions based on their current interpretation of the text.

Not all individuals are subject to the same scrutiny - certain lives are more visible than others and some are more susceptible to manipulation by the stronger agents in the relations of power. However, all members of a society are still subject to the modifying effects of the gaze, even those who write from the ivory tower. The clock has come to be, perhaps, the most powerful panoptic device in our world, and even the inventors of the machine fell into the discourse it helped to secure. Yet, certain members of society are privileged in controlling its effects and resultantly they are less subject to its power.

Imprisonment cannot be used as a technology of control for all members of society, thus societies employ perceptively innocent locations for observations. The school, for example, combines a place of productivity (i.e., learning) with a location of surveillance (i.e., assessment) (Turkel, 1990, p. 185). Schools thus provide “an architecture that would operate to transform individuals: to act on those it shelters, to provide a hold on their conduct, to carry the effects of power right to them, to make it possible to know them, to alter them” (Foucault, 1977, p. 172, *Discipline & Punish*).

Also, the school, like Foucault’s asylum “is a juridical space where one is accused, judged, and condemned, and from which one is never released except by the version of this trial in psychological depth – that is, by remorse” (Foucault, 1967, p. 269, *Madness and Civilization*). Furthermore, the visibility of the individual,

attaches him to his own identity, imposes a law of truth on him which he must recognize and which others have to recognize in him. It is a form of power which makes individuals subjects (Foucault, 1982, p. 781, *The Subject and Power*).

The individual becomes locked, in one sense, in a self-fulfilling prophecy, in which she or he must perpetually recreate one's self-subjectivity in order to maintain an identity within the prevailing discourse. Individuals come to assume responsibility for the discourse, and take on both roles in the power relation becoming the "principle of his own subjection" (Foucault, 1977, p. 203, *Discipline & Punish*).

Finally, for a discourse to take hold of a society, one other component is required – an examination. If society wishes to socialize individuals into conformity with expected norms with the gaze, a more visible examination must accompany the invisible and absentee observation. The examination, for Foucault, is "the point where power reaches into the very grain of individuals, touches their bodies and inserts itself into their actions and attitudes, their discourses, learning processes and everyday lives" (Foucault, 1980, p. 39, *Prison Talk*; see Hill, 2009, p.313). Examination leads to action.

The examination is a technique that combines "compulsory visibility," a "field of documentation," and the "establishment of cases" to normalize judgments and establish individuals as visible subjects (Foucault, 1977, p. 184-192, *Discipline & Punish*). The visibility and documentation of the subject makes it possible to fix norms, form categories, and classify individuals (Allan, 1996, p. 223). With the individual as a case, one can be "described, judged, measured, compared with others" then "trained or corrected, classified, normalized, excluded" (Foucault, 1977, p. 191, *Discipline & Punish*) – in short, objectified. The objectification of the individual marks the full manifestation of a discourse formation and with one's own individuality; society links the subject to an identity through the measurements of normalization and can be characterized as a case within the dominant discourse (ibid, p. 192).

Foucault highlights education as an example of the examination in disciplinary activity. He states that in education, the examination “enabled the teacher, while transmitting his knowledge, to transform his pupils into a whole field of knowledge” (Foucault, 1977, p. 186 *Discipline & Punish*). A state of constant evaluation develops in which the normalizing gaze works to subjugate every individual act. Again, the examination of children in American public schools leads educators to define subjects before they have even spoken on their own behalves (Morgan, 2005, p. 327). This act begins the process of self-subjugation in students before the students have even started the new school year. The discourse of the education race is thus a powerful force on the lives of American children.

### **Struggle**

Within the power of a discourse, individuals may seem helpless against the disciplinary technologies that play on their self-understandings, but the reader must remember that discourses only hold power because of individuals’ willingness to follow the narratives that it promotes. Thus, individual autonomy is required for power to effect human actions.

Subsequently, Foucault stresses that the power of which he talks is not ‘Power’ – with a capital P – but rather it is power situated in multiple relations of many forms. The power of discourse can exist in families, institutions, administrations, and class struggles. Sovereign power connected to the territorial state still exists, but it is part of a diverse network of power relations that shape discourse in a society (Qi, 1997, p. 14). One cannot deny the impact the federal government has had on education policy in the

twenty-first century, however, the power of this discourse is dispersed throughout society.

A critical ontology thus recognizes a sovereign power, where individuals act as visible agents in the exercise of controls, but also it recognizes a more diffuse power where individuals cannot trace the origins of particular statements (Covaleskie, 1993). Foucault's question of "How can the subject tell the truth about itself?" requires looking at this diffusion of power relations, and those relations act in many directions, including back to the sovereign individual (Foucault, 1988, p. 38, *Critical Theory / Intellectual History*; see Wong, 2008, p. 75).

In schools, this means that the teachers are both the transmitters and the recipients of power; we are part of the process in disciplining children, yet they, themselves are measured by the controls (Covaleskie, 1993). The truths of a discourse becomes self-fulfilling prophesy in which one's actions leads another to justify future conclusions about subjects. While some individuals in power relations do have greater power over others, for instance Rupert Murdoch has more power over many discourses than most Americans, and Barack Obama has an influential hand in shaping education discourse, the struggle by individual actors forces certain moves by these powerful individuals (e.g., Murdoch's scandal in the UK and Obama's polling numbers). Furthermore, there remain invisible mechanisms that shape the course for all (Weeks, 1982, p. 117).

To understand how individual's shape discourse we must therefore look at the role of conflict and struggle in the creation of knowledge. Power requires a confrontation between two adversaries, and the resulting conflict and instability in power relationships creates differences in people's abilities to decipher the same events in history. The

interpretations of what appear to be the same event does not consist of the same elements of meaning and thus, may represent two entirely different pictures of reality. Thus, the process of assigning meaning to one's interpretation of events is an act of creation.

Foucault states,

What I do is a kind of historical fiction. In a sense I know very well that what I say is not true. A historian could say of what I've said, "That's not true." I should put it this way: I've written a lot about madness in the early '60's – a history of the birth of psychiatry. I know very well that what I have done from a historical point of view is single minded, exaggerated. Perhaps I have dropped out some contradictory factors. But the book had an effect on the perception of madness. So the book and my thesis have a truth in the nowadays reality. What I am trying to do is provoke an interference between our reality and the knowledge of our past history. If I succeed, this will have real effects in our present history. My hope is my books become true after they have been written – not before...I hope that the truth of my books is in the future" (Dillon & Foucault, 1980, p. 5)

In short, individuals shape truth, not just reflect the knowledge that they observe.

Foucault repeatedly clarifies that writing is not about what the author or anyone else has already thought, but are rather an act engaged in "because I don't know yet what to think about a subject that attracts my interest" (1991, p. 27, Remarks on Marx; see Macdonald, 2002, p. 264). In this perspective, the author immerses herself or himself in the text and becomes a producer of knowledge more than the discoverer of facts (Scott, 2009, p. 352). Foucault writes,

Writing as a personal exercise done by and for oneself is an art of disparate truth – or, more exactly, a purposeful way of combining the traditional authority of the already said with the singularity of the truth that is affirmed therein and the particularity of the circumstances that determine its use (Foucault, 1997, p. 212 Self Writing).

Similar to Whitehead's (1929) conception of the learning process, the creation of knowledge consists of rectifying differences between new and preexisting truths.

Just as others argue that truth is determined by the "what we say" (James, 1909, p. 62; see also Dewey, 1915), a critical ontology recognizes that knowledge does not exist without human actors voicing statements aligned to the discourse in which those 'facts'

exist. Thus, the process of writing becomes a location where the author may continuously recreate oneself and one's work; the writing transforms the author just as much as the author creates the writing. As James (1909) states, "New truth is always a go-between, a smoother-over of transitions. It marries old opinion to new fact so as ever to show a minimum of jolt, a maximum of continuity" (p. 61). Resultantly, each new work, each new word, comes from a new author, one who is ontologically changed by each new word (Foucault, *Remarks on Marx*, p. 27, see Macdonald, 2002, p. 264).

In this line of reasoning, Foucault provides a rebuttal against those who conclude that critical ontology condones the fabrication of lies. He cites two prison revolts in which the disgruntled inmates had read his texts and organized resistance in accordance with his theories (Dillon & Foucault, 1980, p. 5). In James' (1909) words, "'The true,' to put it very briefly, is only the expedient in the way of our thinking, just as 'the right' is only the expedient in the way of our behaving" (p. 222). Truth is therefore, what we use to extend experience, what is taken-up and used in human action.

In Foucault's view, this conflict of intelligibility is the visible sign of 'domination' present in many human societies (1982, p. 795, *Subject and Power*). The difference in interpretations of events leads to a fierce struggle to shape the truths we hold to be self-evident. For example, most students of American history recognize that the meaning society ascribes to subjects such as 'women', 'White' and 'Black' changed over the last two centuries of national independence. Furthermore, the struggle for meaning encourages individuals to change affiliations within the discourses available to them and fight each other if not themselves (see Paternek, 1987, p.100-101).

Knowledge, especially truths about human subjects, in this view, is not the discovery of objective empiricism, but rather the spoils of a victory in a struggle between partisan forces. The author is no longer an impartial observer, but a participant in the battle, “has adversaries and is fighting to win,” and to the victor goes the privilege of interpreting the subject (Foucault, 1997, p. 268, *Society must be Defended*). Thus, the reader should be aware that while I leave it up to you to arrive at any conclusions about the subject, my intention is to shape a discourse of time for education that recognizes the fallacy of ascribing meaning to differing paces of learning. My goal here is thus not to create new ‘truths’ about the subject, but rather to usurp power from the dominant discourse and place it back with established discourses in the natural sciences, Pragmatic ethics, and Critical Theory that have heretofore been suppressed in American schools.

A ‘power’ with the prerequisite of conflict, requires two opposing viewpoints – that means resistance must always be present. For Foucault, resistance is “inscribed” in power as an “irreducible opposite,” and here it is important to illustrate the difference between ‘power’ and ‘force’ (see Paternek, 1987, p.99-100). An individual chained and beaten is a victim of force, not a subject of power (Foucault, 1988, p. 83, *Aesthetics of Existence*). One may best illustrate this concept through the case of slavery in American history. In this case, White planters could force enslaved women and men into submissive roles through acts of torture, but a great many women and men under such force did not give in to the rules and regulations of their so-called masters (e.g., Douglass, 1851; see also Cornelius, 1983; Smith, 1997). Scholars have also documented the same distinction between force and power in histories of American public schools where teachers’ notions of discipline were sometimes enforced with a switch when

preferred methods of power failed to instill a discourse of conduct desired by the teacher (Zimmerman, 2009).

Power, therefore, requires some kind of consent on the part of the governed to adhere to a set of rules that, to some degree, determine the actions of others. The degree to which a relationship of power controls others cannot be absolute, nor can there be an absolute refusal to abide by the rules of the governors. There instead, must be the potential refusal or potential revolt on behalf of the governed for power to exist (Lacombe, 1996, p. 343 citing Foucault, 1982, p. 788, *Subject and Power* and Foucault, 1988, p. 84, *Aesthetics of Existence*). The effects of power, therefore, are not exclusively in the present, as with force, but have potential to arise in the future as well. A relationship of power is “a mode of action which does not act directly or immediately on others,” rather it takes the form of an action upon an action having a trickledown effect on future possibilities (Foucault, 1982, p. 789, *Subject and Power*). A clear example of this concept in relation to the race to educate comes every morning when my alarm clock wakes me for work. No one pulls me out of bed, and no one forces me to work at the particular school in which I am employed, but needless to say, I strap my neck-tie around my neck every morning and head off to work only to chastise children for falling asleep as they sit in my first period class.

In his discussion of the productive forces of power, Foucault is careful to distance himself from Marx. He states that the production of truth is neither synonymous with the production of value, nor the production of any economically useful object. Instead, Foucault’s productive power concerns the creation of identity. He does not try to liberate the subject from some repressive system of control, but instead assumes the subject can



never be liberated from systems of control. In some sense, a subject can never know oneself as a being outside of discourse (Foucault, 2000, Interview with Michel Foucault; see Macdonald, 2002, p.273). The positive productive forces in the exercise of power, thus, do not constitute violence in the traditional sense of the word. For Foucault, there is no queen waiting to behead those who violate some sovereign order. Instead, relationships of power organize a total structure of action that limits the possibility of future actions. Power incites, induces, seduces, even forbids absolutely, but it always provides room for action, and choice within the given discourse of options (Foucault, 1982, p. 789, The Subject and Power).

Just as students in most American classrooms are not given relative freedom to work at their own pace, and often resist when the pace is not to their liking, there are general normative rules about due dates, grade promotions, and graduations that most come to accept as reality. The tension between the child who wishes to work at her/his own pace, and the mentor who urges conformity is what shapes future actions with each new day. However, the relationships of power are strongest and most constraining when they enable this sense of free choice in subjects.

One can also see the power of a discourse upon sovereign beings when subjects enter into a double bind. A double bind works swiftly to pin any individual who violates the *episteme* of a discourse. For example, if a student rejects the normal pace of the classroom and speaks out against the teacher's methodology, the student must position herself or himself as a 'slow learner' in comparison to those who do not wish to slow down. In calling out for a different lesson pace, the student must accept the prevailing discourse of speed and the labels of deficit associated with it (Liggett, 1988; Allan, 1996,

p. 230). Thus, the power of the student's argument loses ground as the label marginalizes her or his voice.

The power of a double bind becomes apparent when one considers the arguments put forward by Newkirk and others for a 'slow' education. While these arguments are compelling and timely, they employ a methodology of critique that puts the authors in a double bind. Newkirk works to challenge the privileged discourse of pace and time in education, but by confessing his identity as a 'slow learner', the author seems to accept its power and the pathology it projects onto subjects. Though Newkirk combats this pathology with his status as a successful scholar and revered teacher, for some people, his argument is less powerful than one that comes from an author who confesses herself or himself as a "speed reader." Foucault's (1988) paraphrase of this type of argument is, "All right, we are the same as you, by nature sick or perverse, whichever you want. And so if we are, let us be so" (p. 115, *Aesthetics of Existence*). Those condemned to the infirmary lose their voice.

The success that authors such as Newkirk have had is achieved by not arguing as, "a complete stranger to the game of truth," but rather accepting the rules and then playing "trumps" in this game (Foucault, 1988, p. 15, *The Ethics of Care of the Self...*). While the author above insists that "if you want to know what we are, we can tell you better than you can" (Foucault, 1988, p. 115, *Aesthetics of Existence*), this strategy allows the more privileged relations in this discourse to retain power. In other words, advocates for 'slow reading' must accept the discourse of linear time and the binary of 'slow-reader' versus 'fast-reader' in order to advocate for an alternative subject-position, and in this way, these writings serve to reinforce the regime of truth that imposes this subjectivity in

the first place. Thus, if we have ambition to achieve social justice for those who differ in the way they read or learn, or if we want to full-out question our identities as ‘slow-readers’ we must question this notion of ‘slow’ and look for a discourse more fitting for our chosen identities. We can do this when we question the technologies of power that enforce the race in education. However, one must accompany any calls for social justice with an ethical theory that justifies such actions; thus, we next turn to an analysis of the ethical philosophy held in critical ontology.

### **The Purpose of Aesthetic Ethics in Critical Ontology**

#### **The Art of Becoming**

On April 21, 1980, the *Christian Science Monitor* reported on a field trip taken by students at Boston High School. The field trip was to a local McDonald’s restaurant with the point being, according to an eleven-year veteran teacher on the trip, “to show [the students] and tell them that ‘this is what you will be doing for the rest of your life if you don’t start taking school seriously’” (Harsch, 1980, Apr. 21, p. B16). The students on that trip were supposedly going to taste the hard work of service labor and realize that a white-collar life was preferable to blue-collar labor.

Just by coincidence, a young woman named Karen King started her first job at a McDonald’s restaurant in Lawrenceville, Georgia around that same year (McDonald’s, 2011a). I do not know if her teachers brought her on a similar field trip, but regardless, Ms. King has been an employee of McDonald’s for thirty years. Stuck in this dead-end job, Karen King has worked for McDonald’s in several locations. No longer employed in

Lawrenceville, she now works in Oak Brook, Illinois - as president of McDonald's USA, East Division (McDonald's, 2011b). Karen King must not have worked hard enough in school because she's still stuck working at McDonald's – at least that is what some may believe.

In a similar story that happened some two decades earlier, a high school student named James Leno got his first job at his local McDonald's restaurant. Finding humor in his work, James (you probably know him as Jay) made a joke of his employment; in fact, his jokes were so popular that he won a talent show hosted by the very restaurant that, in part, inspired his humorous lines. Jay did go to college, Emerson College, but his career preparation came from performing comedy gigs on the Boston campus. Those teachers on that field trip in 1980 must have been thinking of Leno as their exemplar because since graduating college Jay just went back to doing what he did at his first job at McDonald's – cracking jokes (Oprah, 2003).

I bring up these cases, not because I am a spokesperson for McDonald's – I'm not – but because they are just two rebuttals against a tradition in which, for well over a hundred years, educators, government officials, curriculum writers, parents, and children have brought specific values about time, progress, and 'success' into American schools and used those values to judge others and themselves. This narrative values a narrow trajectory for education, but by doing that, it fails to recognize the chaotic nature of learning.

If Karen King was on that field trip, would she have chosen to work at a McDonalds? Would Jay Leno have had the courage to step into his first job? I do not know the answers to these questions, but the message was certainly clear to those

students in 1980: “don’t waste your time encountering differing experiences or gaining knowledge while climbing up a career ladder, head directly to college, and avoid service labor at all costs.” Yet, there seems to be a qualitative difference between a Karen King who worked at the lowest paid positions in a company she now runs, and a Karen King who heads straight to college, grad school, and then takes the position without having any experience working the jobs her employees do every day. There seems to be a qualitative difference between a Jay Leno who works up the courage to joke with a customer at his high school job and a Jay Leno who never faced rejection.<sup>12</sup>

In full disclosure, though I do not represent McDonald’s in any way, I have worked three hours in a McDonald’s restaurant as part of a community fundraiser for school field trips. I was assigned to the drive-through window taking money and handing back change, easy enough, right? However, after it became apparent that I, a college educated individual, was not fast enough in working the register or calculating correct change I was delegated to the grill, where my colleagues assumed I could handle flipping a burger when my direct supervisor told me to do so. Working that job was hard, and it is easy for me to see how Karen King was able to build skills early in her life that she would use in her current occupation. Similarly, I did not dare approach the front counter of that restaurant due to the pressure I knew I would face – Jay Leno did it as a teenager.

Thus, we must ask if by racing to educate students, we now, in some sense, push students past less-privileged knowledge only to silence what would otherwise enrich

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<sup>12</sup> At an August 14, 2012 political rally in Lakewood, CO, Republican vice presidential candidate Paul Ryan made a similar argument that his experience working at a McDonald’s shaped his work ethic (Ryan, 2012). Other McDonald’s alum include Amazon.com CEO, Jeff Bezos, actress Sharon Stone, talk-show host Star Jones, actor James Franco, Indiana governor Joe Kernan, Olympic gold medalist Carl Lewis, chief of staff for George W. Bush Andrew Card, and Miss America Debbye Turner among others who used this service job as a stepping stone for future work experiences.

one's life; we must ask if our conceptions of progress have a negative impact on students' experiences when we use these values to judge students' achievements. In this discourse, we convince students that a certain pace is mandatory for success, and we pathologize anyone who does not meet the expected pace even if their path to success takes them on a long road. We often forget that the Tortoise *and* the Hare in Aesop's fable both did finish the race, although not at the pace *we* may privilege.

Coincidentally, many of the discursive themes that work to create privilege for fast food also work in the race to educate our children, and while we should digest both in moderation, we are trapped in a discourse that does not allow such action – for some reason it is all or nothing. And just like one who eats too many Big Macs, a persistent race to educate our children is enough to give the American education system indigestion – if not cardiac arrest.

A critical ontology, therefore requires both an epistemological framework for understanding the creation of knowledge and an ethic for understanding what one should do with that knowledge. The notion of ethics promoted in a critical ontology rests on an aesthetic of existence and the act of becoming (Peters & Besley, 2008, p. 5), plus an assumption of uncertainty for those who make judgments about others and about themselves.

In this model, the body is in a perpetual state of creation, and “we have to create ourselves as a work of art” (Foucault, 1997, p. 262, *On the Genealogy of Ethics*; see Theile, 1990, p. 915). Foucault challenges individuals to look critically at themselves and question the relationship one ought to have with oneself. As individuals are caught in the web of discourse, one must conduct an ongoing assessment and creation of the self; and

though one may be immersed in a discourse, the goal of an aesthetic of existence is to “leave to others memories of a beautiful existence” (ibid). This implies that one must be aware of, and negotiate with, power relations that would impose an alternative discourse on one’s behaviors, but it does not require one to race. A critical ontology calls on individuals to seek a beautiful existence while negotiating the biopower that plays on the body. In effect, individuals must enact a critical ontology on themselves to maintain some sense of awareness of possibilities of action.

The aesthetic existence is a perpetual act of becoming. One following this ethic may subscribe to Foucault’s mantra, “Do not ask who I am, and do not ask me to remain the same” (1972, p. 17, *Archaeology of Knowledge*). Individuals thus must play with the self-subjectivities that form the basis for their actions and find the preferred combinations of judgments to create the greatest forms of themselves (Scott, 2009, p. 361). In effect, one may morph and shift forms according to the discourses one is currently a part of; one’s movement between societies may impact which form of the self is seen as beautiful. With this understanding of aesthetic ethics, one should not be surprised to find the proverbial straight-“A”- student hanging around the skateboard park with kids who have dropped out of school. Likewise, one should suspend judgment of those who drop out, but also serve with their churches and attend Symphony Hall for a recital of Beethoven’s 9<sup>th</sup>. An aesthetic existence calls for one to suspend judgment of the subject in recognition of the fact that the subject is unknowable in its complexity.

With the assumption that the subject is unknowable, the ethical event in this view is the transformation of the self into a knowing subject – the act of questioning and searching for previously silenced knowledge. As people come to know themselves

differently and change their perceptions of others, individuals must make judgments about their own bodies and bodies of others (Foucault, 2000, p. 241-242, Interview with Michel Foucault). However, in this ethic, to know thyself is not necessarily the goal – one may assume it impossible – rather the goal is to know of the power relations that influence such knowledge – the goal therefore is to question thyself. Foucault states,

Maybe the target today is not to discover what we are, but to refuse what we are. We have to imagine and to build up what we could be to get rid of the kind of political 'double-bind', which is the simultaneous individualization and totalization of modern power structures (Foucault, 1982, p. 785, The Subject and Power).

To 'rid' oneself of the power relations that work to subjugate the individual, we must practice a "politics of the self," or a recognition of the self as "nothing else than the historical correlation of the technology built into our history" (Foucault, 1997, p. 231, Christianity and Confession). Through a critical ontology, one can then analyze the limits that society imposes on us and play with possibilities of going beyond those limits.

It is this premise that requires us to reject self-imposed labels like 'slow reader' or 'gifted learner'. As a questioning subject, I cannot claim to know who I am, and thus must posit the possibility that I can be anything. In a critical ontology there is the assumption of uncertainty that introduces that status of maybe into the binary logic of "yes" or "no." Thus, I *may be* a 'slow reader', but I also *may be* a 'fast reader', a 'non-reader', and a 'picture-reader', if not many other forms (see Foucault, 1997, p. 213, Self Writing). Certainty is replaced with probability, and the possibilities for existence are endless, thus one must be cautious of judging others due to our uncertainty of the other's 'true' state of being.

It is the act of pushing the limits of known realities that allows one to develop as an ethical being in an aesthetic of existence. When one treads into these limit-



experiences, or boundary-experiences, the reality of some parts of an identity dies with what the individual finds. Conversely, interaction with new people, places, things, and sensations creates new behaviors and begins a new process of discourse formation within the subject (Scott, 2009, p. 363). As Scott articulates,

The very act of caring for myself in this instance interrupts the subliminal processes of normalization and sets in motion another kind of dynamics as I come to the limits of my “authorized” experience and the emergence of a different kind of experience (ibid).

The critical awareness with which individuals enter non-discursive situations leads, in some sense, to a liberation from the self-subjectivity acting upon the person. For example, Foucault does not look for liberation from the state, but rather for liberation from the modes of objectification and individualization that are connected with governmentality (Foucault, 1982, *The Subject and Power*). Quoting Seneca, Foucault writes, “I am wont to cross over even to the enemy’s camp, - not as a deserter, but as a scout” (1997, p. 213, *Self Writing*). In an aesthetic ethic, the individual is never content to assume a static nature to knowledge; there is always something more to uncover.

This concept of individuals engaging in boundary experiences aligns to similar concepts in an ethic popularly known as Pragmatism. For William James (1909), these encounters with border knowledge shape human experience. He writes, “The result is an inward trouble to which his mind till then had been a stranger, and from which he seeks to escape by modifying his previous mass of opinions” (James, 1909, p. 59-60).

Elsewhere, Alfred North Whitehead (1919, 1929, 1933) articulates a conception of ‘process learning’ by which individuals acquire knowledge through their experiences with the environments in which they live. For Whitehead, James, and Dewey, knowledge is a live organism that changes as humans experience the world. A conception of one’s

interaction with boundary-experiences is similar to how these other authors frame learning because a critical ontology allows individuals to question the static realities held by disciplinary sources as the learner experiences events that may challenge preconceived notions of truth.

For some, this description of an aesthetic existence and critical ontology may resonate more as an outline for individual liberation of the self, than as a prescription for individual action towards others, but Foucault's model does help us articulate the latter requirement of an ethical theory. One may summarize the outlook of this perspective in broad pronouncement of the death of the expert, but this ethical view requires individuals not only to question the expertise of others, but also the expertise of the self in knowing itself or others. One can summarize the argument for the treatment of others within an aesthetic ethic with two premises: 1) One should not judge others or themselves without first holding complete knowledge about the person and the environment in which they live; 2) Humans are incapable of holding complete knowledge about any person or the environment in which they live. Thus, one should not judge others or themselves.

This conclusion has many implications that I address below, however, it is hard for one to move on without first acknowledging that this ethic severely limits the scope of human actions that one may consider moral. In fact, one may argue that an aesthetic ethic frames all but the meditating hermit in an unethical light, and it reserves judgment to only a being(s) who can behold the universe in total form at every moment of existence – that is correct, but I hope the reader does not think I'm introducing anything new here<sup>13</sup>. Thus, the intellectual, in this view, is no longer an adviser in the struggle – no longer one

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<sup>13</sup> Many of the world's foremost ethical theories rely on similar premises.

who judges that status of others - but rather one who is a topographer and geographer mapping out the landscape of the battle. The observer's essential role in this ethic is to provide instruments of analysis (Foucault, 1980, Afterword; see Weeks, 1982, p. 117). Instead of assuming superiority based on knowledge claims, one must step back and assess the landscape to see what discourses are available for the construction of alternative truths.

As metaphor, let us say that we sit in a diner considering the nightly specials. On tonight's menu, we have Ivy League salad, Submarine sandwiches, and Shepherd's pie – each selection represents a presumed trajectory on which we base treatment for our particular students. Though one may jump at a privileged choice, critical ontology encourages us to consider all options and search for possibilities hidden off the menu before we call the server. Ideally, we would like to sample everything on the menu in order to find the best dish – the moral action here would be to sit all night and consider how our choices would play, we would attempt to attain absolute knowledge about the subject and its environment before we judge which action to take. However, pragmatically, we all must order eventually and it is our prior understanding of the subjects and the social pressure of our company that leads us to that decision when the time demands. The only ways we may be certain of a 'right' choice is with comprehension of absolute knowledge, but since that it not possible, we are required to make some decision, albeit immoral.

William James (1909) uses the concept of an 'ethical holiday' to explain one's ability to engage in social action. Just as one must order from the menu of action at some time, an ethical holiday allows the individual to take action as a method of survival

despite disapproval of the means. Explaining the charge of hypocrisy that comes with one's actions during an 'ethical holiday', James (1909) explains how he is forced to "give up the absolute" in his daily life to carry out continued existence (p. 78-79). Some critics of critical ontology charge writers like Foucault with hypocrisy – for Foucault the charge comes in criticisms against him when he attempts to interrupt 'enlightenment reasoning' while speaking within the very same discourse. However, one may view this tactic as Foucault's 'ethical holiday' - to speak, one must communicate within a discourse others recognize, and an expatriate who returns to his homeland does not have a voice if he speaks in a foreign tongue. Ethical holidays are required until we achieve universal acceptance of a beautiful life (see Habermas), or we all ascend to the status of all-seeing deities – don't hold your breathe on either.

Similarly, Dewey (1925, *Development of American Pragmatism*) writes, "Absolute truth is an ideal which cannot be realized, at least not until all the facts have been registered...and until it is no longer possible to make other observations and other experiences" (p. 8). Thus, without access to absolute truth, we must accept the immorality of our actions, all the while working to understand the other options that are available to us. Foucault cannot write outside of 'enlightenment reasoning' because he does not have access to language with which to speak. Consequently, while I advocate exploring the borders of knowledge in relation to the pace of education, I am humble in assuming that my analysis is incomplete; it will always be incomplete due to my lack of absolute knowledge. So I beg the reader to heed Dewey's words, "Be the evils what they may, the experiment is not yet played out" (1922, p. 31, *Pragmatic America*).

Therefore, with no claim of final authorship, one ascribes to creating a beautiful existence committed to the reformation of the subject. In this sense, the work of art is never completed, and authorship never signed. Those who set in stone a final interpretation impede freedom of other works in process of becoming (Foucault, 1977, *What is an Author?*). A closed-minded individual, so to speak, is the proverbial critic whose cemented review destroys the career of an artist. In American schools, how many education officials have dashed dreams with scathing criticism or stigmatizing identifications in a 'special education' program? Conversely, the artist and student are responsible for listening to this criticism and shaping the self with a mind to this power – though not necessarily succumbing to it. A critical ontology therefore views the author, at worst, as an agent of obstruction in which we block the proliferation of meaning. At best, the author is an agent of metamorphosis who clears the terrain so subjects may explore the borders of knowledge. Thus, the moral act of any person in this framework is to leave the interpretation of subjects open for future encounters, to question the subject without imposing oppressive limitations on one's continued aesthetic experience. One must be skeptical of assigning meaning to other persons or other things, if for no other reason than if the 'other' follows their own aesthetic of becoming, the former meaning assigned to the subject is not valid. This uncertainty in the validity of observation is a fact of nature in the present discourse of Quantum theory, and humility in one's acceptance of limited knowledge has been a premise of many ethical discourses. Just as the scientific method encourages researchers to continue the search for knowledge, critical ontology requires one to explore the borders of knowledge in search of a more just world.

It is due to a sense of humility that we must suspend judgment indefinitely – in an ever-changing social world, one has no choice but to modify judgments based on the largest supply of information. People such as Galileo Galilei and Vincent Van Gogh come to mind when I speak of this concept. Remember that the Catholic Church censored Galileo’s ideas and Van Gogh had trouble selling a painting during his lifetime; it was only when society viewed their works in a different context (a discourse that they influenced) that their genius was acknowledged – try buying a Van Gogh today. In American schools, we are so quick to initiate students into the knowledge of “greatest value” without first listening to them, and without allowing them to question the knowledge we promote; in effect, we put Galileo on trial before we read his book. Thus, educators may teach lessons according to the rules set by authorities, but an educational setting must encourage the free exchange of ideas, and schools should allow students to explore the borders of accepted knowledge so they may create a beautiful life. We will return to how this ethic may play out in schools after we address some of the challenges to this point of view.

### **Criticism and Defense**

An underlying assumption of a critical ontology is that no subject has a natural, complete, unitary, singular identity . Subjects may occupy multiple positions at one time, even though others frame them as holding single standpoints (Sullivan, 2005, p. 31). Thus, many of the premises of a critical ontology come in reaction to the universalist ethic that came out of the Enlightenment. Some ethical theories hold that only when society accepts values as universally valid is one able to act ethically. However, one

must question values that have been elevated to a status of ‘universal’, especially in light of a history of human atrocities enacted in the name of such values (Corbett, 1996, p.96 citing Suleiman, 1994, p. 227). Likewise, while an aesthetic ethic is a theory, we reject the idea that a theory, or reason, alone can be the means to a justifiable end. Theory, in this view, assumes a prior objectification of the subject, and reason removes the individuals from the contexts of guilt or innocence (Foucault, 1982, *The Subject and Power*; see Paternek, 1987, 103). For Foucault, the philosophy and the sciences that emerged during the Enlightenment and that have gained power through the modern era “radically exclude forms of thought, language, association, action, and experience that are deemed to be aberrant” (see Turkel, 1990, p.172). In short, reliance on universalist theory and reason alone silence voices that can help us expand our understanding of the world. An ethic focused on contextual circumstances is the best for American schools – and an aesthetic of experience is just such an ethic.

*Rarely have mentally retarded adults been taken seriously, offered a forum, given a voice in the society in which they live, and to which many of them contribute (Townsend, 1981, Dec. 6, p. G2).*

If one wishes to appeal to the discourse of justice, one must look at critical ontology as a form of defense. In the American code of criminal justice for example, the role of a defense attorney is *not* to prove the innocence of her client; rather it is to place doubt in the certainty of guilt. If after hearing the case, one wishes to claim knowledge in the matter, let the jury decide – this is what we call the establishment of discourse. However, the jury has the ethical responsibility to listen to both sides of the case and to consider the evidence that lawyers present. Furthermore, one must acknowledge that the rules of the court, the *episteme*, restrict the types of evidence that lawyers may present.

Thus, in our social world, the truth of the matter is of little significance; rather ‘truth’ is determined by a jury of our peers. In the discourse of our race to educate, the prosecution has put the ‘slow learner’ on trial and calls for a conviction on the grounds that this child is not learning fast-enough. However, upon hearing further evidence, the reader may overturn her conviction and let justice reign – a critical ontology inspires the jury to question why the subject is even on trial. This is our cross-examination.

As a direct affront to established universalist discourse, critical ontology is attacked as an unsatisfactory ethical framework. The three major criticisms of critical ontology are that it promotes relativism, that it embraces nihilism, and that it ensures ethical paralysis. Yet, while some attack Foucault and his hyperskeptical followers for conceptualizing a flawed ethic (e.g., Habermas, 1966, p. 7; Fletcher, 2000, p. 86), if we buttress components of an aesthetic ethic with justifications from other emancipatory ethics (e.g., Derrida’s Theory of Hospitality; James’ Pragmatism), a robust defense of this philosophy can result. A pragmatic aesthetic ethic can serve as an ideal for educational research and for American public schools; I argue that point here.

For some, the ‘cynical’ characteristic of critical ontology, “allows no meaning, no subjectivity, no spontaneity, no mutual understanding” (Isenberg, 1991, p. 305). For philosophers such as Jurgen Habermas (1990), an analysis that blends and blurs the lines that separate truth and power is unable to distinguish the factual nature and authority of the discourses available to the researcher. Discourses in art and literature, according to this criticism, have as much authority as politics and science – and that is apparently bad (Isenberg, 1991, p300). According to some, while Foucault appears to “endorse a one-sided wholesale rejection of modernity,” he does not leave the reader with anything to



replace it (Hartsock, 1990, p. 170 quoted in Fletcher, 2000, p. 94). If he rejects universalist notions of humanity and justice, according to some, “he stands on no ground at all” (ibid). In short, these critics claim that critical ontology leaves us with no reason for privileging one discipline over another and assumes that if one were to reject and overthrow one regime of truth, we would just take on a new one with no inherent superior value.

This begs the question dealing with the relativity of choices within our ethical lives: what makes one ethical choice any better than the next? One must be careful here, not to assume that because one lives within an aesthetic ethic, that anything goes. In any society, there is a fine line dividing power and freedom, and just as Foucault rejects absolute power as force, he rejects absolute freedom as “inconceivable”. He writes:

My point is not that everything is bad, but that everything is dangerous, which is not exactly the same as bad. If everything is dangerous, then we always have something to do. So my position leads not to apathy but to a hyper- and pessimistic activism. I think that the ethico-political choice we have to make every day is to determine which is the main danger (Foucault, 1997, p. 256, *On the genealogy of ethics*)

For Foucault, the key to individual liberty does not lie in the right of individuals to do whatever they choose; critical ontology does not “vindicate a lyrical right to ignorance or non-knowledge” (Foucault, 1980, p. 84, *Two Lectures*).

Rather the quality required for liberty is for individuals to have ways of affecting the discourse and modifying the power/knowledge that shapes it. Individuals must have means to engage in the pessimistic activism that challenges dominant power. As

Foucault states,

There is no question that a society without restrictions is inconceivable, but I can only repeat myself in saying that these restrictions have to be within the reach of those affected by them so that they at least have the possibility of altering them (Foucault, 1997, p. 148, *Sexual Choice*).

One may not accept the manifold interpretations of reality, but one cannot live a beautiful life if one has not heard all there is to say.

Thus, one must not mistakenly think that critical ontology denies the existence of truth. It must be stated plainly that critical ontology does not deny the existence of truth in physical phenomena, it does not deny the existence of truth *within* discourses, and it does not deny the existence of truth when one holds absolute knowledge. To the point, oxygen reacts with iron to create rust, ultraviolet radiation affects skin cells and causes burns, and in the discourse of linear time, 5 miles per hour is slower than 10 miles per hour – those are all true statements. However, the determination of *episteme*, and the determination of knowledge, involves an interaction between power relations. The purpose of critical ontology is therefore to clear the terrain so that individuals may survey the power relations that affect their lives.

With that said, a critical ontology does not reject the notion that some individuals within a regime of truth know more than others, or that some actions are ‘better’ than others. Foucault states,

I really can't see what is so objectionable in the practice of those who know more in a given truth game than another participant and tell the latter what he must do, teach him, and pass on knowledge and explain techniques to him" (Foucault, 1985, p. 26, Freihart and Sielsstorge quoted in Coelen, 2008, p. 44).

Knowledge in any discourse has practical uses for the continuation of experience, and ethical choices must promote that transfer of ideas.

The presence of power within a society decides the pragmatic question of which knowledge is best. As Foucault states, “Leave it to our bureaucrats and our police to see that our papers are in order” (1972, p. 17, *Archaeology of Knowledge*). An aesthetic ethic is not concerned with assigning ethical projects, but rather it is concerned with promoting

survival within discourse and promoting the continuation of experience into border regions of knowledge. As an educator, I am concerned with teaching my students a history of power that shapes our understandings; I am concerned with teaching them the value of hospitality so that everyone may speak, and I am concerned with introducing my students to alternative voices that run contrary to the prevailing messages they receive from society. Teachers must have confidence that students will then take actions that are for the betterment of society – whatever that vision may be. Any other aims I leave up to authorities in society – my curriculum is a counterbalance to the weight of their power, a disruption to the narrative they wish to promote.

Just as Dewey (1925, *Development of American Pragmatism*) and James (1909) argue in regards to Pragmatism, critical ontology holds that discourses establish certain codes of acceptable behavior, and to gain any sense of power within a society, individuals must adhere to a certain ethic. Foucault states, “if they want to have a good reputation, if they want to be able to rule others, they have to do this” (Foucault, 1983, p. 266, *On the Genealogy of Ethics*). While a critical ontology may question our very senses of reality, one must still communicate with others in society. Whether or not one speaks a non-discursive truth, the effects of one’s speech are what stand trial – if one speaks truth, but is not able to communicate with society, one’s voice may as well be silent. Thus, for an individual to have any hope of living a beautiful life, despite one’s bending and twisting of previous works, one must align to some code that is intelligible to a perspective audience. In short, one’s own narrative cannot be completely and originally fabricated; otherwise, no one will listen to the message (see also James, 1909, p. 201). Thus, we position ourselves within discourses that allow us to communicate.

However, just as the scientific method directs one to form conclusions based on available evidence, a critical ontology accepts that we must apply some pragmatic judgments in our daily lives, but it also respects the processes of self-organization in shaping which ethic holds power. One may never escape the web of power, yet based on the structure of society at a given time, one must decide which moral position she or he must take based on the discourses available to her – one must decide if the ‘ethical holiday’ will gain approval within the larger society. Ethics in a critical ontology is thus not relativist because we expect individuals to make moral decisions in reference to their relations of power. The beautiful self is thus the subject who withstands modifications in the discourse and rests as a model for future generations despite apparent changes in society’s ethical viewpoint.

For example, let us consider Susan B. Anthony as an ethical being. During her lifetime, most states denied women the right to vote on all forms of political and moral grounds. For much of her life, Anthony survived within this regime of power; however, she worked towards a discourse in which women enjoyed the same voting rights as men. Thus, at a time when it was criminal for a woman to vote, Anthony cast her ballot and served prison time for breaking a law – an act seen by many at that time as immoral. However, today most Americans praise Anthony for her courage and her willingness to stand up against the dominant regime of power. Her attempts to give voice to millions of silenced women is the moral act in this case, the attempts to block women from voting are not, even though at the time one may have argued the opposite opinion. That is not to say that any ethical position is justifiable; it does mean however, that we must never give

up the right to contemplate alternative narratives – to challenge the regimes that hold power in our lives.

Because of the complex interrelationship between knowledge, power, and discourse, the errors of ‘truth’ are hardened into social consciousness. “In the long baking process of history” these errors form a dominance that cannot be easily refuted (Foucault, 1984, p. 79, Nietzsche, *Genealogy, History*; see Chaput, 2009, p. 97), and thus the moral act in an aesthetic ethic is the attempt to untwine the knots that hide power and the knots that cover truth. For example, as Foucault (1988) articulates in the context of the medicalization of madness, the linkage of medical discourse to narratives of madness, “in no way impairs the scientific validity of the therapeutic efficacy of psychiatry” (p. 16, *Ethics of Care for the Self*). However, the privilege that biopower secures for the medicalization of madness is dangerous, and the power of these dominant discourses silences the other knowledge that is equally, if not more valid in solving these problems. Therefore, the goal of critical ontology is to show how some truths gain privilege while others remain hidden and to show how knowledge that society often promotes as universal truth is in-fact subjective. The point is not to create and/or observe an environment where anything goes, but rather it is to question what society allows to go. In short, we fight to see the truth, though it remains clouded in discourse.

If one does hold the assumption that power is inescapable, this begs a second question: “Why fight?” (Habermas, 1966, p. 7 quoted in Thiele, 1990, p. 908). In other words, if individuals rest on an inescapable web of discourse created by power relations, but those power relations are hidden in most cases, what use is there in struggling to

shape power/knowledge? (Thiele, 1990, p. 908). In short, the argument holds that if one does not retain absolute knowledge, then all else must be untrue (Wong, 2008, p. 77).

However, we fight because we seek the truth, albeit elusive. Those who promote critical ontology believe we must aim for a society in which all voices are heard at the table of power; however, unlike Habermas we do not believe we can ever achieve a society in which power is absent. Thus, our *only* choice is to continue interrupting the power that aims to silence those voices on the margins of society. The aim of an aesthetic ethic is absolute knowledge of the histories that shape our lives; however, short of arresting power from God, we are unable to conceptualize a universal “good life.” Yet, we forever struggle against the power that shapes our identities – a power that is in constant flux. Thus, the “good” is found in the struggle, not in the ends.

Astronomers are famous for pointing their telescopes towards the sky and bringing pictures of far off celestial objects back to earth. Edwin Hubble famously pointed his telescope to where other scientists assumed there was just vast empty space, finding distant galaxies otherwise invisible to all but those who peered through the most powerful machines. His discoveries launched new discourses in the study of the universe including the idea that the Milky Way was only one of many millions of galaxies, and that the universe was expanding with origins in a big bang (Hawking, 1996). Analogous to Hubble’s efforts, a key component of an ethic in critical ontology, in which one does not claim final authorship, is the request for individuals to peer into the places silenced by dominant discourses.

Thus, I wish to make a clear distinction between pursuit of an ethic by force, and pursuit of an ethic immersed in power. In an aesthetic ethic, one may not escape the

power relations that shape our lives, yet, the ethic does not require that one pursue the same ends forever. In an aesthetic ethic, individuals may shape the means as well as the ends when they pursue the ‘beautiful life’, and they are required to help others realize these choices as well – the possibilities for moral action are manifold. Thus, I aim for a conception of ethics centered on power, not on force – one in which individuals participate in crafting the ends, and one in which individuals play on the margins of possibility so as to shape the power in which we live. Even in the most dominant of discourses, individuals still are able to reach the borders and experience alternative truths that the prevailing regime suppresses. However, this dash for the border requires action, and thus many critics of critical ontology argue that those who take no action are paralyzed. One who believes the tiger crouching in the grass is paralyzed, soon recognizes the difference. Surveying the terrain and taking a moral holiday is not paralysis; it is a tactic for survival.

The argument against critical ontology continues that language wrapped in power/knowledge leaves speakers with no way to describe non-discursive events one finds on the borders. The implication of this absence of truth outside of discourse is that “no language or discourse exists that can be used to assess the adequacy of competing constructions of individual identity or social organization” (Fletcher, 2000, p. 86). In other words, because all language is discursive, we have no words for describing something new (ibid). Additionally, a similar line of reasoning charges that an ethic proclaiming the ‘death of the expert’ lapses into a debilitating paralysis (Thiele, 1990, p. 918). This argument assumes that without the liberal goal of emancipation and self-realization, politics becomes meaningless. One who ventures into a border-experience

has no guide for negotiating alternative discourses other than venturing further and becoming increasingly inundated. Individuals in this sense would “have to overcome the incapacitating fear that one would unavoidably be acting as an abettor to the establishment of a potentially even more pernicious regime” (ibid).

This criticism leads some to question individuals’ abilities to take action in an aesthetic ethic. One commentator claims, “This transition from impotence to agency cannot be easily explained by reference to Foucault’s *oeuvre*” (Hughes, 2005, p. 80). Another author suggests that a study using critical ontology must “define the character of resistance more precisely and substantively than Foucault himself does” (Brenner, 1994, p. 696). With charges that the individuals in a critical ontology range from undisciplined relativists, to zombies paralyzed by the disciplining technologies of biopower (I’ll let the reader decide which is worse), these criticisms, in short, claim that critical ontology creates paralyzed subjects incapable of acting in discursive society. In other words, the proverbial ‘doubting Thomas’ stays caught in the quandary without a guiding Light to show him the truth.

With paralysis of the subject, some have argued that the individual is not able to engage in the struggle Foucault calls for in the maintenance of power/knowledge. Foucault, according to this argument, “fails to theorize explicitly the normative notions his own description of bio-power presupposes, and he provides no substantive reasons why individuals should oppose domination instead of merely adapting to it” (Brenner, 1994, p.696). Taylor (1984) argues that critical ontology can serve only as an appendix to Critical Theory in understanding the role of purposeful human action (Paternek, 1987, p. 113). As one author put it, Foucault’s work “does little to encourage or instruct



anyone interested in undertaking [social change]” (Shumway, 1989, p. 158 quoted in Allan, 1996, p.229). In short, this argument concludes that if individuals are contained within the discourses of biopower, then accordingly, they pose no threat to existing regimes (Fairclough, 1992, p. 57).

Some writers charge critical ontology with creating the very ‘docile bodies’ we work to liberate. A liberal, or humanist, ethic assumes individuals are embodied with agency – free will – and that for freedom to be secured, agency must be a first principle in an ethics. Consequently, the charge against Foucault is that agency for his ‘docile bodied’ individual is merely a post hoc argument (Hughes, 2005, p. 80). A humanist argument holds that a body is capable of practical sensuous activities independent of discursive rules, and that this pre-discursive activity plays a role in constituting social life. Because discourse operates independently of subjectivity, Foucault’s ‘body’, according to this line of reasoning, is incapable of translating sensuous activities into discourse and thus lacks autonomy (ibid; Shilling, 1993).

With all of these changes, one might question if Foucault is misguided in questioning the premises of universalist ethical theories that have justified ‘progress’ in the world in terms of living standards and human rights (Rorty, 1990, p. 3). In other words, is a critical ontology naïve to leave us wondering if valuing the less-privileged subject is really any better than maintaining the current regime of power? Nevertheless, there are adequate answers for those who question an aesthetic ethic on these grounds.

I clearly have interpreted the words of Foucault’s writings differently than the authors cited above, and I find it interesting that one would charge an individual who describes his writings as “lancets, Molotov cocktails, or minefields” with accusations of

promoting paralysis with his philosophy - who proclaims, "The only sad thing is not to fight" (quoted in Thiele, 1990, p.916). As Thiele states, for Foucault,

One acts not because goals are attainable but because it is one's fate to struggle valiantly. One struggles because the uncontested life is deemed not worth living. Everything is dangerous precisely because all systems of power, all forms of social and political organization inhibit struggle, they militate against their contestation (Thiele, 1990, p.916).

The individual struggling in an aesthetic existence does not find paralysis in confrontation; instead, the individual meets power with reciprocal incitation and a struggle of permanent provocation. Foucault states,

For to say that there cannot be a society without power relations is not to say either that those which are established are necessary, or, in any case, that power constitutes a fatality at the heart of societies, such that it cannot be undermined. Instead I would say that the analysis, elaboration, and bringing into question of power relations and the 'agonism' between power relations and the intransitivity of freedom is a permanent political task inherent in all social existence (Foucault, 1982, p. 791-792, *The Subject and Power*)

Admittedly, an individual immersed in a world of biopower is not able to speak truth to power, in some sense, but while disciplinary power taints the words and actions of all subjects, one can still speak power/knowledge to power/knowledge and work to set the foundation for future struggles (ibid).

Ideally one might discover some non-discursive experience, some phenomenon not yet shaped or defined by power/knowledge, that can play against prevailing discourse (Turkel, 1990, p. 172), but more likely, one finds existing discourses suppressed by power – discourses that are shaped by the prevailing power/knowledge, but are not congruent in form. Foucault suggests that these bubbles of knowledge, hidden within prevailing discourses, are the best answer for rebutting domination. He states, "as in judo, the best answer to an opponent's manoeuvre never is to step back, but to reuse it to your own advantage as a base for the next phase" (quoted in Thiele, 1990, p. 920). In this way,

the individual engaged in struggle works to double back the privileged discourse and cause it to fall apart due to its own momentum.

Foucault identifies three forms of struggle that all work *against* prevailing power relations. One may struggle against forms of domination, against forms of exploitation which divide individuals from what they produce, and against the technologies of self-subjugating (Foucault, 1982, p. 781, Subject and Power). However, breaking silence is not exclusively a struggle *against* power/knowledge, but it also contains a struggle *for* the power to speak. For only with a voice are the conditions of self-creation possible. To do this, we must look for discourses that have been repressed or buried by other powers. Likewise, we must listen for,

A whole series of knowledges that have been disqualified as nonconceptual knowledges, as insufficiently elaborated knowledges: naïve knowledges, hierarchically inferior knowledges, knowledges that are below the required level of erudition of scientificity (Foucault, 2003, p. 7, Society Must be Defended quoted in Diedrich, 2005, p. 653).

In other words, we must search for the knowledge that is not privileged in the current power relations; we must find the knowledges that have lost a struggle and have been submerged by a “tyranny of totalizing discourses” (Diedrich, 2005, p. 653). While an ethic of critical ontology is clearly a political task, one must have a “historical awareness of our present circumstances” (Foucault, 1982, p. 778, Subject and Power). Moreover, if one wishes to see an uprising of subjectivities, we must find ways to reach the borders of accepted human knowledge or else the struggle for truth remains only a potential (Paternek, 1987, p. 116 citing *ibid*).

It is important for us to remember that struggle in the Foucault model is fundamentally different from struggle in the Marxist concept. For Marx, “the proletarians have nothing to lose but their chains. They have a world to win”

(*Communist Manifesto*, last lines); however, for Foucault, freedom does not come in exchanging places with one's oppressors, but rather, freedom is found in the struggle itself (Flyvbjerg, 1998, p. 223; see also Freire, 1993). For one who follows an aesthetic of existence, one group's victory, in the sense of its dominance in society is an unethical conclusion. We must remember that "maybe the target nowadays is not to discover what we are but to refuse what we are" (Foucault, 1982, p. 785, *Subject and Power*). In short, struggle, in this sense, first comes in rejecting prevailing discourses that shape one's self-understanding, but secondly the struggle comes in suspending the solidification of new forms of domination (Foucault, 1982, p. 794, *Subject and Power*). The ethical world is one in which the suspension of belief and the disposition of wonder flood the popular discourse.

As a result of this constant wonder, Foucault hypothesizes that the struggle is ever present. He states, "I would say it's all against all... We all fight against each other. And there is always within each of us something that fights something else" (Foucault, 1980, p. 208, *The Confession of the Flesh*). The struggle remains against the privileges of knowledge and for the exposure of the secretcies, deformations, and mystifications that are imposed on people (Foucault, 1982, p. 781, *Subject and Power*). Ethics is an unfinished art, and the work is never over.

For Foucault, the moral act is in aiding the struggles against power which are already in existence. Aiding a struggle means giving a voice to those who have been silenced by disciplinary technologies. For him, it means giving a voice to inmates in asylums, prisoners, patients in hospitals, and those judged sexually deviant. These people on the periphery of society were subjected to the disciplinary techniques of biopower, but

were denied access to the modification of the discourses that identified them. Foucault worked to turn these discourses around so that instead of talking about ‘madmen’, ‘criminals’, ‘the ill’, and the ‘perverted’, he shaped a discourse of ‘psychiatry’, ‘penology’, ‘clinical medicine’, and ‘sexology’, respectively, that questioned these identifications (Sprinker, 1980, p. 90). A critical ontology thus, works within the productive freedom of power to reverse the dominant discourses that create truths about the body. Following him, in the next chapters, I work to problematize the dominant discourse of time that now shapes our understanding of human learning, and I give voice to the discourses of time that are sequestered. The current study works against the dominant discourse of subject identifications based on learning speed, and give voice to the many individuals who interrupt this narrative.

### **Aesthetic Ethics in School**

As uncomfortable as it may be, critical ontology frames any action that assigns final meaning to a subject without consideration of *all* data concerning the subject as immoral; that leaves very few of us immune from condemnation. As Foucault states,

I could offer my opinion, but this would make sense if everybody and anybody’s opinions were also being consulted. I don’t want to make use of a position of authority while I’m being interviewed to traffic in opinions (Foucault, 1997, p.142 Sexual choice).

American schools are superhighways for the trafficking of opinions. In educational settings, we should not accept an ethic in which children have sovereign right to dictate the curriculum and instruction, especially when it affects other students. However, students must have a voice, to some degree, in modifying the rules that govern *their* learning (see Noddings, 2006). Likewise, educators must be aware of the institutional

practices that serve to marginalize students and silence their participation in the larger discourse.

An aesthetic ethic in an educational context works towards three ends; first, the purpose of education is to teach individuals how to be aware of the power that affects their subjectivities. Our first aim with our students is to make them aware of their actions – to teach them that they repeat the same actions without reaching alternative ends, and to teach them of the manifold possibilities in the ends they pursue. Without an awareness of the power affecting one’s life,

there is no chance of any sense of ‘freedom’ or ‘autonomy’. In this view, ‘freedom’, or ‘autonomy’, can only arise when individuals are resistant to the imposition of power on

*To a Slow Learner*

*And what of you, poor John,  
Who cannot see my beauty-rated verse, and never will?  
Do you, unhappy-happy-ignorance,  
Concede your place to those who love my love  
Because they, more than you, deserve of it;  
Or do you growl in some deep cavernous retreat that you,  
Who are no less in that dark spot, can meet  
With gods and angels on its highest peak  
To speak in under-grimaces divine  
And match poetic voices line for line?  
(Curtin, 1965, p. 288)*

their bodies (Thiele, 1990, p. 907). One may never claim absolute knowledge of all power affecting one’s life, but at least one may be aware that power exists.

I believe there is a qualitative difference between a student who recognizes the futility of her or his venture and usurps power where she or he can, and a student who does not recognize the repetitive nature of her or his actions. A society in which all individuals recognize the existence of power relations (albeit not knowing the exact nature of those relations) is qualitatively better than a society in which some individuals remain staring at shadows, unaware of the puppet master behind them. Thus, an aesthetic ethic aims for a society of critical thinkers.

Second, once one is aware that power is present in shaping one's subjectivity, the educational aim becomes one of creating ourselves as "a work of art." We must teach our students that they may play within the power that shapes their moral duties, but they must know that society will judge them, not only for their ends, but also for the means by which they aim to achieve those ends. An aesthetic ethic is pragmatic in that it expects one to use available knowledge for creating a course of action that pleases society to an extent that society allows those actions to speak, to remain alive. An aesthetic life is not worth living if its work is destined for the circular file. At least actions must be preserved in an archival closet for others to discover, and cherish later. Thus, one cannot find the ends of an aesthetic ethic in reaching some final goal, but rather one finds the ends in the ways in which we pursue that final goal.

Educators must encourage students to play on the margins of knowledge so that they may shape the discourse in which they live. Students must learn how to escape acts of force and play within the power that holds them subject. However, just as society silences artwork that is too extreme, and cookie-cutter reproductions have little or no voice, educators must teach students how to survive within power. The "works of art" that are acceptable to the society are shaped by the histories and subjectivities that have voices at that time, but they all provoke, they all touch a border in some way, and this is what education should do. We must teach our students how to play around and subvert the power that holds them subject. We must teach them how to shape the discourse to its most beautiful form. In the race to educate, students labeled 'slow learners' are marginalized in a way that they are not given access to shape the discourse that affects their lives. All of the technologies of power employed upon students identified as 'slow

learners' are designed as ways to limit individuals' abilities to speak and to replace their voices with that of more powerful actors who wish to speak *about* the subject (see Noddings, 2002). Thus, as educators we must assist our students in breaking the silence that envelops their understanding of the world.

For educators, one technique of breaking the chain of silencing actions is to take on a narrative of hospitality – the third principle of an aesthetic ethic in schools. Articulated most notably by Jacque Derrida (e.g., Derrida & Dufourmantelle, 2000), the law of hospitality entails an unconditional offering to strangers. While both sides of a relationship must be careful to notice the sovereignty of the other (Dungey, 2001, p. 473), this notion of relational behavior calls for the principle of equivalence. With the principle of equivalence “a type of commonality is created that does not erase plurality and differences and that respects diverse forms of individuality” (Mouffe, 1992, p. 32). The individual accepts the other as a subject engaged in the aesthetic project.

The law of hospitality is, perhaps, best summarized by Derrida's line: “Let us say yes...to who turns up, before any determination, before any anticipation, before any *identification*, whether or not it has to do with a foreigner, an immigrant, an invited guest, or an unexpected visitor” (p. 77, *Of Hospitality*). In effect, the individual must put aside the power/knowledge that affects her interpretation of the subject and look at the other as a pre-discursive being. Derrida even suggests that one might play out an “absolute hospitality” where the other is given a place and the individual refrains from asking for reciprocity, even the sharing of names (Derrida & Dufourmantelle, 2000, p. 25, *Of Hospitality* quoted in Tarc, 2005, p. 845). In short, one remains open to possibilities in the other, and allows the other to speak on their own behalf.



The law of hospitality requires one to take on the conception of engagement with the world as a process of continuous learning. Individuals who follow the law of hospitality question existing discourses and enter border-experiences with an open and critical mind. Additionally, to allow others to practice hospitality, one must work to question existing law, relations of production, systems of education, etc. that might serve as oppressive forces in the lives of others (Spivak, 1999, p. 383 cited in Tarc, 2005, p. 846).

An aesthetic ethic, critical ontology, and law of hospitality conceptually challenge certain discourses of 'difference'. In many American schools a philosophy of multiculturalism based in a 'politics of difference' remains the dominant discourse; members of the school community are taught to respect the cultural beliefs of those who are different from the majority. This discourse of respect assumes that members of the school community become more tolerant and more accepting of each other if they learn to recognize the differences each person embodies. In a way, this discourse promotes the idea that the political identities of subjects are "purely differential, particularized, an incommensurate with one another" (Newman, 2004, p. 151). In short, everyone is different, so let's get along.

However, one could argue that this 'It's a small world' discourse employs hidden dividing practices in the creation of subjectivities. Individuals put under the gaze of this biopower fall into the double-bind of subjugation. When less privileged individuals are positioned against certain backgrounds of identity, they lose vocal authority to enunciate their own subject positions (ibid). In effect, the discourse of cultural respect that many schools promote serves to subjugate individuals before they have begun to speak. One

must question the privilege that assumes authorship before the subject has spoken, and the law of hospitality urges us to let the other speak first.<sup>14</sup>

The aesthetic ethic and law of hospitality promoted by a critical ontology are appropriate and needed in American public schools. Whitehead (1929) writes,

Education is the guidance of the individual towards a comprehension of the art of life; and by the art of life I mean the most complete achievement of varied activity expressing the potentialities of that living creature in the face of its actual environment (p. 39)

Educators who employ such an ethic find application in both lesson planning and student relations. An educator who sees oneself in the process of becoming engages in the learning process as a learner and as an instructor. This teacher is open to inquiry and investigation and continually keeps a cautious eye towards the truths that she or he puts forward in the classroom. Education, in this sense, is a practice of making familiar truths unfamiliar, making what is certain, uncertain. Furthermore, she or he negotiates the effect of power imposed on her or him through administrative policies and other outside disciplinary forces such as government imposed curriculum standards or standardized testing instruments (McDonough, 1993). Educators may take pragmatic ethical holidays, but we must be mindful that those vacations do not turn into ethical unemployment.

When interacting with the student community, the law of hospitality urges teachers to suspend authorship until the students have spoken. Tarc (2005) suggests

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<sup>14</sup> The dangers of a 'politics of difference' have been demonstrated in many contexts. For example, Corbett (1996) outlines the process of labeling people with 'learning disabilities' and identifying them as 'different'. The author suggests that identifications of 'difference' always come with binaries to suggest certain meanings for the subject. The example provided is how 'special' often comes to mean 'better' in the sense of passive, complacent, happy individuals. The stereotype of the ever-smiling child diagnosed with Down's Syndrome comes to mind here. However, by challenging these notions of difference, Corbett argues that individuals with less privileged abilities "should be entitled to the same rights and expectations as the rest of adult population. They can also be seen as other than nice" (p. 50). Corbett calls for a 'difference' that can be seen as an active agent of change, and the law of hospitality looks for individuals to reserve identifications until others who appear different are allowed to speak for themselves.

teachers modify Derrida's central question and ask, "*Who sits before me? To Whom does my teaching respond? Who are my students? With Whom do we share the world?*" (p. 836). As teachers, we must humanize the subjects who sit before us and not position our students as objects we must modify to meet certain expectations. We must relinquish the urge to 'attack' a 'behavior problem' in our classrooms, and instead we ought to look to welcome the students and ask how we can respond (Corbett, 1996, p. 49). If students do not keep the 'pace' of learning we have set for them, we must double back to ask them what their agenda is, and we must help each other see the full spectrum of learning behaviors as valuable in their own right.

Perhaps most importantly, we must pause to consider the menu of moral possibilities before we take action with our students. Education officials are so quick to pull the most expedient solution off the shelf (or more likely off the table at an education consultants' conference) and employ blanket solutions for problems they see pressing. How often do we institute school wide initiatives to address benign issues that we could address with more tactful approaches? As we have discussed, there always comes a time when we must order our moral decision, a time when we must take our 'moral holiday', but we should not close the menu before considering all the options – school officials are often stuck in ethical ruts, and the results are morally wrong. Let us return to the menu in regards to our students; there are choices we have not considered that will help all have a more satisfying learning experience.

## **Research Methods for a Critical Ontology**

### **Introduction**

A critical ontology allows writers to conduct research into educational matters. And while Foucault's work provides models for conducting critical ontologies, the literature in this field often becomes embroiled in the naming of certain methods such as 'archeology', 'genealogy', 'discourse analysis', 'deconstruction', etc., that contradict the aim of this project. Additionally, Foucault's model contains a paradox in that we may use it in setting research methods, yet this epistemological discourse calls for constant critique of knowledge – including the critique of the truth of our own methods. Therefore, before continuing with any study, we must survey this discourse and clarify some of the more pressing methodological issues pertaining to the Foucault model. With these conceptual concerns satisfied, I then outline the research methods I find most appropriate to use in the current study. In other words, we rummage through Foucault's 'toolbox' and pick out the equipment best suited for the job.

### **Foucault's 'Tool Kit'**

The research methods spoken of as part of Foucault's 'toolkit', some argue, are conceptually variant, and resultantly draw much debate in the literature. With a bookcase worth of research writings accredited to his name, the literature contains a vigorous conversation regarding the different ways one should use the Foucault model to conduct research (e.g., Parker, 1992; Kendall & Wickham, 1999; Willig, 1999; Carabine, 2001; Hall, 2001; Taylor 2001, Brocklesby & Cummings, 1996, p. 749; Morgan, 2005, p.331).

In education research, many writers use elements of Foucault's thought but do so in diverse ways; as Peters & Besley (2008) state,

they abuse him in countless ways; they unmake him and remake him; they twist and turn him and his words; sometimes they spread him very thinly; at other times they squeeze him into small spaces; often they appeal to Foucault, beginning with a quote only to do something very conventional and mundane, against his original intent (p. 3).

However, even though we cannot identify what the right interpretation should be, there are wrong and misleading interpretations of Foucault's methodology, (ibid). Therefore, I recognize that while Foucault's model offers the researcher much freedom in choosing the tool most appropriate for the given context, by naming him, I carry a responsibility to represent his meaning in a way that is, at least, recognizable to a wider audience.

An example of this misapplication of Foucault's work happens when some scholars try to differentiate his writings into the categories of 'archaeology' and 'genealogy' (Allan 1996, p. 220 citing Shumway, 1989). This taxonomy of methods seems to violate a discourse that calls for critical awareness of dividing practices and the suspension of final authorship. For a scholar who was perpetually reformulating his own project, it seems foolish to attempt to pin-down one unifying conception of his methods (Peters & Besley, 2008, p.5). In Scott's words, "Emphasizing a sharpness of the differences between the two kinds of study as though they mark two basically diverging types of interpretation, in my opinion, is not helpful in its oversimplification" (Scott, 2009, p.351).

Although, in some sense, there was much change in Foucault's conceptual analysis between his writing of *Madness and Civilization* and *History of Sexuality*, one can argue that the basic themes of critical ontology were present throughout (Scott, 2009, p. 351). More importantly, perspective researchers must remember that Foucault,

himself, was involved in an aesthetic existence and his own self-subjectivity changed throughout his lifetime. As he says, one's identity can change even within the course of writing a single book (1988, p. 251, *The Return to Morality*; 1991, pp. 26-27, *Remarks on Marx*). Therefore, we must not conceptualize a methodology of critical ontology by attempting to identify supposed structures seemingly apparent in Foucault's work; rather we must compose a methodology based on certain discursive themes. In this way, the current study does not intend to colonize 'Michel Foucault' with an essentialist understanding, but rather I see his methodology as a subject full of discontinuities, reversals, and problems with no final interpretation yet assigned. He, in effect, presents us with a 'toolkit' full of possibilities.

While I do agree with those who suggest that researchers using a Foucault model for critical ontology must at least pay homage to a certain set of rules within the discourse, the rules are more like broad principles than any specific structures. On this point, Foucault states,

If people wish to open [my books] and make use of this certain phrase, idea, or analysis, as one would use a screwdriver or a wrench in order to short-circuit, disqualify, or break the systems of power, possibly including even those from which my books are conceived...well, so much the better (Foucault, Interview in *Le Monde*, 21 February, 1975 quoted in Thiele, 1990, p.916)

Like Foucault, our intention in writing a critical ontology must be to allow others to explore the borders of knowledge, to unlock the voices which are not allowed to speak for themselves; his model, therefore, must be a platform from which others may explore knowledge.

Just as Foucault's *oeuvre* demonstrates his methodological use of the themes in the work of Nietzsche (e.g., 1956; 1967; 1967; 1964), Marx & Engels (e.g., 1967; 1970),

and Heidegger (e.g., 1972), it seems that he advocates that one must be flexible in adapting specific methods to fit the research context. The only fundamental principle that must remain is that one must be critical of the truths created within the chosen methodological discourse. As many qualified carpenters, electricians, mechanics, and explosives technicians know, there is often need for more than one ‘toolkit’ when conducting a job. One cannot answer every question with a stick of TNT, so to speak. Thus, while Foucault’s contribution to critical ontology has been privileged in this chapter, one must remember that Marx, Dewey, James, Noddings, and others are present here as well. Additionally, in the next chapter, I employ the conceptual models of relativity theory and quantum theory to present an alternative discourse of time for American schools.

### **Critique of Foucault’s Model**

Before, I outline the methodological themes in a critical ontology, I believe it prudent to address the many warnings writers have put forward concerning the use of methods associated with Michel Foucault. These harbingers of scholarly doom range from cautious remarks to all-out attacks challenging the very epistemological grounding on which this research is based. While I believe I have adequately addressed many of these criticisms in previous sections of this chapter, we ought acknowledge and consider these voices in the context of methodological practices. Furthermore, although the methodology of critical ontology should be viewed as themes of possibility, since one must author methodological practices before proceeding with a research study, I feel a thorough examination of these criticisms is required before we continue.

One criticism of the methodology of critical ontology is that it suffers from paradoxical logic. Many authors (e.g., Sweetman, 1999, Fleming, 1996, p. 169) illustrate apparent unresolvable conflicts in the premises of this discourse and thus conclude a fallacious nature of Foucault's line of reasoning. Habermas (1986, p. 106, *Taking Aim*) for example, adds to this line of criticism with his question, "How can Foucault's self-understanding as a thinker in the tradition of the Enlightenment be compatible with his unmistakable criticisms of this very form of knowledge of modernity?" For Habermas (1987, p. 283), Foucault undermines his own argument with his (i.e., Foucault's) criticism of the very discourse in which he (i.e., Foucault) writes (Wong, 2008, p. 74). By arguing within an Enlightenment discourse, Foucault acknowledges and identifies with that discourse, and according to this criticism, the very writings with which Foucault (and Derrida) wish to criticize Enlightenment reason only serve to validate the discourse (Fleming, 1996, p. 169 citing Habermas, 1987, p. 185-210, *Philosophical Discourse of Modernity*). Foucault, according to Habermas, is caught in a hypocritical bind.

Similarly, Habermas accuses Foucault of employing a circular logic in his interpretations. Habermas understands discourse analysis to be, "the understanding of meaning by interpreters participating in discourses [that] is reduced to the explanation of discourses" (1990, p. 276-277, quoted in Isenberg, 1991, p. 302). In other words, discourse analyses are conducted from the researcher's own perspective, results being tainted by the researcher's self-subjectivity. The biased interpretation that results, in many opinions, is no more meaningful than any other interpretation of the statements – nullifying any valid results. With researchers bound to particular discourses, this



criticism likewise implies a resulting hypocritical bind by which one's writing is paralyzed from action.

With a similar question in mind, Sprinker (1980, p. 85) asks how a scholar like Foucault can produce knowledge that is 'new' or at least outside of the dominating discourse that affects everyone in society. In particular, this criticism questions Foucault's methodologies and asks where they stand in power relation with other disciplines – is 'archaeology', for example, outside, inside, or to the side of other discourses? For many, the answer to this question is that Foucault's methodologies, such as 'archaeology', are nothing more than new disciplines in themselves and work under the same discursive practices as the other disciplines (Sprinker, 1980, p. 85). Sprinker states, "Any archaeological description is thus a mode of knowing ("a regulated transformation of what has already been written"), hence, an exercise of power over what has been said in the past" (p. 86). Furthermore, Habermas (1990, p. 275-276, *Philosophical Discourse of Modernity*) sees Foucault's methodologies having a similar fate as those in other disciplines. Habermas sees 'genealogy' retreating "into the reflectionless objectivity of a non-participatory, ascetic description of kaleidoscopically changing practices of power" and becoming the "presentistic, relativistic, cryp-normative illusory science that it does not want to be" (pg. 275-276 quoted in Isenberg, 1991, p. 302). Foucault's critical ontology, in this sense, is nothing but the introduction of a new discipline used in the objectifications of subjects.

For some, a self-contradictory logic in critical ontology has more ominous implications. Critics, such as Habermas (1990, p. 282, *Philosophical Discourse of Modernity*) charge Michel Foucault with positioning himself as a dissident to disciplinary

power, and then hypocritically disguising his authorship in the same way that authorities hide the apparatuses of power. Isenberg (1991) states, “he is everywhere and nowhere. Foucault’s engagement is obvious but decentred, intense but abstract” (p. 304). Baudrillard (1987) charges that “Foucault’s discourse is a mirror of the power it describes” (p. 10). Foucault, for Baudrillard, is a ‘seducer’ who uses “tactile and tactical exactness” to “unwind” the meaning of an object and give “birth to the operation of new powers” (p. 10 quoted in Isenberg, 1991, p. 304). This ‘Foucault’ is accused of a bait and switch, an appeal to novelty, in that he argues against older disciplines, but then replaces the old with nothing less than his ‘new’ methodologies.

Fearing the consequences of the radical changes in power that could result from the most effective writing, at least one author urges caution when moving forward with Foucault’s model. Corbett (1996, p. 38) warns that deconstructing “special languages” and other privileged categories is risky. The author cautions that if certain privileged discourses are undermined, “there is a risk of the rule of the strongest prevailing” (Corbett, 1996, p. 38). After an author has cleared the way with Foucault’s ‘tools’, all types of hidden discourses may appear in vying for dominance – some of which may have negative consequences. In this sense, Foucault’s critical ontology is nothing more than his methodological bulldozer making room for his own discourse, but this ‘seduction’ assumes Foucault’s discourse wins the struggle to fill the power vacuum.

One should not dismiss these strong criticisms without thoughtful consideration. In regards to the current study, one may question a critique of ‘mechanical time’ that embodies organizational practices promoted in that discourse (e.g., the concepts of before and after). However, Foucault never claims that he writes outside of biopower in his own

society; and he does not deny the inherent irony of questioning the truths that we, ourselves, have created. He states, “We are prisoners of certain concepts about ourselves and our behavior” (Dillon & Foucault, 1980, p. 4, Conversation); Foucault is just as much a prisoner as anyone else.

Though I disagree with naming the subject, those who identify ‘critical ontology’ as a discipline seem justified just as those would name Critical Theory, astronomy, psychology, etc. as disciplines. Furthermore, Foucault is quite clear in his aspirations of establishing a new discourse (Dillon & Foucault, 1980, p. 5, Conversation with Michel Foucault). However, as stated earlier, one who conducts critical ontology is not satisfied with establishing new discourses for the sake of cementing a new regime of truth. The methodologies with which Foucault analyzes power changed throughout his writing career, and I would not doubt that it would be still changing if he were alive today. What we must look for is that which cannot be spoken – if ‘archaeology’ is merely a refabricating of an ‘old’ methodology, its power lasted only so long as it took for its own deconstruction. This constant questioning of the self is the key difference between Foucault’s methods and the other options present. In short, if one wishes to assign a label of truth to this methodology so be it, I continue questioning its identity.

Similarly, Foucault warns future scholars against “blackmail of the Enlightenment” (Foucault, 1984, p. 42, What is Enlightenment?). Habermas’ argument employs a duality of reason and irrationalism in claiming that Foucault cannot argue against ‘modernity’ within the ‘rational’ discourse, and the use of this dichotomy allows Habermas to position Foucault’s philosophy into a box not fit for the subject (Wong, 2008, p. 74). As Wong states,

it is the task of critical ontology to unmask such arbitrary constraints. Foucault's project, then, does not repudiate the values or institutions under the broad notion of 'modernity' or 'Enlightenment.' It is quite possible that some values and practices should turn out to be indispensable for our autonomy today...Critical ontology, then, is not a global anarchist-deconstructionist project but a local and experimental, hence tentative, one (Wong, 2008, p.74).

In defending against similar criticisms, Derrida (1989, *Structure Sign and Play*) argues that it is pointless to attack a discourse from outside the discourse; outside a discourse one does not have the language, the syntax and lexicon, with which to deconstruct the subject (quoted in Tarc, 2005, p. 838). The researcher falls into the 'double bind' and cannot speak on the subject without accepting the power/knowledge used in creating the subject.

In contrast to the universalist thinking that others may promote, critical ontology allows one to hold truths, but it calls for us to leave open our understanding of those truths. One may speak against mechanical time, but still pause to take an 11:45 lunch break every day; one may be 'fast' to learn mathematics, but 'slow' in learning to read. As long as one questions how she or he came to these identities, and continues to ponder their validity, there is no reason to enter into the line of thinking promoted by Habermas above. In critical ontology, the label is only as important as its effect on one's self-subjugation.

Using an aesthetic interpretation of this criticism, one may suggest that scholars using the methods of critical ontology are self-critical artists (Megill, 1985, p. 354 quoted in Slattery, 2006, p. 197). To answer the criticisms brought forward by Habermas and others, that critical ontology establishes a new discourse, one need only look at the work of Ludwig Von Beethoven, Pablo Picasso, or Oprah Winfrey. Each of these artists was embedded within a dominant discourse, yet each modified her/his work just enough to

gain recognition as an 'original'. Picasso, for example, helped establish 'cubism' as a 'new' discourse in visual arts, yet he demonstrated his mastery of traditional methods. Additionally, he never let his methods stagnate – every new painting brought forward a new perspective, a new technique on the border of established notions of 'art'. Oprah reshaped daytime television into her own form, and continued playing with the format until her last episode on network television. One might position Foucault as the artist who opens himself up for criticism by himself and others. For Isenberg (1991, p. 303), what makes Foucault's discourses "rich and fruitful" is that "he *strives* to externalize his position, to get away from himself and his contemporaneity" (p. 303, original italics). A new 'Foucault' is created with every word, just as 'Beethoven' creates a new work with every note. One ought not to settle on a vision of reality until one has witnessed *all* there is to experience; since that task seems out of reach, all we have left is unsettled existing discourses and further exploration into silent spaces.

As certain scholars criticize critical ontology as a self-conflicting logic, others question the extent to which Foucault handicaps the state in his analyses of power. Foucault, in this view, fails to see laws as diverse and disparate, and resultantly "reduces the law to an instrument of power" (Weeks, 1982, p. 116). Instead of seeing relations between institutions and the juridical framework of social life, Foucault downplays the juridical, negative functions of power, and focuses instead on the productive forces of power/knowledge (Weeks, 1982, p. 116). Habermas (1990) goes as far as to claim that Foucault has turned the state into "a dysfunctional relic from the period of absolutism" (p. 290, quoted in Isenberg, 1991, p. 305), and in doing so Foucault apparently misses the influence of that state on individual lives. Weeks (1982), thus concludes that Foucault's

view of the state and its apparatuses, “is a very conventional and narrow one” (p. 116).

In short, to some critical ontology misses a significant factor that shapes social life; and with government and law playing a large role in the operations of American schools, we must settle this charge before moving forward.

Weeks (1982) is correct in articulating a need for close scrutiny of the state’s apparatus’ of power. However, the use of governmentality, and Foucault’s discussion of liberalism, can help with some of these concerns. In discussing liberal discourse, Foucault (1981, p. 358, *History of Systems of Thought*) defines it as an ‘art of government’ that is used to direct the conduct of people. And because liberal discourse works to criticize existing governments in terms of personal autonomy, there are different variations of its themes – one can look to regulate and reform existing governmental practices, or completely overthrow the government (Lacombe, 1996, p. 347-348). While some may argue that laws can be functionally liberating or oppressive, “liberty is an ‘invention of the ruling classes’ and not fundamental to man’s nature or at the root of his attachment to being and truth” (Foucault, 1984, p. 78-79, *Nietzsche, Genealogy, History*). Subsequently, liberty is never assured by the institutions supposedly created to guarantee it, conversely, oppression is never assured by the institutions and laws that work to guarantee it. One need only look to the Rosa Park’s civil disobedience, Nelson Mandela’s imprisonment and release, or Mahatma Gandhi’s independence movement to see how laws and institutions can have little power over the will of a people. Likewise, one need only look at the influence of television on American citizens to see how governmental forces, in today’s world, often bend to the disciplinary forces of the media.

This dismissal is not, however, an attempt to dismiss the role of juridical forces in people's lives. No Child Left Behind is a law that directly impacts the lives of millions of school children, teachers, and parents each year; Race to the Top has worked to modify entire states' systems of education, so an analysis must combine an examination of the juridical framework of social life with an examination of biopower. Foucault states, "I think that if one wants to analyze the genealogy of the subject in Western civilization, he has to take into account not only techniques of domination but also techniques of the self" (Foucault, 1993, p. 203, *About the beginning of the hermeneutics of the self*). As discussed earlier, analysis of governmentality and disciplinary technologies are tools one can use to analyze such a relationship.

Additionally, Foucault is clear that the point of observation is an important factor in critical ontology. When studying institutions, one must position herself at both internal and external standpoints. Internal positions "constitute a privileged point of observation, diversified, concentrated, put in order, and carried through to the highest point of their efficacy [sic]" (Foucault, 1982, p. 791, *The Subject and Power*; see Allan, 1996, p. 231); however, exclusive focus on the internal functioning of the institution alone does not yield a perspective for the analysis of power (ibid). For Foucault, "the fundamental point of anchorage of the relationships, even if they are embodied and crystallized in an institution, is to be found outside the institution" (ibid). As Turkel (1990) states, "In modern society, law combines with power in various locations in ways that expand patterns of social control, knowledge, and the documentation of individuals for institutionally useful ends" (p. 170). By examining two mechanisms of biopower, one

is able to analyze both the disciplinary power and governmentalities used in objectification of the subject.

Along with these criticisms against critical ontology, there have been charges in the literature that center directly on Foucault's methods of historiography. Some have accused Foucault of employing a poor methodology, that is, they charge that he does not meet the disciplinary standard for historical research. As I addressed previously, some commentators have claimed that Foucault ignores the disciplines, including the discipline of history, altogether (Shumway, 1989, p. 159). Megill (1979) has gone as far as to charge Foucault with playing 'fast and loose' historiography by arbitrarily selecting from sources and manipulating historical data and time to meet his needs (cited in Allan, 1996, p. 229). This methodology, to some, has resulted in studies in which "the evidential basis of the texts is odd and incomplete" (Poster, 1984, p. 73, quoted in Allan, 1996, p. 229). This criticism, in short, states that Foucault is too broad with his analysis with too little depth of conclusive evidence to support his thesis.

Though charges of poor historiography are serious, we must be careful in assuming that all histories are the same. Though Foucault identified himself as a historian, critical ontology should not be judged under the same standards as research conducted in other history disciplines. While accusations of 'fast and loose' historiography may be valid when viewed through the lens of more traditional history disciplines, Megill (1985) argues that for one to look at Foucault as an authority, and focus criticism exclusively on his inaccuracies, is missing the point of his work (Allan, 1996, p. 229). Rather than an authority, Foucault, according to Megill (1985) should be viewed as an animator – a provocateur (Allan, 1996, p. 229). For Foucault, the task is "to



cultivate the details and accidents that accompany every beginning” (1984, p. 80, *What is Enlightenment?*; see Allan, 1996, p. 229). A critical ontology is not a total history, but an ‘effective history’ – one that looks to disrupt the assumed flow of progress.

While critical ontology calls for thorough research, it does not call for a ‘complete’ or ‘total’ narrative of history. Conversely, an ‘effective’ history taken on in critical ontology of a discourse does not allow one to pick and choose sources that fall into a particular theory – that is exactly opposite the point of doing this kind of research. While a ‘total’ history looks for universal themes that unite all phenomena under a single catalyst, such as is the case for a research discourse that states “The history of all hitherto existing society is the history of class struggle” (Marx & Engels, 1967/1848, *Communist Manifesto*), or the implication is forwarded that all economic, social, political, religious, scientific, and time phenomena operate under a common influence like Newtonian physics, an ‘effective’ history sees limits, segmentations, differences of level, time diffusion, chaos, and other possible types of relations that may influence events (Weeks, 1982, p. 110). In this way, critical ontology is an “anti-science,” in that its methods work to disrupt confirmed theories, and show discontinuity in, what otherwise appears to be, universal results (Foucault, 2003, p. 9, *Society must be Defended*). Conclusions reached in critical ontology are always unfinished, thus it is impossible to arrive at any ‘complete’ version of historical events (Driedrich, 2005, p. 654).

The point of Foucault’s ‘fast and loose’ history is to challenge the conclusions found with more traditional historical epistemologies and methods. These histories did not review the unspoken, unacknowledged rules of discourse formation, nor did they bring forward the silent voices that have been hidden and ignored (Foucault, 1970, p. xi,

*The Order of Things*). Additionally, Foucault questions the historical beginning of things and disconnects that history from the identity of their origin (Foucault, 1984, Nietzsche Genealogy History; see Verstraete, 2007, p. 60). Critical ontology thus, investigates the creation of the subject rather than one's 'essential nature' (see Besley, 2008, p. 57).

The 'effective' history of critical ontology searches an "entangled web of differential impacts" for new ways of explaining familiar events; new options for understanding the world without calling for all other phenomena to fall into that explanation of the world (Foucault, 1984, p. 88-89, Nietzsche, Genealogy, History; see Scott, 2009, p. 359). The subject, for Foucault, does not fall into arbitrary categories, and may not even be identical to itself; as a consequence of the ever-changing identities of individuals, the truths that become part of a dominant discourse can be born from chaos, and these truths can result in error (Hartsock, 1990, p. 164-165). The goal of an 'effective' history is to "introduce discontinuity into our very being," this form of history "deprives the self of reassuring stability of life and nature" (Foucault, 1984, p. 88, Nietzsche, Genealogy, History, see Scott, 2009, p. 359); the task of the researcher, therefore, is to uncover these conflicting identities, and displace notions of timeless objectivity. In this sense, there is no 'real' history awaiting discovery by ambitious scholars, but rather, there are bubbles of identity that occasionally surface only to evaporate if not negotiated into the dominant discourse.

While the aim of critical ontology is to introduce discontinuity into the discourses that influence our subjectivities, a researcher cannot randomly choose anecdotes that serve as exemplars of some alternative identity. The goal is the identification of the rules

of discursive formation and the discovery of internal disagreement within the regime of truth (Rowan & Shore, 2009, p. 65). This task requires, no “demands,”

a vast accumulation of source material, ‘relentless erudition’, and a patient attention to the discourses which have by and large been ignored, but which in their singularity constitute warnings of the emergence of new ways of conceiving of the world” (Weeks, 1982, p. 113).

In other words, the task of critical ontology is to poke holes in the discourses that we assume to be natural and universal; the more dominant the discourse, the more convincing evidence is needed for problematizing its hold.

### **Three Methodological Themes**

The criticisms leveled against critical ontology lead me to a cautious construction of the methodology used in the current study. In the current study, I employ several of the methods in Foucault’s toolkit and bend and distort these tools to disrupt the notion that education must be a race. I frame these tools as three methodological themes that run throughout the current study. While I discuss each separately here, in the text of the study, the reader should be aware that each theme plays simultaneously – it is not wise to simplify a critical ontology to a consecutive ordering of themes – unlike a chess match, a real life struggle for truth does not privilege an etiquette of turn-taking.

### **Tracing a History of the Present**

One tool I privilege in questioning the race in education is a ‘history of the present’. A history of the present shows how America’s education race is “constituted through particular practices that order, structure, and align as they are also contingent upon other discourses never spoken” (Rowan & Shore, 2009, p. 59). By diagnosis of the

present situation, we are able to ask, “How did we get here?,” and then go on to look at other problems (Allan, 1996, p. 229). A history that diagnoses the present, thus, serves “not to discover the roots of our identity but to commit ourselves to its dissipation” (Foucault, 1984, p. 95, Nietzsche, *Genealogy, History*; see Weeks, 1982, p. 111). To use Foucault’s analogy of critical ontology as a battle, one must survey the landscape before attacking the front.

A critical ontology is not necessarily concerned with the past for its own sake, but rather it is concerned with uncovering traces of the present in apparently distant statements (Weeks, 1982, p. 111). In this sense, Foucault’s historiography reverses a traditional notion of writing about the past in terms of the present, and positions the subject as a history of the present in terms of the past (Visker, 1995, p. 12). As present researchers, it may be said that we should keep our eyes on contemporary issues, and Foucault’s model allows us to shed new light on those subjects with illumination from past perspectives.

The goal of history, in tracing the present, is different from other historiographies that look to explain the past. One’s historical analysis does not attempt to bring back the dead, but rather one tries to describe how discourse-objects have been represented.

Foucault states,

[Archaeology] does not try to repeat what has been said by reaching it in its very identity. It does not claim to efface itself in the ambiguous modesty of a reading that would bring back, in all its purity, the distant, precarious, almost effaced light of the origin. It is nothing more than a rewriting: that is, in the preserved form of exteriority, a regulated transformation of what has already been written. It is not a return to the innermost secret of the origin; it is the systematic description of a discourse-object (Foucault, 1972, p. 139-140, *The Archaeology of Knowledge*).

In this sense, a history of the present ‘translates’ one discourse into present terms of another (Sprinker, 1980, p. 86). However ironic, a history of the present relates what can

be described at one place and time, through the rules of discourse that dictate what can be described at the present place and time. In some sense, a history in this model works to encase events in an intelligible discourse but tries to avoid the “temptation to invoke a historical constant” (Rowan & Shore, 2009, p. 68 quoting Foucault, 2003, p. 249, Questions of Method). The aim of an ‘effective’ history is not to create a “theory of knowing the subject,” but rather, the aim is to organize a “theory of discursive practice” (Foucault, p. xiv, *The Order of Things*). In Foucault’s words, what is needed is a ‘genealogy’ or

a form of history which can account for the constitution of knowledge, discourses, domains of subjects, etc., without having to make reference to a subject which is either transcendental in relation to the field of events or runs in its empty sameness through the course of history (Foucault, 1980, p. 117, Truth and Power)

One who traces the discursive history of the present, does so without accepting “natural” notions of the subject. However, simultaneously, one hopes to illustrate the “wide variety of dangers in established knowledge and practice; one works to show the many problems inherent with these discourses, but does so within the terms of the discourse – to turn it against itself (Scott, 2009, p. 356). These are the data that make one question policies upon discovery; for example, one might show how increased attention to standardized testing in No Child Left Behind, works to leave many children behind as schools inspire them to drop out (Lipman, 2003). Or one might show how pressuring students to ‘Race to the Top’ works to ‘slow’ down learning as students employ techniques of a passive aggressive struggle against new teaching methods. In this study, specifically, the discourse of time and progress that policy makers employ to make ‘scientific’ decisions about education is turned against itself by the very science these people support, but whose many premises they ignore.

What one assumes as universal and progressive, may have hidden negative effects and a critical ontology searches for these meanings that are often silent. To uncover the discursive rules of a different time and place, one must dig for material. Foucault analyzes records, rules, notes, and all other archival material pertaining to a particular period of time (Scott, 2009, p. 355). Likewise, he examines contemporary forms of data in an effort to better account for the prevailing discourses of the present (Morgan, 2005, p. 331).

Foucault also looks at his writing as part of his own biography. He states that at least part of every book he wrote was inspired by “a direct personal experience” (Foucault, 2000, p. 244, Interview with Michel Foucault; see Scott, 2009, p. 362). Thus, all statements, even personal ones, are open sources of data. In this effort, I have examined magazines, newspapers, school textbooks, educational resource materials, government policy documents, secondary sources, television shows, scholarly journals, personal diaries, the Bible, testing manuals, and even crossword puzzles for statements that support and refute the need for racing children through their education (more detail later in this chapter)

After collecting these statements, the researcher does not analyze, in the sense that other historiographies might call for, but rather the interpreter leaves alone questions as to the ‘true’ meaning of the statements and allows them to speak to their own modes of existence (Foucault, 1972, p. 109, *Archaeology of Knowledge*). In a critical ontology discourse, despite the researcher being saturated with her or his own notions of truth, this is the ethical process of listening to the other – perhaps the best an outsider can do. Some authors have even positioned psychoanalysis with autobiography as a tool for

understanding how the researcher is saturated with discourse (e.g., Salvio, 2007). While listening to the statements, the researcher stays aware of what can be described, and what is remaining silent.

In looking at the statements made within a discourse, one may understand the categorization of subjects in the dominant regime of truth and understand the ways in which certain forms of knowledge are produced (Weeks, 1982, p. 112). Richardson summarizes in saying, “Empirically, the task is to reveal the patterns that confer an overall unity on disparate events and practices and that define the boundaries and content of discourse” (Richardson, 1994, p.699). In effect, the research looks for the knowledge that is allowed within a particular discourse (Popkewitz & Brennan, 1997, p. 9, cited in Qi, 1997, p. 7). However, a history of the present does not trace “succession, continuity, and progress about what can be said,” but rather highlights the simultaneous inconsistencies and changes in what can be said (Foucault, 1970, p. xi, *Order of Things*; see Rowan & Shore, 2009, p. 65). One must look for the multiple themes within a discourse and watch as they go through phases of surfacing and times of dormancy.

By identifying discursive themes, the researcher works towards an end goal of demonstrating the discontinuous orientation of power/knowledge. Discursive themes are the ideas that seem to flow throughout a given regime of truth and are thus promoted as natural (Johannesson, 1998, p. 304; see Hill, 2009, p. 313). They are often the statements that deafen the voices of alternative discourses. In the current study, we are exploring the discursive theme of ‘racing students’. To do this, one looks at the ways in which statements can be said; particularly *how* those statements can be said (Rowan & Shore, 2009, p. 62). Here, the prevailing notions of ‘time’ play this role is shaping the

statements that can be said within the discourse of education, and Western society in general. However, we also look for the statements that do not conform to the dominant discourse.

Critical ontology aims to question any theory that predicts future events within a society. In this way it does not share goals with other disciplines in the natural and human sciences. Rather, the aim of critical ontology is,

to follow the complex course of descent is to maintain passing events in their proper dispersion; it is to identify the accidents, the minute deviations – or conversely, the complete reversals – the errors, the false appraisals, and the faulty calculations that gave birth to those things that continue to exist and have value for us; it is to discover that truth or being does not lie at the root of what we know and what we are, but the exteriority of accidents (Foucault, 1984, p. 81, Nietzsche Genealogy History; see Stevens, 2003, p.581).

For Foucault, his work rests on the analysis of ‘events’ that “come out in the order of knowledge, and which cannot be reduced either to the general law of some kind of ‘progress’, or the repetition of an origin” (Foucault, 2006, p. 578, Reply to Derrida, quoted in Scott, 2009, p. 352). As one examines the statements within a discourse, one is apt to find the mutations and conflicts that play a role in shaping the discourse (Scott, 2009, p. 356)

As the researcher comes across these non-conforming statements, one must follow them to see if they later take the form of more stable discourses. With ‘time’, for example, we see that many notions of the concept that we now take for-granted are arbitrary, and have no grounding in claims of universal truth. One can see another example in an analysis of technology in the classroom, and its periodic surge as a dominant pedagogical tool. In questioning the ‘nature’ of the ‘slow learner’ the current study demonstrates the multiplicity of experiences, events and practices occurring within what is supposed to be a timeless and true characterization of the subject (Diedrich, 2005,



p. 656). For Diedrich (2005, p. 656), the uncovering of non-conforming statements shows how bodies that are subjected to oppressive discourses “may yet be thought otherwise, may yet be reinvented” (p. 656). Critical ontology, in this sense, not only criticizes dominant discourses, but also opens alternative avenues in which individuals may participate in the aesthetics of themselves.

Scott (2009, p. 357) suggests some basic steps one may take when searching for mutations in a discourse. First, one may suspend all notions of harmony and progress; though well-intentioned, these ideas may cause one to interpret continuity where there is none. Also, one may expect continuous divergence and transformation within a discourse; if one expects discourse to modify, one is open to seeing minute changes in certain lines of reasoning. Finally, the author suggests that one may expect the marginalization of subjects as products of regulation and enforcement mechanisms; in addition to tracing a discourse, one must also look for the biopower that supports one discourse over another. The analysis of biopower is the next method in Foucault’s ‘toolkit’.

Perhaps the most dominant theme in a methodology of critical ontology that traces a history is the identification of power. Foucault states,

It is a question of orienting ourselves to a conception of power which replaces the privilege of the law with the viewpoint of the objective, the privilege of prohibition with the viewpoint of tactical efficacy, the privilege of sovereignty with the analysis of a multiple and mobile field of force relations, wherein far-reaching, but never completely stable, effects of domination are produced. They strategically model, rather than the model based on law. And this, not out of a speculative choice or theoretical preference, but because in fact it is one of the essential traits of Western societies that force relationships which for a long time had found expression in war, in every form of warfare, gradually became invested in the order of political power” (Foucault, 1978, p. 102, *History of Sexuality vol. I*; see Paternek, 1987, p.100 )

In short, there are particular phenomena related to power relations that researchers ideally ought stay cognizant of when conducting a study. In an identification of power, researchers may start with the relations that constitute the *local* centers of power/knowledge – perhaps choosing to study “carefully defined institutions” (Foucault, 1982, p. 791-792; *The Subject and Power*). However, Foucault warns that the “fundamental point of anchorage of the relationship” is not found within the prison or the school, but outside the institution (ibid). Thus, researchers may additionally give particular attention to “those continuous and uninterrupted processes which subject our bodies, govern our gestures, dictate our behaviors” (Foucault, 1986, p. 233, *Disciplinary Power and Subjection*; see Qi, 1997, p. 14) and resultantly work to forge the truth that govern ourselves and the governmentalities in our lives. Likewise, investigators may explore the different techniques of power used within the discourse, and examine whether certain disciplinary mechanisms have the same influence at both micro- and macro-social scales. Moreover, one may explore the tangled natures of discourses and power/knowledge and see how discourse can at once potentially be an instrument of, effect of, and point of resistance to the dominant regime of truth (Paternek, 1987, p. 100, citing Foucault, 1978, p. 98-102, *History of Sexuality, vol. I*). With this general outline in hand, we now examine the tool available for analyzing power.

### **Analyzing BioPower**

Foucault suggests that a history of the present serves as a “catalyst” for critiquing power. He states that with this starting point, one can, “bring to light power relations, locate their position, and find out their point of application and the methods used” (Foucault, 1982, p. 780, *Subject and Power*). However, the identification of discursive

themes alone is not enough for one to successfully challenge a dominant discourse – I wish to go beyond a survey of the landscape. Thus, while tracing a history of the present does not call for analysis, once the landscape has been surveyed, one must examine the mechanisms of power that sustain the discourse. Thus, the researcher’s task is to articulate a history of the body as it is affected by events, governmental statements, popular images, media reporting, and other disciplinary technologies and show how the body comes to be docile and self-subjective (Foucault, 1984, *Nietzsche, Genealogy, History*; see Deidrich, 2005, p. 657).

Dominant discourses are difficult to displace because they are widely held, and they continue to produce power/knowledge that assimilates weaker voices (Hill, 2009, p. 314), thus one must understand the conditions that allow certain regimes of truth to flourish or fail (Weeks, 1982, p. 110). If one wishes to analyze the power relations – the biopower – supporting any given discourse, one must take into account both “techniques of domination, and techniques of the self” (Foucault, 1993, p. 203, *About the Beginning of the Hermeneutics of the Self*) – this calls for an analysis of disciplinary technologies and government.

When it comes to America’s race to educate children, this discourse has discontinuities, but society routinely refreshes it through disciplinary technologies and governmentalities. Indeed, the notion of mechanical time that supports America’s Race to the Top is perhaps the most dominant discourse in the world. Few other discourses have their disciplinary technologies strapped to the wrist of, in the pocket of, or on the room wall of almost every subject. Also, few other discourses have government support in identifying subjects in the first years of life. Therefore, a critical ontology of the race to

educate requires an analysis of the biopower that supports the discourse. For example, the current study examines the governmentality of the race in education, and to do this we look at the differentiations determined by the law and other traditions of state and privilege (Foucault, 1982, p. 792, Subject and Power). The aim of analyzing governmentality is to show how certain truths have been “elaborated, rationalized, and centralized, in the form of, or under the auspices of, state institutions” (Foucault, 1982, p. 793, Subject and Power). One may describe the invention of the norm and the practices used to enforce the discourse (Davis, 1995, 2002, Diedrich, 2005, p. 655); these practices may include the “judgments, decisions, and forms of authority to which they are subject, and the types of relationships with others in which they are situated” (Yates, 2005, p. 71). To this effect, special education law in the United States has done much to promote a truth of ‘slow learners’ and we must look at how this legislation works to enforce self-subjugating individuals. We also examine the role of intelligence testing in normalizing the American child, and in enforcing the divisions that serve to entrench a notion of ‘slow learner’.

With the analysis of biopower, one must remember that the researcher should not be interested in discovering the origins of subjects. Instead, one is to search out the “numberless beginnings” a subject may have (Foucault, 1984, p. 81, Nietzsche, Genealogy, History; see Hill, 2009, p. 312). The goal for us is not to go back and state, “this is where the race to educate began,” or even to show that events of the past, secretly affect the present, but rather the researcher must critique statements of origin by showing how disciplinary and governmental practices flow from the repeated struggles in power relations (ibid). For example, commentators often cite the launch of Sputnik as the cause

of a race in America's education system; critical ontology, however, looks at how biopower shaped the perceptions of the Soviet launched radio until it became a problem in the minds of American society. One can position Sputnik as a 'beeping' tin-basketball sent into space on behalf of all people, or one can frame the satellite as an evil menace signaling the end of Western civilization – the difference between these two pictures is discourse, and the fact that for many decades the former notion of Sputnik was unspeakable in America is *episteme*. Also, while a conception of Sputnik may have been one 'cause', one must also look at how the biopower of Newtonian physics, Scientific Management, eugenics, militarism, psychological testing, lead paint, Apple Computers, Ritalin, etc. came to influence a history of the racing discourse. In short, we search for the many disciplinary technologies and governmental statements that shape perceptions of truth.

### **Legitimizing the Silent**

As the reader comes to question the dominant discourse through contemplation of a history of the present and the analysis of biopower's modes of objectification, the many suppressed discourses that come to the surface play as much a role in decentering the subject as do the other two methods. Foucault states, "Criticism performs its work...through the reemergence of these low-ranking knowledges, these unqualified, even directly disqualified knowledges" (Foucault, 1980, p. 82, Two Lectures). Reading the statements of less privileged discourses may or may not convince the reader to question the dominant discourse, however if one buttresses the emergent discourses and legitimizes what would be otherwise silent, one may introduce the reader to alternative possibilities that she or he may not have considered before. If one is to successfully

challenge a dominant discourse, then, one must legitimize the silent voices that have remained hidden by the more powerful voice.

Silent voices live on the margins of sanctioned discourse. Foucault broadcast the voices of those judged 'insane' or 'criminal', while many others (e.g., Tremain, Ed. 2005; Lofty, 1992; Lesko, 2001; Salvio, 2007) have forwarded the voices of those deemed 'disabled', 'lazy', 'adolescent', 'emotional', etc.; and all of these voices challenge what is often experienced as 'normal' by allowing subjects to speak for themselves. The voices of the exiled represent a counter-memory to the dominant discourse and force a negotiation of new truths. By uncovering silent voices, one is also able to speak to those who may not have heard or understood otherwise. One is able to communicate through the codes of the oppressed, and show how apparent silence is very loud indeed (Sprinker, 1980, p. 90-91). Steve Prefontaine was one of those voices silenced until he was privileged by the media spotlight – there are many other people who have not received such privilege but still deserve to have their stories told.

The legitimization of silent voices may work to unfold what Foucault calls the double language, or the double bind. Double language is "a linguistic code that does not exist except in this utterance, an utterance that does not say anything other than its linguistic code" (Foucault, 1995, p. 295, *Madness, the Absence of Work*). This fold shapes the meaning coming from marginal voices, and essentially silences participation in negotiations of the discourse. For example, individuals labeled with mental illness must speak within the discourse of pathology; however, the interpretation of that language frames the subject into a position of less privilege compared to those who speak from codes of 'health' and psychiatric medicine. Likewise, individuals who have been

identified in American schools with a 'learning disability' must speak from a position of deficit. For one to modify identification, one must go through the special education meeting process – a process that most often excludes the individual to whom the label is affixed. However, when one is able to speak outside of, or against the more dominant discourse, she or he may represent what seems to be an entirely different identity than the one ascribed. It continually amazes me how my thirteen-year-old students can act and talk one way in the hallways, and then enter a teacher meeting and speak with an entirely different code. Likewise, many students would be shocked to discover how their teachers sometimes act when not in school. For Foucault, the apparent silence amongst some members of a society stems from those in power searching for language “where it will never be found because it had never been located there to begin with” (1995, p. 296, *Madness, the Absence of Work*). The language of work and madness are located in the same place, the language of slow and fast are likewise; and these concepts only appear dichotomous due to one’s “blind spot of the possibility of each to become the other and of their mutual exclusion” (ibid). When we legitimize silent voices, the blind spots of our discursive perspectives become a little less shaded, and thus, the counter-voice to a dominant discourse can be heard more clearly.

With that said, it seems wise to enter this study with caution. While we let subjects speak for themselves with the legitimization of their voices, it is important to remember that these discursive voices are not stationary and homogenous beings. Just as dominant discourses have more tributaries and mutations than any study could recognize or describe, so to do the hidden discourses spoken through these bodies (Foucault, 1980, p. 194). If one is to speak on a topic on Monday, she or he may convey much different

meaning if she or he was to speak on the same topic on Tuesday – in certain frames of reference, both speaker and interpreter have changed in the meantime. Thus, critical ontology calls for us to question our sources of knowledge at all times – the knowledge that flows through biopower, the knowledge that is suppressed, and the knowledge that we hold ourselves. If one walks away having decided the question, the researcher’s job is not complete.

### **The Research Strategy**

*The spirit of the Nation in this critical matter will be determined largely by what individuals and society and those gathered in public meetings do and say, upon what newspapers and magazines contain, upon what ministers utter in their pulpits, and men proclaim as their opinions on the street (Wilson, 1914, Aug. 20)*

To understand how we came to race American children in their education, some may argue that a history of ideas is sufficient for analyzing the power of this discourse. However, a history of the giants of philosophy can only partially explain this discourse; from their shoulders, I see the many technologies and government actions that support power in our schools, and I hear the many voices that struggle against their dominance. A critical ontology thus requires us to go further in exploring the biopower that supports this regime of truth; to understand the race to educate American children we must trace a history of education as a temporal endeavor, analyze the biopower of this discourse, and legitimize the voices that the dominant discourse has silenced.

To organize this project the current study explores two discursive themes that support the race to educate. Chapter Three traces the first of these two themes, a metanarrative of universal time and linear progress that has come to dominate American



culture. This narrative of time and progress has power in American schools and shapes many of the structures that influence students' educational experiences. Chapter Four traces the history of the so-called 'slow learner', a subject position used to instill society with anxiety about 'progress' and security.

The current study builds on existing literature that studies the role of time discourses in schools. Many authors argue that one can see the disciplinary power of time in the technologies of clocks and calendars. As others have argued disciplinary mechanisms of time shape the school schedule, establish classroom routines, and "dominate the life of students and teachers alike" (Boyer, 1983, p. 141 quoted in Lofty, 1992, p. 220). Quoting an undergraduate student in his study, Lofty (1995) brings out the power of time in students' lives. A student reports, "Time is the cage in which I live. It represents the rules and boundaries of society that I must obey" (Lofty, 1995, p. 29). Power hides, but the disciplinary mechanisms of time are so visible in American schools that one can recognize the influence of this discourse on our lives. Furthermore, while much of that awareness comes with the technology that many people have strapped to their wrists or have sitting in their pockets – the clock – many Americans lack the discursive power to take off that watch – literally and figuratively.

There is perhaps no better exemplar of discursive power than a story of mechanical time in American school system, and a history of identifications in the American special education system. As Foucault articulates in several of his works, educational institutions are places where biopower is often visible, and in many cases it is overtly employed to shape the discourse for future generations. In *Discipline & Punish* he states,

The learning situation is reorganized according to the principle of 'panopticism,' the primary effect of which is the creation of a conscious and permanent state of visibility for the school pupils: "He who is subjected to a field of visibility, and who knows it, assumes responsibility for the constraints of power; he makes them play spontaneously upon himself" (Foucault, 1977, p. 202)

Through the panoptic gaze and required examination of selves the time discourse is able to shape human behavior.

Many studies examine the disciplinary technologies that have implanted the discourse of mechanical time into the minds of many people in the Western world. Many histories of the mechanical clock show how one of its origins stems from the monastic desire to regulate the prayer times of Benedictine monks (e.g., Coulton, 1928). Some histories of scheduling technologies trace the disciplinary mechanism of the calendar to the same institutions (e.g., Kramer & Ikeda, 2001, p. 83). Likewise, there is much written about how schedules have been used to manipulate bodies in schools, and how they have been used to socialize students into disciplined behaviors (e.g., Foucault, 1977, *Discipline & Punish*).

Clocks and schedules are not, however, the only technologies used in promoting America's race to educate children. Some researchers have attempted to show how this discourse of time has entered into education materials such as the McGuffey readers, popular in the nineteenth and early twentieth centuries (e.g., O'Malley, 1990). Besides teaching time through behavior management, schools have educated students into this discourse through the morality tales in textbooks. In this regard, the present study takes a fresh look at these types of texts and offers some new insights that show how these technologies have promoted our race.

Yet, as this history is often portrayed as a linear progression from texts promoting agricultural time values to promoting industrial time values, the build-up and influence of this power is not as predictable as one might assume. Even when one can survey the discourse and capture noticeable themes, older and less-privileged discourses still bubble to the surface. The evidence for this examination comes from grade school primers from pre-industrial America, the McGuffey Readers and other primers from industrializing America, statements made by government officials, newspaper reports, and the King James Version of the Bible.

The current study also looks at how society has created temporal subjectivities to support this discourse of racing children. We examine instruction manuals from intelligence tests and achievement tests used in the twentieth century to see what role time plays in the identification of deviants, and we examine how newspaper accounts, articles published in scholarly journals, and government statements promote certain characterizations of 'slow learners' that double-back to reinforce the need to race. In addition, we explore how disciplinary technologies and governmentality have maintained divisions in society that buttress the race to educate. Specifically, we examine the various medical identifications, school structures, teaching methods, and technologies that promote and support this discursive race to educate. In the twentieth century, everything from movies, television, and computers, to better nutrition, drugs, and alternative schools were advocated as ways to speed up education, and a history of these teaching methods adds valuable insight into how we came to race children and how we came to believe this was good.

By organizing the study along these discursive themes, and observing artifacts from this field of data, this model of analysis offers pragmatic conclusions. I offer here, not a single road by which I believe we came to raise our children, but rather a network of histories that have played on the discourse we now observe. Thus, I recognize the uncertainty of interpretation and posit that the ‘truth’ of these conclusions may change depending on how you look at them, and furthermore, I recognize that equally valid roads of data and interpretation remain silent here.

Therefore, let me spend some time discussing the conception of historical sources that I use in this critical ontology. When searching for statements of this biopower in a history of American education, one may see how the discourse of universal time and linear progress appears in academic journals, school textbooks, newspaper articles, etc. throughout United States history. However, we must be wary of the proverbial “wolf in sheep’s clothing.” While many histories of education point to school schedules, the discourse of scientific management, or events such as Sputnik as the genesis for a discourse of efficiency in education, these studies tend to assume the truth of these ‘events’ as factors in prompting Americans to internalize this subjectivity. Therefore, by looking at popular media, such as newspapers, as artifacts of a history, we can get a sense of what people were talking about, and how certain beliefs gained the power of truth. With the establishment of the associated press in 1848 (Associated Press, ND), and other news sharing outlets, news events that may have only impacted the discourse of a small enclave of people in some time past, now is broadcast across the country and affects the beliefs of millions of people. In fact, by the early decades of the twentieth century, several of the syndicated advice columns that deal with education appeared in

newspapers in New York and Los Angeles on the same day; likewise, news events may only be a day apart in their reporting. Because of distribution sources like the Associated Press, I feel confident that while most of my newspaper artifacts were acquired through the ProQuest Historical Newspapers database for *The Boston Globe (1872-1979)*, *Christian Science Monitor (1908-1997)*, *Los Angeles Times (1881-1987)*, *New York Times (1851-2007)*, *Wall Street Journal (1889-1993)*, and *Washington Post (1877-1994)*, these urban-centered publications are able to validly communicate the dominant discourses in American society at various times throughout history. By cross-referencing this data with other sources such as personal diaries, accounts in less-prestigious newspapers, factory publications, magazine advertisements, Congressional records, education scholarship, etc., this collection of artifacts provides a sound foundation for the arguments presented in this essay. Thus, I completely agree with those who believe one can track the discursive pace of education back to monasteries, factories, and fears of Soviet domination, but without acknowledging the role of these media, we cannot understand how those beliefs spread across America.

While previous studies may have used these articles as resources for historical background, and I certainly use them in this way, I propose that we also frame these articles as historical artifacts and see how they change in their representation of the value of speed in education. When we do this, one finds great volatility in this discourse, and we can realize that meta-narratives that some may have us believe are universal, are nothing of the sort.

Thus, any study that concludes that a basketball-sized satellite 'caused' Americans to race education is incomplete; Sputnik 'caused' radio signals to transmit

back to earth, and that is all. Humans ‘caused’ the paranoia that resulted; humans shaped their lives due to the meaning they found in that event. A tin ball in space means nothing unless humans assign meaning to it.

Similarly, while many claim that factories ‘caused’ Americans to change education practices, the only thing the first factories ‘caused’ was uniform textile production and some environmental changes. We must remember that humans took up the discourse of industrialization and humans ‘caused’ those changes to become models for education. By examining these events through the popular media, we can see how certain humans transmitted the values of an education race into American consciousness.

To illustrate this methodology let us return to the story about the field trip to McDonald’s that started the second section of this chapter. In the manner I used it thus far, this newspaper article is a source of evidence for what is happening in society at a given time. If we assume that ‘facts’ in that article are ‘true’, the story tells of how Boston teachers in 1980 brought children to a McDonald’s and warned them against ‘slacking-off’ in school. However, if we look at the article as a discursive artifact, the appearance of this story in 1980 tells us that newspaper editors, at the *Christian Science Monitor* at least, were concerned about career decisions made by Boston high school students, and they communicated this concern through this story. Boston High may have taken their students on this trip, but if the newspaper had not reported it, the values inherent in this action may not have been communicated to the wider society. Likewise, articles in academic journals impact the methodology taught to prospective teachers, but they also serve to indicate of which topics researchers at the time were concerned. The plethora of articles in the first decades of the twentieth-century reporting on intelligence

testing tells us about some anxiety in society concerning the identification of subjects. Similarly, the glut of articles in the mid-twentieth century concerned with the 'slow learner' tells us about discursive concerns at that time. And the virtual disappearance of articles dealing with 'slow learners' in the late 1970s and early 1980s tells us something about changing labels – people were still writing about those bodies, but in differing terms (see Appendix: Table 1 and Graphs 1 & 2).

Thus, the current study allows primary artifacts to tell two stories; one of the facts they report, and another of the discourse they represent. In this way, one should consider the current study, and the many secondary sources I cite, as artifacts of a discourse. For example, my data source for information about McDonald's president Karen King came from the company's website. I recognize the company may have a discursive agenda in promoting this history of their workers, and they may even have a discursive agenda in promoting a certain conception of time – it is 'fast food' after all – but I hope the reader recognizes that too. The article is a mechanism of power; yet, the fact remains that King has spent her career with this company and the McDonald's website seems to be a valid source of reporting these 'facts'. Furthermore, while I privilege statements by Dewey, James, and Foucault, one must remember that these authors are writing within the discourse of universal time and linear progress that I discuss in this paper. In many ways, these authors are writing in reaction to the power of this discourse without naming it as opposition.

In regards to the current study, one should recognize that we are in a period when many people question the effect of time in our lives. In fact, if it had not been for Newkirk's (2010) inspiring publication criticizing fast-paced education, I would not have

written this history. Criticism against the fast-pace of education has not always been possible, and it says something about the level of anxiety amongst Americans when an author can come out and say we should slow down. In 1958, Thomas Newkirk (2010, 2012) would have had a hard time finding a publisher for his writings against ‘fast education’; the *episteme* of the race to educate would not have given Newkirk a voice.

As the reader already might assume, the current study says something about my level of anxiety. Perhaps it says more about my level of anxiety concerning the present state of education discourse than it does about American society during the twentieth century. Therefore, I present here an artifact in the struggle for time – a critical ontology of subjects who are positioned as the objects of power in our race to educate America.



### Chapter III

#### A BRIEF HISTORY OF TIME...IN AMERICAN SCHOOLS

##### Newton Rules!

When asked who was driving the Apollo 8 module as it journeyed back to Earth from its orbit around the moon, lunar module pilot William A. Anders quipped, "I think Isaac Newton is doing most of the driving right now" (Woods & O'Brien, 2001). For over three-hundred years, Sir Isaac, or at least the discourse of linear time he helped

promote, has been in the driver's seat in explaining the movement of objects and in providing the rationalization for progress. In American schools, the discourse of classical-Newtonian physics

*All human behavior is scheduled and programmed through rationality. There is a logic in institution and in behavior and in political relations. In even the most violent ones there is a rationality. What is most dangerous in violence is its rationality. Of course violence itself is terrible. But the deepest root of violence and its permanence come out of the form of the rationality we use. The idea has been that if we live in the world of reason, we can get rid of violence. This is quite wrong. Between violence and rationality there is no incompatibility. My problem is not to put reason on trial, but to know what is this rationality so compatible with violence (Dillon & Foucault, 1980, p. 4, Conversation)*

influences our understanding of intellectual growth, structures the school environment, and shapes the way we understand natural phenomena in our world.

Newton remains in the driver's seat despite the existence of other theories that do a better job of explaining the movement of large bodies, that are better at describing the movement of sub-atomic particles, that are better at explaining the complex relationships

of cause and effect in the natural world, and are better at explaining the phenomenon of human learning. For example, Newton's theory of gravity does not accurately predict the orbital path of the planet Mercury – one needs Einstein's theory of general relativity for that. In addition, Newtonian physics cannot explain the movement of light, one needs quantum physics for that. Yet, because Newton's theory is easy to work with, and other theories defy human perception, scientists and lay people alike use his equations to this day to explain the motion of large objects and we use them to introduce American children to the laws of physics (Hawking, 1996, p. 11). However, while the differences between Newton's predictions and Einstein's predictions are small enough so as not to make much practical difference when launching space craft at the moon, the implications for students are much greater – great enough to race our children out of orbit as they try to learn.

Thus, this chapter is dedicated to tracing a history of universal time and linear progress that shapes our understanding of education as a temporal race. This narrative for human existence comes out of natural philosophy, but one can also see its power in metaphysics scholarship, and the disciplinary technologies that support its existence are ever-present in our lives. However, though these disciplinary technologies seem omnipresent, the metanarrative that they support is interrupted with facts and statements that require one to pause in accepting the truths that urge us to race in our education. As stated in the previous paragraph, the very discipline from which Isaac Newton developed his understanding of the universe and laws of motion has modified its understanding of time and space with theories that were first developed at the beginning of the twentieth century; many of these theories directly contradict the premises that Newton employ.

Yet, the discourse of progress that Newton reinforces remains dominant in American schools despite these facts and statements. Thus, the current chapter traces this history, and questions the wisdom of using this notion of time and progress in our understanding of human learning.

Throughout the history of Western thought, the answer to three questions (perhaps more) has influenced our conceptions of knowledge and our conceptions of individual subjects. To help us consider the validity of allowing the power of universal time and linear progress to dominate American education, I ask the reader to consider the following questions as you read: 1) Is history a linear progression of knowledge? The race in education assumes that answer is yes, and expects students to acquire knowledge in a linear trajectory; is this an accurate model of human learning? 2) Is time a universal truth knowable to all beings? Similarly, the race in education assumes the answer is yes, and expects students to acquire knowledge at standardized rates; students who do not keep pace with the norm are identified as 'defective'. Is this an accurate model of human learning? 3) Can we predict future outcomes based on conditions measured at some arbitrary starting point? Again, the race to educate assumes yes, and we divide students and differentiate curriculum based on our understanding of what students 'need' for their futures. Is this a scientifically valid practice? If the answer to these three questions is yes, then we have full right to acquire information about children and then race them in their education all the while privileging those who learn 'fastest' – we do not have time to waste! However, if the answer to any of these questions is no, then we must reconsider this discourse, and examine alternative narratives for human learning that rest on the borders of our realities. To begin an examination of how we came to race children in

their education let us consider the contributions of three philosophers who shaped our understanding of time and progress; we now consider the work of Galileo Galilei, Rene Descartes, and Isaac Newton.

\* \* \*

Let us return to the moon, this time at the final hours of the 1971 Apollo 15 mission in which Commander David Scott took a geologic hammer and a feather and dropped each out of his hands at the same time. In the Preliminary Science Report for the mission, Mission Controller Joe Allen states,

Within the accuracy of the simultaneous release, the objects were observed to undergo the same acceleration and strike the lunar surface simultaneously, which was a result predicted by well-established theory (Williams, 2008).

The well-established theory came from Galileo Galilei, who conducted similar experiments rolling different weights down smooth slopes (Hawking, 1996, p. 15). With his laws of motion, and his observations of Jupiter's moons, Galileo's work modified the discourse of time and progress in such a way that we all but forget those who wrote before him.

Galileo's laws assume that one can understand motion mathematically. Consequently, according to his laws, mathematical calculations can precisely predict the present state of an object. He also concludes that one can precisely predict the future motion and location of that object (Oppenheimer, 1990, p. 389). In the open universe that

*An [sic] physical theory is always provisional, in the sense that it is only a hypothesis: you can never prove it. No matter how many time [sic] the results of experiments agree with some theory, you can never be sure that the next time the result will not contradict the theory... you can disprove a theory by finding even a single observation that disagrees with the predictions of the theory (Hawking, 1996, p.10)*

Galileo theorizes, 'truth' is a point in the trajectory of an object, and the stability of

permanence, of the continuous 'now', gives way to a notion of indefinitely slowed-down motion, of unfinished progress (Foucault & Miskowiec, 1986, p. 23). Thus, without Galileo's conceptions of motion and time, we could have neither No Child Left Behind nor Race to the Top, because we would have no discourse of trajectory or a linear progression of knowledge. The dominant grade system that schools employ would have no value because one would not assume that twelfth grade was any 'better' than the first. Likewise, conceptions of 'slow learners' or 'backwards youth' would have no meaning without the presumption of a linear continuum of learning of which all children must follow. Without the notion of time and progress that Galileo promotes, there is no reason to race in our education.

\* \* \*

A contemporary of Galileo, Rene Descartes (1596-1650) is another philosopher who laid the foundation for a dominant discourse of universal time and linear progress. Like Galileo, Descartes positions himself within a discourse shaped by the Copernican discovery that the earth revolves around the sun (Arendt, 1958, p. 582). Descartes' conclusion, based on this discovery, was that pure reasoning, carried out through logic, was unable to adequately explain the universe. Descartes viewed Aristotle's conception of an Earth-centric universe as a failure of pure logic, and consequently, he promotes a discourse of inquiry in which one is asked to look outside oneself for truth (Foucault, 1997, *On the Genealogy of Ethics*).

Descartes' answer to the question, "Who am I?" represents an ontological shift in which

*No one shall be so weak as to think they can tell every thing [sic] that shall happen to us hereafter; why then should these bold confident pretenders to future knowledge, the rules of whose art were made by mere chance, and at random, be any more regarded than a...fool" (Green, 1769, p. 78)*

knowledge is divorced from existence. The subject becomes a unique *and* unhistorical being; in Foucault's words, "I, for Descartes, is everyone, anywhere at any moment?" (Foucault, 1982, p. 785, Subject and Power). In short, a Cartesian philosophy views all individuals as celestial bodies following the same universal laws as we float in our trajectories of progress.

Seeing how the telescope reveals new realities that our eyes have never seen, Descartes assumes that the search for truth could trust neither the evidence provided by the senses nor the truth in the logic of reason; instead there is an 'essence', or a 'nature' to the universe that humans had yet to uncover (Arendt, 1958, p. 582). Under this assumption, one now uses evidence that conflicts with human thought and experience as grounds for creating truths about oneself and others – evidence that may be of questionable validity. Foucault's conclusion from this assumption is that "[one] can be immoral, and know the truth" – one can fail to question but still walk away with answers (Foucault, 1997, p. 279, On the Genealogy of Ethics). However, Descartes and those who followed his line of thinking used this conclusion to promote a differing conception of reality; one in which human thought is divorced from the body.

In *Discourse on Method*, Rene Descartes (1637/1956) colonized the Aristotelian 'search for truth' by equating his doubt of the self with a method of reason. In this study, Descartes claims that to be human, one must be rational (Kramer & Johnson, 1997, p.35 citing *ibid* p. 2), but the distrust of both mind and body forces one to look for universal conditions of reality, not the truth one finds by examining the soul. Thus, when Descartes published his own laws of motion, he insisted that his laws were valid in all places and at all times. For Descartes, time is a universal truth knowable to all beings.

He also posits the importance of ‘initial conditions’, a doctrine that assumes that one can understand how a body progresses over time if one has knowledge of a set of its original characteristics (e.g. mass; velocity) and its environment (e.g., water vs. air). With this addition to the discourse of linear ‘progress’, one can now claim knowledge of the child and develop a plan for ‘moving’ that child in the ‘right direction’ if only we can discover the initial conditions and environment affecting that ‘progress’ (i.e., that’s where IQ scores and a hundred years of research in the social sciences come in). In other words, Descartes’ addition to the discourse assumes that we can discover the nature of a child through rational inquiry; and we can predict future outcomes based on conditions measured at some arbitrary starting point. If we can know the child, we can help her or him learn faster!

\* \* \*

Following Galileo and Descartes, the British philosopher Isaac Newton took this discourse of linear progress and instilled it with knowledge of a clock-like universe that we know today. Publishing his seminal work *Principia Mathematica* in 1687, Newton proposed three premises of motion that assumed the truth of ‘initial condition’ theory and the truth of time as a linear measure for movement that worked to cement this discourse into ‘law’. Premise one: “Whenever a body is not acted on by any force, it will keep on moving in a straight line at the same speed.” Premise two: “The body will accelerate, or change its speed, at a rate that is proportional to the force.” Premise three: “for every action there is an equal and opposite reaction” (quoted from Hawking, 1996, p. 16). While these premises may seem benign in promoting a conception of linear progress and universal time that now affects American’s race in education, one should note that with

the discursive success of Newton's laws of motion, we have a much different picture of space and time than we had before. Newton creates an image of the universe in which all bodies had 'initial conditions' and if one could uncover all the necessary data, one could track the history of a body back to its origin. Newton also formulated an image of the universe in which space and time were separate; two variables in the equation of moving bodies. While Newton rejects the discourse of absolute rest, he holds on to the conception of linear time. Newton promotes the notion, "that one could unambiguously measure the interval of time between two events, and that this time would be the same for whoever measured it" so long as they agreed on the units of measure and the accuracy of the timing devices (Hawking, 1996, p. 18). In this way, the universe became a giant clocklike mechanism with all components marching forward in a predictable trajectory (Slattery, 1995, Time and Education, p. 29). According to Newton, if one knows where to point on the timeline of ever-unfolding progress, one can precisely determine the location and speed of every particle in the system. If one measures and determines the 'initial conditions' of each body, then one can predict where that body will be in a year. In education, we schedule students into classes under the assumption that we know what they will become. If a body was not moving as fast as desired to reach a certain destination, one could push it forward to 'catch-up' – all that is required is force. In many schools, we now call this Response to Intervention or Special Education. Following Newton's logic, one can chart the movement of bodies in time and space, and compare trajectories to determine who is 'fast' and who is 'slow'. Enter any public school in America today and you will find entire rooms filled with documents tracking the trajectories of each child attending that institution, you will find additional paperwork



for students who have ‘fallen behind’, and you may find teachers calculating learning goals for each student based on numeric test scores. In my school, and many others across the United States, Isaac Newton is superintendent.

In the centuries after the publication of *Principia Mathematica*, one sees a wave of philosophical writings influenced by Isaac Newton’s contributions to the discourse of time. For example, the Marquis de Laplace (1749-1827), inspired by Newton’s theory of gravity, argues that the universe is completely deterministic. That is, Laplace argues that if one can know the complete state of the universe at one point in time, one can use a set of scientific laws to predict everything that will happen in that universe (Hawking, 1996, p. 55). This assumption is the underlying premise of scientific method, and it is the basis for all modern science (Hawking & Mlodinow, 2010, p. 30).

The epistemological discourse which Galileo, Descartes, and Newton have most notably advanced is often referred to as positivism, though I am not sure if this identification serves any use. After the successful application of the scientific theories of those cited above, some people, such as Laplace, began to assume that science and the language of mathematics could “speak correctly about the world” (Cherryholmes, 1994, p. 195). The subsequent problem for investigators then became a search for new methods by which to find and thus speak these truths (ibid). This discourse of epistemology assumes that humans can speak objectively about the world, and that any observation that requires subjective assessment, such as history, politics, sociology, is meaningless without some quantitative evidence to support the conclusions (LaNear & Frattura, 2007, p. 90). Thus, in education research, there is often an underlying push for quantitative

data to support judgments made by teachers and parents. As I show, the history of standardized intelligence testing in American schools is a direct product of this discourse.

Additionally, this epistemology requires researchers to understand all the parts of the whole before one can conclude any meaning. This call for knowledge of ‘initial conditions’ is the most commonly violated premise of the ‘scientific method’, yet it is often used to discredit the findings of methodologies that confess subjectivity and limited generalizability *prima facie* (Grover et al. 1997, p. 269). Furthermore, this guise of knowledge derived from ‘initial conditions’ allows researchers working in this discourse to avoid accusations of making valued judgments (Endres, 1997, p. 2). As LaNear & Frattura (2007) frame it, “The scientific method, then, is necessarily implemented in a political and/or social vacuum, a vacuum that discourages – or, worse yet – silences the voices of students, the object of labeling” (p. 90)<sup>15</sup>. The knowledge created under this discourse thus obtains the status of objective truth, and individuals who accept this reality fall under a spell in which professional psychologists, medical doctors, educators, etc. can

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<sup>15</sup> It is interesting that LaNear & Frattura (2007) argue that the scientific method requires a political and/or social vacuum, because when it comes to successfully demonstrating the law of nature posited by Galileo and Newton, a vacuum is precisely what one requires. ‘Gravity’ is a phenomenon that perplexes investigators to this day, and while Galileo, and later Newton, were somehow able to describe what they saw and then generalize natural laws, little did they know about gravitons, or the quantum strings that some theorize attract large bodies together. Furthermore, Galileo’s discourse assumes knowledge of all necessary variables for the accurate calculation of motion, yet to meet that premise one must eliminate all factors that support our existence. While one should note that the Apollo lunar module would not have come close to the moon if not for Newton’s ‘laws’, one should also be aware that the astronauts would be a distant space probe today if not for Johannes Kepler’s (1571-1630) discover of planetary *elliptical* orbits; it is also important to realize that the Apollo astronauts could only put Newton in the driver’s seat because they traveled in the vacuum of space. I pity the pilot on Earth who drives with those same assumptions only to find that wind, rain, pot-holes, birds, and bounding balls seem to not let those ‘laws’ have any ‘real’ impact on our course. Needless to say, the initial push of the Saturn 5 thruster attached to the Earth-bound pilot, though it would provide one hell of a ride, would soon produce a hitchhiker due to the entropic nature of energy that is turned to work (Bertalanffy, 1968). Furthermore, one should note that the Apollo astronauts did not take the hammer and feather to the moon merely as a publicity stunt, but rather they needed to travel to this crater-faced rock, 238,857 miles (*on average*) away from Earth, because it is the only natural place we can go where Galileo’s law actually works to its theoretical truth. I needn’t remind the reader that if one drops a feather and a hammer simultaneously on Earth, the experiment falls short (no pun intended) of the expected findings due to the influence of air. Yet, because the epistemological split between empiricism and metaphysics is present to this day, and the mathematical interpretation of knowledge is overly generalized to the human sciences, we apply these concepts to very ‘air-filled’ and living situations.

prescribe treatments based on subjective notions of illness (Shildrick, 2005, p. 762). In schools, education officials pathologize individuals who society otherwise marginalizes in efforts to objectively 'know' the subject.

Those who promote No Child Left Behind and Race to the Top, give little heed to the meaning of 'adequate yearly progress' let alone a 'year', a 'day', or even 'adequate', but under the tutelage of Galileo and Newton we can mindlessly set standards for student growth in their education, and we can set blame when those targets are missed. We can search for initial conditions, and plot a course for a child's education as if she or he is a space probe headed to the moon. If students lived in a vacuum then maybe these theories would work, but in a world where millions of environmental factors shape the lives of each individual every day, we must look for a theory of time and learning that understands complexity, and accepts the uncertainty of human existence. We will explore those alternative models later; however, now the discourse of universal time and linear progress is dominant in our society and in our schools, and to answer how we came to race children in their education we must explore how this knowledge became part of our understanding of ourselves.

### **Disciplinary Technologies and the Power of Universal Time and Linear Progress**

The discourse of time and space that Isaac Newton promotes is the dominant narrative for explaining events in American education, as well as many other contexts of human living. Yet, understanding Newton's laws of motion is not enough for explaining its power in our schools. We still must question how one discourse of time came to dominate our society. Thus, an examination of the disciplinary power and

governmentality that has reinforced this knowledge may help one see how universal time and linear progress

*You cannot go any faster than you can advance the average moral judgments of the mass, but you can go at least as fast as that, and you can see to it that you do not lag behind the average moral judgments of the mass (Wilson, 1914, Oct. 20)*

became the time for school. For that, we

look at the disciplinary mechanisms that shape our knowledge of the learning subject as a temporal being and we examine statements that reinforce Americans' efforts to pursue a 'fast-paced' education.

### **The Time Table in Surveillance**

The use of clocks and calendars as disciplinary devices has received much focus in the literature. Foucault (1977, p. 149, *Discipline & Punish*) argues that the modes of establishing rhythms, imposing particular occupations, and regulating the cycles of repetition may have started in monasteries, but soon were found in factories, hospitals, and schools. Connecting the religious sphere with schools, Foucault cites an education program started by the Brothers of the Common Life that followed the child from year to year with a curriculum of increasing

complexity (ibid, p. 161). Zepeda & Mayers (2006) follow Foucault and argue, "One constant in the reform agendas has been the ways in which learning and time

*Time, even before it can be used productively, or made available for various tasks, needs to be understood in a particular way, to exist in a particular format, and to be invested in or possessed by particular people; it follows that disciplinary time also made the specialized time of schooling possible in the first place (Deacon, 2006, p. 182)*

are arranged" (p. 139). In 1893, for example, a recommendation by the Committee of Ten asked high schools to plan classes in sequence of subject and they recommended a set length for instruction (p. 139). In 1906, a policy recommendation made by the Board of Trustees of the Carnegie Foundation set the credit system in high school based on the

number of periods the class met throughout a semester (ibid). The connection between seat-time and measures of achievement are a prominent part of schools today. For example, Hottenstein (1998) states,

At Hatboro-Horsham, we encourage a 20% participation grade. This grade includes in-class activities that cannot be made up or duplicated at any other time and places an emphasis on the importance of in-class activities. It always amazes me that so many students with a high percentage of absences can still obtain a grade of A or B. When this happens, it sends a terrible message to students and parents about the need to be prompt and on the job every day (p.43).

Rather than questioning the quality of a curriculum in which a student can obtain an “A” or “B” with little attendance in the classroom, Hottenstein instead reveals his displeasure at failing to teach the intended curriculum lesson to “be prompt and on the job every day”.

Another place an observer may find the power of the clock is in how many students respond to bells throughout the day. Lofty (1992, p. 210) argues that the internalization pattern, translates for some into a certain work ethic for studies that is brought into the home. Furthermore, this power sustains itself by rewarding individuals who are on-time and punishing those who do not conform. For example, in many schools, bells or tones signal transitions between classes – students move without verbal prompting. Students who do not move at the desired pace, are punished for being ‘tardy’ to class. Similarly, school officials reward students who complete work on time with recess or game time, while officials require students who do not finish at the expected rate to stay in or stay late.

The system of signals in the school disconnects students (and teachers) from disciplinary time, which is already disconnected from natural cycles or pragmatic needs of learning. When the 2:10 bells rings on schedule, students leave my classroom whether

or not I have finished my lesson - the bell is in charge. As evidence, one would be amazed to see how many students leave their seats when our school's final bell rings at 1:10 instead of 2:10 because of the daylight savings time change, then they complain that they cannot go home. Within this structure, teachers who wish their students to make 'adequate yearly progress' need to race through their lessons so they may 'cover' all of the required content. If the lesson does not end by 2:10, most students' close their minds for the day and the teacher must 'waste' the next period 'catching up'.

Many authors (e.g., Boyer, 1983; Kruse & Kruse, 1995; Carroll, 1994) argue that this system of seat-time, deadlines, and regulatory bells is linked to the factory system found in America's industrial revolution, and one important piece of the puzzle for understanding how America came to race to educate our kids is definitely found in this discourse. However, a history of clocks shows us that we can trace this disciplinary technology to dates long before the invention of the factory. Nevertheless, to understand the race to educate in American schools, we must understand the power of the clock.

### **Clocks & Calendars**

The clock, no doubt, is the face of universal time and linear progress in American schools and this mechanism drives the education race. However, calendars also are a powerful disciplinary technology that supports the power of universal time and linear progress in America's race to educate. When one surveys a history of these disciplinary technologies one sees the irregular and sometime arbitrary nature in their invention and we see how these devices, from their very beginnings, are intended as mechanisms of power for instilling a certain pace to life. A history of the clock, and the other

disciplinary technologies of time, such as calendars, shows how these inventions serve as the ends by which we shape our behaviors.

Many histories of time trace the origin of the mechanical clock back to medieval Benedictine monasteries. Used to instill order in the monastic tradition, some even argue that the adoption of clocks in certain Christian religious sects was a catalyst of modern capitalist discourse and an inspiration to scientists such as Isaac Newton (Coulton, 1928; Gebser, 1949/1985; Kramer & Ikeda, 2001, p. 83).

A history of the clock can start around the seventh century, when, by this time Pope Sabinianus decreed that the days were to be divided into seven canonical hours. Marked by bells, the start of each canonical hour represents a call to prayer, and by the end of the tenth century, Pope Sylvester II was commissioning the best minds of his era to devise a mechanism that would alert the bell-ringer so that the hours would run with some measurement of regularity. Additionally, the Catholic Church commissioned the *Book of Hours*, which helped crystalize this discourse into the thoughts of wealthy aristocrats in medieval Europe. A *Book of Hours* places this canonical doctrine into a written text, and allows all to return to its teachings (Kramer & Ikeda, *ibid*).

Heinrich von Wych invented the first “true mechanical clock” *circa* A.D. 1370 and ever since it has been the most dominant disciplinary device in human history. Mechanical clocks divide time into units of base-sixty – a common discourse by 1345 (Thorndike, 1917) – and by the end of the sixteenth century, small clocks were available to people in England and Holland with people such as Peter Henlien creating “many-wheeled watches out of small bits of iron” (Kramer & Ikeda, 2001, p. 92 citing Mumford, 1934/1963, p. 16). The mechanical clock contains necessary circular mechanisms

required for producing regular intervals of time and it demonstrates a world in which objects moved smoothly in circular orbits. Consequently, this mechanization of time worked in dissociating human perception from mechanical models of the scientific world, and helped promote quantitative mathematics as a language for measuring temporal events (Mumford, 1934/1963, p. 17).

It was not long before people heard the bells of a clock in town marketplaces across Europe and thus the discipline of time slowly crept into the public sector (Mumford 1952, p. 265). In short, the bells of Saint Benedict regulated the regularity of prayer, the schedule of the market place, and the timetable for work. Furthermore, as clocks became more available, civic officials applied this monastic tradition of time keeping to many schools as a disciplinary mechanism (see Lofty, 1992, p. 211; Foucault, 1977, *Discipline & Punish*; Deacon 2006, p. 182; Zerubavel, 1981, p. 31-69). By the eighteenth century, teachers in the United States rung bells to signal the start of classes and gain the attention of their students, and it is no coincidence that the shape of the schoolhouse in nineteenth century America resembled community churches complete with a belfry (Zimmerman, 2009). Many depictions of the classic American one-room school still portray this image.

This direct connection between prayer time and school time is not seen in most Christian cultures today; yet, it is still present in other cultures. In majority Muslim countries, for example, the minarets that surround a mosque broadcast the daily calls to prayer that many observant individuals regard as their cues to stop worldly business and enter into prayer. While this evidence does not indicate any causal connection between bell schedules and the pace of education, it seems probable that one who gazes at the



clock and sees an approaching deadline may modify her or his behavior – in many cases this may be in the form of increasing pace of activity.

In the United States, the disciplinary power of clocks and bells has a similar history to their effect in Europe. However, just as in Europe, the transition to a life regulated by mechanical time had interruptions, and throughout early American history belief in the truth of mechanical time was certainly not universal. In 1803, a Shaker clockmaker from New Lebanon, NY confided in his diary that clocks were scarce in his region of the country. In 1800, in fact, a New York state tax assessor recorded 937 clocks and watches owned among the 48,000 inhabitants of Columbia and Greene Counties – one in eight households owned a timepiece (Bruegel, 1995, p. 549). How many clocks do you have in your house today?

Additionally, at this moment in history, in most cases, employers measured labor in half-days; they measured the day by the earth's rotation in reference to the sun (ibid). Additionally, when conflicts arose between workers and employers regarding quality of work and performance, clocks, watches, and timetables played no role in these conflicts before the 1830s (ibid, p. 557).

The power of the clock comes to prominence as a disciplinary device during the 19<sup>th</sup> century in two distinct ways. Those readers familiar with a history of the early Industrial Revolution in the United States probably recognize the importance of clocks and bells in the early factory system. Still today, if one visits a nineteenth-century cotton mill, such as the Boott Cotton Mill in Lowell, MA, she or he sees a clock towering over the industrial landscape. One just needs to examine the writings of factory workers during this time to see how this technology shaped the lives of women *and* men in the

factory system (Female Operative, 1844). As one operative summarizes this effect, “hark, the factory bell is ringing, and our discussion must be deferred until another time” (ibid, p. 162). How many teachers have said a line similar to that before? Moreover, while the face of the clock simulates the cyclical conception of time of which agricultural peoples are familiar, the clock shows no regard for the irregularity found in nature. According to one time table for the Lowell mills from September 21, 1853, work would commence at 6:30 am from March 20 to September 19, inclusive, and 7am from September 20 to March 19, inclusive. Nature apparently had two times, and the daily variation in the rising and setting of the sun had little power. Interestingly, the people who created this timetable used the longitudinal meridian of Lowell to measure time – if this table was used in Chicago at this time, one with astute hearing (or the quantum ability to be in two places at once) would notice that the bells in those two cities did not ring at the same time. This is because, at this moment in history, towns set their own standards for time based on their local noon.

Mill owners knew and used ‘Lowell time’ as a way of instilling discipline through “unimpeachable authority” (O’Malley, 1990, 52). Though this schedule represents a step in divorcing time from natural cycles, in 1853, towns still used natural time for setting their clocks. It was not until the end of the 1800s that mechanical time was completely separated from nature with the establishment of the Greenwich meridian and time-zones as the standard for setting clocks. Yet, even today ‘universal time’ is set by averaging the readings of several atomic clocks that cannot agree on the time due to the characteristics of space-time modeled by laws of general relativity (Fraser, 1987).

Nevertheless, the rotation of the clock, and the chiming of the bells came to symbolize time. As the 'mill girls' of Lowell had once planned their lives around the needs of the season, and the cyclical demands of those for whom they cared (including themselves), they now began to regulate their behaviors around the direction of the clock and the pace of 'progress'. This change in daily behavior caused by the discourse of mechanical time inspired one nineteenth century observer to call the wristwatch the "handcuff of our time" (Kramer & Ikeda, 2001, p. 92). People who had to live under its power felt the disciplinary effect of the clock.

With the advent of mechanical time, people's lives became ever-increasingly disassociated from the cycles of nature, and with human rhythms divorced from nature; people began seeking artificial illumination, and new inventions that kept them occupied during the new hours of human created light (Mumford, 1934/1963, p. 17). As Mumford (1934/1963) states, the cycles of the body became regulated by the turning of the clock, "one ate, not upon feeling hungry, but when prompted by the clock: one slept, not when one was tired, but when the clock sanctioned it" (p. 17). In schools, the clock comes to determine all these behaviors but also when we sit, when we walk, when we 'science', and when we 'write' (Lofty, 1992).

As factory workers began to regulate their behaviors to the discourse of the clock, those in control of the mechanisms began to fall into the discourse that they, themselves, had worked to establish. A watch on one's wrist came to symbolize an independence from nature that was so valued in industrial culture. If one was able to live under the rules of the clock, this showed that she or he was free from the governance of natural rhythms (Bruegel, 1995, p. 551). With clocks appearing in town squares, and on fire-

place mantles, the ability to keep a meeting time became a sign of status in a society increasingly watched by the gaze of the clock – one who was late according to the clock of the most powerful member of the relationship, ‘wasted time’. In my classroom, the bell or the clock on my wrist determines tardiness, I spend much time each day urging students to get to class and “stop wasting time in the hallway.”

Similarly, by the middle of the nineteenth century, the ‘knowledge’ of time becomes a sign of maturity. The passing of time-pieces through estate wills became a ritual for the passing of patriarchal power, and as popular literature from this period shows, the discourse promoted the ownership of watches as a distinction between childhood and adulthood for both women and men (ibid, 552). In towns across the United States (i.e., both Northern and Southern), the public clock served as a reminder, though highly privileged, that all had agreed to the same mechanical conception of time (ibid, p. 558). Anyone who did not agree to this discourse was ‘backwards’, ‘slow’, ‘careless’, ‘immature’ or ‘savage’. Today, the entrusting of a cell phone seems to be a rite of passage in our society; students now have ‘more accurate’ timekeeping in their pockets and a method of communicating time commitments (i.e., texting) if one forgets an appointment.

Unfortunately, for the people who still have connection with the natural world, roosters, cows, agricultural crops, babies, viruses, weather patterns, and people’s body organs still use the sun as their clock, and some people see any deference to these needs as a sign of pathology. Even with prominent almanac makers boasting, as Nathaniel Low did in 1786, “the poor peasant, who never saw a watch, will tell the time to a fraction by the rising and setting of the moon,” farmers’ derived their knowledge from an almanac,

which used mechanical clocks to decide the time of such observances (O'Malley, 1990, p. 5). And while people everywhere tried to teach their roosters how to read a clock and tried to find the snooze button on their new-born infants - well, maybe nobody did that - many individuals were caught between two worlds - one where bodies ruled time, and the other where time ruled the body. In the race to educate, the timing of tests pays no heed to bodily functions; 'adequate yearly progress' gives no recognition to variance in individuals learning growth; and education officials give little attention to individual factors that may affect students test performance on one particular day compared to the next. The clock and industrial discourse have overpowered consideration of the natural events that play on our lives.

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Along with regulating the movements of bodies, one sees an increasing connection between the mechanical time discourse and morality in the nineteenth century. If powerful individuals, such as the mill owners in Lowell, could set the rules for time, a fact noticed by the mill girls who routinely complained of administrative tampering with the factory clocks, they could also set the penalties for not adhering to the discipline. In Lowell, this meant reduction in pay and potential for dismissal; for the capitalists, this means loss of business. Time became money, and to 'waste time' became a sign of moral failure (Kramer & Ikeda, 2001, p. 93). As a result, while levels of wealth may have been signs of Divine providence in agricultural societies (Weber, 1930/1992), poverty in the industrial world became more a sign of personal failure than symbols of Grace, or even societal oppression or discursive under-privilege. As capitalist discourse became dominant in American society, wealthy individuals again assumed sovereign

right and began to look for those 'worthy' of charity (Berger, 2005, p. 161 citing Katz, 1989). How many teachers today tell their students to "stop wasting time?" How many teachers assume some level of moral failure if students do not complete their work 'on time'?

It may be interesting to note here that the language of racing and linear progress is born with the advent of the mechanical clock. The word 'speed', or 'spede', does not appear in the English language before the invention of the mechanical clock (Kramer & Ikeda, 2001). Similarly, the word 'punctual', before the late seventeenth century, meant a person obsessed with trivial matters; it is not until the end of the 1600s that the word comes to symbolize a person arriving with temporal precision (ibid, citing Levine, 1997). Likewise, it is not until industrial workers adopt the discourse of mechanical time that they begin to associate working hours with wages, and start to complain about the 'unethical' manipulation of clocks and inadequacy of pay. While pre-industrial history saw labor measured by piece rates or time divisions no more precise than the half-day, by the mid-nineteenth century, the 'cost of time' was being entered into account books, and people began looking for ways to make better use of this valuable resource (Bruegel, 1995, p. 555).

The men who worked to 'sell' time to the American people during the nineteenth century are an illustration of the discursive connection between 'time management' and morality that grows during this time. Leonard Waldo, founder of the Standard Time Company, and director of the time service at Yale and Harvard during the late nineteenth century, promoted the idea that time measurement was a moral obligation and that the standard should be left up to scientists to decide. Waldo also promotes the idea that these

authorities have the moral duty to train ‘disorganized workers’ into the discipline of time (Kramer & Ikeda, 2001, p. 95). While people like Samuel Langley promoted the notion of local time as a ‘fiction’ and ‘relic of antiquity’ (Levine, 1997, p. 66), Yale president Timothy Dwight, expressed anxiety over the growing number of laborers who were “shiftless, diseased, or vicious” and who lacked a sense of order and time-discipline (O’Malley, 1990, p. 2-3). Today, school officials promote this ethic, and a major part of the special education program in many schools is devoted to organizing ‘disorganized students’ who do not adhere to the time norms privileged in that environment.

Dwight’s discourse of time morality is supported in the popular media through advertisements, such as the 1891 advertisement by the Electric Signal Clock Company that proclaims, “If there is one virtue that should be cultivated more than any other by him who would succeed in life, it is punctuality” (Kramer & Ikeda, 2001, p. 95 citing Levine, 1997, p. 76, 67). By the turn of the twentieth century many American schools, offices, and factories had heeded the call and installed time systems into their organization structures. Within decades of Dwight’s statements, most Americans would have a watch strapped to their wrist, and the gaze of time would stare them into attention to increasingly smaller units of time (Apostle, 1969, p. 8).

Thus, as industrial discourse gained power, people came to see time as a commodity, and timeliness became a virtue. Still today, authorities charge workers with accusations of idleness, dishonesty, and immorality when they do not meet standards of work pace set by their employers (O’Neill, 1986, p. 47). In schools, teachers carry these same impeachments against students who do not meet the expected pace. Ware (1931) and Thompson (1963) argues that this ‘work-ethic’ discourse stems from the new

technologies that appeared in industrial factories during the nineteenth centuries.

Machines, such as the spinning jenny and the power loom required constant attention, and the panoptic gaze of management requires workers to internalize a discourse of labor pace much different from anything found in nature (Breugel, 1995, p. 556). In effect, industrial workers internalize a race to produce, and society judges anyone who fails to keep pace in this race an economic *and* moral failure.<sup>16</sup> In American schools, students internalize a race to demonstrate knowledge, and society judges anyone who fails to keep pace in this race an economic *and* moral failure. To the point, in our race to educate kids, this discourse that positions time as a commodity, and the machinery of surveillance it employs, play a huge part in the race to educate kids. When industrial time goes to school in the beginning of the twentieth-century, this principle of efficiency and economic use of time changes the definition of education and turns education into a race.

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<sup>16</sup> As this discourse came to justify moral judgment about work ethic and economic success, it also came to be a premise for valuing consumer products. Several authors have studied American consumer culture, and many have tried to form a link between technology in the home and standards of work versus leisure time (e.g., Cowan, 1983; Linder 1970; Lewis & Weigert, 1981; Sorokin and Merton, 1937). However, Gross & Sheth (1989) trace a history of the discursive link between time and value through the publications of *Ladies' Home Journal*, and found that the link between speed and value in the twentieth-century has not been stable, at least in terms of consumer products. The authors found that prior to the Second World War advertisements for products in this magazine were mostly based on appeals to labor saving features (i.e., use laundry machine instead of washing by hand), not time saving (i.e., buy machine that does laundry in half the time). But, during the first half of the twentieth-century, the decade of the 1920s saw a discursive shift towards time-saving devices, while the years of the Great Depression saw a return to the norm of labor saving. World War II inspired a flood of time-oriented propaganda and a corresponding discourse in the advertisements that appealed to saving time. *Blitzkrieg* and the ominous specter of surprise attacks were used, justifiably so, to inspire a faster pace in work at home and in the factory. This discourse of speed in productivity was not only used in promoting certain consumer products, but it was also used in promoting a value for 'quick' minds (Kramer & Johnson, 1997, p. 35).

Following World War II, time-orientation to consumer products remained strong despite a return to 'normalcy' (Gross & Sheth, 1989). 'Convenience' became the buzz word, and in the second-half of the twentieth-century this word changed meaning from saving labor, to saving time. After the War, DuPont, for example, advertises their nylon fabric as promoting "more fun time, less chore time" (ibid, p. 80); however by the 1960s, the meaning of 'time-saving' had also changed. Before this decade, advertisements promoting 'time-saving' imply just what DuPont states, time-saving means more time for fun. However, as a 1967 advertisement for Midol expresses, time-saving allows women to "set a fast pace [and] meet a tight schedule" because they have "no time to slow down" (ibid, p. 81). For some, women's liberation came to mean an identity aligned to the non-stop pace promoted in the industrial discourse, but one can argue that this binary creates a situation in which the only choice for one who wants to stay in power is to go even faster. By the 1980s, the value of 'saving time' no longer serves as a premise for a commercial argument, but rather is an assumed characteristic of life (Gross & Sheth, 1989). In a 1986 ad for Hunt's Manwich the headline reads, "when it's dinner time and time is tight" (p. 81) – the choice is no longer between taking the whole time to cook dinner or taking less time to cook in order to enjoy leisure, the choice is now between taking less time for dinner in order to move on to the next task, or failing to be a good parent.



Before we consider the powerful narrative of efficiency in education, let us examine the role of calendars as a disciplinary technology in the race to educate. The first calendars known to exist were lunar calendars; these models of time are terrible for predicting the rising and setting of the sun or the passing of the seasons, as is required in agricultural production, but lunar cyclicity was ideal for planning the required tasks of husbandry, and scheduling maritime work (Kramer & Ikeda, 2001, p. 87).<sup>17</sup> Additionally, farmers adopted solar calendars to help plan their work in the fields. Planting times, harvest times, and other seasonal cycles are difficult to monitor on a twelve-month lunar calendar that cycles every 354.36 days (ibid, p. 88). A history of calendars shows that the people who developed these devices may have had much more benevolent ends in mind than the people who developed the mechanical clock (i.e., calendars were not developed by religious clerics instilling discipline in their converts or factory bosses squeezing pennies out of their workers). However, we must not miss the disciplinary power embedded in these charts that mark the passage of time; the only difference between a calendar and a clock is the size of the units they measure.

Some authors argue that the adoptions of the Julian and Gregorian solar calendars have more to do with power than with any benevolent turn towards the needs of impoverished farmers. For example, in studying indigenous people visited by Christian missionaries, Burman (1981) found a people who viewed the Europeans' arrival, and their introduction of the Gregorian calendar, as the origin of 'new ways' of living (cited in Munn, 1992, p. 110). Similarly, during the French Revolution, the Republic introduced a decimal calendar that they intended to systematically delete the existing

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<sup>17</sup> Lunar calendars are even ideal for planning lessons in grade schools. I only have anecdotal evidence for this, but talk to any teacher and she or he will tell you about the effect of the moon on students' behaviors.

system of time and measurement found in the Gregorian model, the model of the French monarchy (Zerubavel, 1981, p. 83). In education, the power of the school calendar influences determinations of 'adequate yearly progress', and the arbitrary nature of this measurement of time shapes students' learning throughout their school experience.

Any parent can tell you about the power of the school calendar on families' lives. The calendar tells us which day we start school each fall, which day we graduate, and which days we do not have to attend school. In many schools, the calendar tells us what we eat for lunch, what teachers students see, and in what activities they engage in the afternoon. However, in most cases, natural events are separated from the time required to attend school - snowstorm hits your town, add a day to the school calendar; miss too many days of school, risk repeating a class on next year's calendar. In most states, one's seat time during a 180-day school calendar is what marks the passage of time and 'progress' through the grades.

Furthermore, each year, schools across America use the calendar to determine the date for administering standardized tests, and during the school year, teachers and students rush to meet deadlines so that they may show 'adequate yearly progress' on the next round of assessments. Teachers often ignore the events happening around us in our haste to 'cover' enough material before the next deadline – students miss learning about the world 'as it happens'. However, without the arbitrary deadlines set on a calendar, the concept of 'adequate yearly progress' has no meaning; students and teachers can measure learning at pragmatically relevant moments. 'Grade-levels' have no meaning; students can receive instruction with the people who are best able to help them learn. The concept of 'falling behind in school' loses power; students learn at a pace that is best for them and

the people they work with. And the race to educate has no influence on the decisions that affect student education other than one's own desire to learn valued knowledge.

This race to educate students according to arbitrary calendar dates is supported by the highly abstracted Euclidean conception of this world that allows us to picture anything as a straight line. Since the adoption of the Gregorian calendar, we model history as this count-up clock from the birth of Jesus to his unpredictable apocalyptic return at an undeterminable date (Kramer & Ikeda, 2001, p. 89-90). Regimes throughout history use the count-up calendar to mark particular reigns of power (ibid), and this model of time is familiar to educational settings. In schools, we model history by counting to 180 days in a school year and counting-up grade levels. However, while we look at June as the *end* of the school year, and twelfth grade as the *end* of high school, maybe we should conceptualize these events as the beginnings of something new. The school year does start anew each fall, but students' histories follow them as they move from grade to grade, and if they do not meet learning targets 'in time' they face identification as an embodiment of 'learning deficit'. Additionally, many students go on to college after completing twelfth grade, but too many students end their learning when they leave high school, with or without a diploma. The race to educate employing this notion of linear calendar time seems to have one end, the transfer of students through the grades with the expectation that they master privileged knowledge at a predetermined pace - there is no turning back.

However, while we have this sense of time ticking away in a straight line, one may conceptualize a lunar calendar moving in a circle, solar calendars moving in a circle, and biological calendars moving in a circle. *Eureka; nothing in nature moves in a*

*straight line!* As the models of time in Quantum theory, Fractal theory, and Relativity theory demonstrate, an arrow of time, if it exists at all, is not uniformly flowing in one direction for all observers to see. Yet, this narrative of education as a linear endeavor is supported by disciplinary technologies like the clock that gaze at our behaviors and instill urgency in our actions. Its power is so great that many of us cannot contemplate existing in a differing pace of life, let alone an entirely different discourse of time. Thus, we privilege an education race in our schools that demands linear progress in mastering knowledge on a universal structure of deadlines. To understand how this narrative came into American schools, we must understand how the narrative of efficiency gained power.

### **Industry & Efficiency**

One may recognize similarities between the organization of secondary schools, even some elementary schools, and the organization of factories (e.g., Khazzaka, 1997/1998). Much like a factory, schools establish specialized work stations in which laborers tool away at isolated tasks until the bell signals a shift in their task, and it is this model of education that calls for a certain pace of work.

However, American society's juxtaposition of education with the capitalist economy has not always led to calls for efficiency. At a time when agricultural production was the chief economic force in the United States, many officials looked to support the sciences that led to new technologies and increased production. Yet, at this time many Americans felt that 'progress' was America's

*The true prosperity and greatness of a nation is to be found in the elevation and education of its laborers (Grant, 1871, Dec. 4).*

'manifest destiny' so there was little sense that educators needed to 'race'. President

Ulysses S. Grant, for instance, states, “The subjects of education and agriculture are of great interest to the success of our republic institutions, happiness, and grandeur as a nation,” and while he calls for Congressional funding of this project there are no deadlines, and no request for a ‘faster pace’ (Grant, 1870, Dec. 5). Similarly, William Howard Taft states, “The far-reaching utility of the educational system carried on by the Department of Agriculture for the benefit of the farmers of our country calls for no elaboration” (Taft, 1912, Dec. 3). Grant and Taft join education with economic production, but instead of positioning America on a racetrack, they instead frame education as a means to self-improvement (see also Grant, 1871, Dec. 4; Cleveland, 1894, Dec. 3; Coolidge, 1928, Dec. 4; Coolidge, 1925, Dec. 8). For Taft, the ‘pace of development’ is measured qualitatively and new knowledge was “for the benefit of the farmer” (Taft, 1912, Dec. 3)<sup>18</sup>.

Even when industrial production became a stated concern amongst government officials, early twentieth-century presidents similarly seemed to have no interest in racing anyone. In his sixth annual message to Congress, for example, Theodore Roosevelt states, “Our industrial development depends largely upon technical education, including in this term all industrial education” (1906, Dec. 3), but again, he frames education as a means toward internal improvement. However, even by Theodore Roosevelt’s presidency, this casual association between industry and education was starting to change, and a discourse of clock-measured efficiency had already gained power in the

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<sup>18</sup> Note that Taft uses the phrase “for the benefit of the farmers” in two successive sentences in this message to Congress. There does not seem to be a sense here that economic production is necessary for the health and safety of the nation as a whole.

lives of many American workers. If the American economy was to be efficient, that meant American schools had to develop similar methods of educating students.

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Frederick Winslow Taylor (1856-1915) is perhaps the poster-child for the introduction of industrial culture and its use of the disciplinary technology of the clock into American schools (e.g., Apple, 1986, p. 140). Championed as the 'father of scientific management', Taylor worked as a professional engineer of production (Kliebard, 1999, p. 46). After introducing his own version of the 'piece-rate system' in a 1883 paper delivered to the American Society of Mechanical Engineers, Taylor worked to replace subjective management organizations in factories with 'objective' efficiency experts, who determined the quality of workers by measuring their pace of production with a stopwatch (ibid). By the time Taylor published *The Principles of Scientific Management* in 1911, he was already in great demand as a consultant to business owners who wished to squeeze extra profits out of their existing plants.

American workers soon felt the impact of Taylor's methods and this discourse of efficiency that gained power in American factories. Furthermore, workers noticed the power of the stopwatch and worked to end its hold on their working lives. Recognizing the changing definitions of measurement, workers from the Watertown Arsenal went before a House of Representatives committee investigating a strike in that same year and testified against the use of the stopwatch and the bonus system implemented to promote faster work (ibid, p. 48). In the earliest years of the efficiency discourse, the power of the clock was visible, and the struggle against it was equal to match. As this discourse moved into schools, its power became increasingly hidden.

Taylor is, perhaps, the most widely recognized supporter of the discourse of scientific management, but American newspapers communicated this discourse of efficiency well before he published his famous book. In a 1900 letter to the editor of the Baltimore newspaper *The Sun*, one “mother” complained about the methodology by which her son’s teachers were having him add. She states, “It has taken the combined efforts of his teacher and myself for some time to accomplish this stupendous task, and at what an expense of time for the teacher and nervous energy on the part of the little child” (1900, Apr. 4, pg. 7). The writer goes on to fret about the condition of the ‘slow learner’ and these children’s abilities to progress in grades. The gaze of the clock was already infiltrating American’s homes before anyone wrote a book glorifying its power.

Taylor’s answer to these types of concerns was that managers just needed to set standards. In *Scientific Management* he states, “There is no question that the average individual accomplishes the most when he either gives himself, or someone else assigns him, a definite task, namely a given amount of work which he must do within a given amount of time” (p. 69). Sound familiar to the due dates we assign our students?

When John Franklin Bobbitt (1876-1956) published an article called “The Elimination of Waste in Education” in 1912, this discourse of fast-paced education took another step into education discourse. In this article, Bobbitt suggests a model of scientific management for American education. Similarly, in 1914, Franklin W. Johnson published an article in *Popular Science Monthly* criticizing the “waste in elementary and secondary education”; the commodity wasted of course being time (p. 41). Furthermore, in the text of a 1915 report commissioned by the National Education Association, the Committee on the ‘Economy of Time’ states, “there is much waste in elementary

education,” and the solution to this ‘waste’ was in “accomplishing more within the time” (NEA, 1915, p. 403). The committee then went on to suggest numerous ways schools could cut ‘waste’ out of their educational programs. With John Franklin Bobbitt’s publication of *The Curriculum* and *How to Make a Curriculum* in 1918 and 1924, respectively, the discourse of efficiency in education was placed in the hands of teachers and administrators across the nation, and expectation communicated within these books is that American educators should search for ways to take waste out of their lessons. As one author wrote, “The crying need of the hour is for efficiency” (Gregory, 1922, p.1)<sup>19</sup>

The newspaper media communicated this desire for efficiency in education. In 1929, Washington, D.C. School Superintendent Frank W. Ballou published an article proclaiming the advantages of the “period schedule” as a structure that would “prevent any waste of time.” According to Ballou, “Time allotments make for greater efficiency in teaching in that they serve to balance the program and to plan the time without waste” (Ballou, 1929, Feb. 13, p. 19). With the proper schedule, schools could “stimulate the slow child and provide an opportunity for the accelerated child to go as far as he can” (ibid). This system would also allow students to engage in self-examination by giving them “the valuable experience of planning his work ahead at his own rate of speed because he knows the plan of the day” (ibid). The message was clear; students needed to complete work in a given amount to time, and if students had no use for that work in their

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<sup>19</sup> Early twentieth century authors like Chester Arthur Gregory seem obsessed with finding the most efficient ways to educate children: “Just as in the business world the greatest economies are effected through small savings, so the school must expect to make its greatest gains by checking up the small leaks in time, energy, and expense. A saving of thirty-five minutes a day, for instance, would save a child one school year in eight, or a saving of three and one-half minutes per day would mean a saving of one school month in the course” (Gregory, 1922, p.16)



adult lives, schools needed to find new lessons or new structures because society could not afford to waste time (Kliebard, 1999, p. 53).

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The power of efficiency education in American schools rests on a certain conception of independence that society has not always promoted. In fact, one may frame the history of American education as a discursive battle over the meaning of that concept – independence – and the role of time has been at the center of such debates. For efficiency discourse to gain power, it must change the conception of independence from one meaning control over one's time, to one meaning control over one's environment. In factories operating under efficiency discourse, workers are convinced that despite their having no control over the hours and pace of labor, their wages will bring material prosperity, which will allow them greater control in the market – independence.

In schools operating under efficiency discourse, students are convinced that despite their having no control over the hours and pace of work, their academic success will bring material prosperity and greater control in the market. However, while proponents of efficiency education would like us to believe this is the only meaning of independence, a conception of the term defined as 'freedom to control time' rivals for prominence in our society.

During the twentieth century, neither meaning of independence was completely dominant. Furthermore, one can see the dual meaning of the term in the writings of some authors who use the differing concepts simultaneously. For example, syndicated columnist Myrtle Meyer Eldred often argued that children were naturally curious,

learning by experience at the rate that met their needs. Children would get dressed to play, they would finish their meals, and they would go to school, but only at a pace that met *their* needs – the child could learn independently, but freedom meant more time (Eldred, 1943, Jun. 8, p. 8). Yet, in one 1932 article, Eldred writes,

independence is a slow growth, constantly checked by the child's own parents, because so much of his natural expression of independence runs counter to the parent's comfort and so is nipped in the bud (Eldred, 1932, Apr. 15, p. A6)

She recognizes the social pressure parents feel concerning educating their children into acceptable time codes. In a society that expects 'fast learning', parents could not wait for their children to learn at their own pace. Thus, in the same article in which Eldred proposes, "independence is slow growth," she also states, "the independence that comes from a mastery of the physical environment is smiled upon by the parent" (Eldred, 1932, Apr. 15, p. A6). The author then goes on to list a timetable of skills parents should expect to see from their 'normal' child:

At five or six months both cups and spoons can be given the child as playthings...By the time baby is 12 months old, he should be able to manage his spoon competently...he should be taught to drink from [a cup] as early as the fifth or sixth month (ibid).

In this sense, learning means mastery of the environment, and the quicker the child could learn, the faster she or he would be independent.

In 1957, an article written by Mary Lou Downer reflects how society positioned children within the industrial discourse. Downer writes, "Learning and studying are the jobs of childhood just as housework is the job of the homemaker and providing for his family the job of the man of the house" (Downer, 1957, Mar. 31, p. D17). Aside from the obvious sexist inferences one may draw from this statement, we may also conclude that if schoolwork is the child's job, then she or he must also abide by the discursive rules that

govern industrial culture. With schoolwork, the child may achieve independence in the market, but the subject's control of time had vanished.

In the 1922 *Fundamentals of Educational Measurement*, Chester Arthur Gregory writes, "A school system should meet the same requirements that a business corporation must meet. The output must be commensurate with the expenditure" (Gregory, 1922, p.16). By the 1970s, the industrial discourse for education had influenced some cities to turn their schools into corporations. The discourse had changed its focus from factory training to business training; however, these schools still positioned students as widgets on the assembly line of normalcy. In 1971, for example, the *Wall Street Journal* reported on the Banneker School in Gary, Indiana, which the city had leased to a private company called Behavioral Research Laboratories Inc. of Palo Alto, California. As terms of the contract, the city agreed to pay \$800 for each student the company was able to bring up to the national average in reading and math by the end of the three-year agreement (presumably measured by a standardized test) (James, R.D., 1971, Jun. 2, p. 1). The company was responsible for paying teachers' salaries, purchasing educational materials, and renting the building facilities, and the city did not pay for any student who did not reach their testing goal. However, in exchange for taking these students from this "grimy city" and making them 'normal' the company was allowed to keep any surplus funds for profit – students had 'no time to waste' at this school (ibid).

In 1978, the *Wall Street Journal* reported on another school run in a similar way. The Indian Hill School in Ohio was "a leader in a national movement to run school systems somewhat like a business," and just like the Banneker School, students and teachers were judged by their reaching standardized learning goals (Bulkeley, 1978, May

30, p. 1). A second grade teacher was reported to have “meticulous records of each student’s progress” and another teacher of the same grade level reports, “I feel I’m teaching more efficiently, with more direction. I have objectives just like any other job” (ibid). Perhaps a prelude to the battles between teachers and government officials in the Race to the Top, this article summarizes the issues teachers had brought up in the policy to tie job performance to standardized testing, but the point is clear that the business model is the preferred model for education, and just as the final teacher states, educators were now workers who could efficiently produce widgets for their overseers.

With economic pressure to produce results within a given time period, the micro-management of time becomes common, even in schools that are not run directly by for-profit corporations. Prior to this discourse coming to prominence in American culture, progress of students, if it was measured at all, was measured in units of years. Adults who judged children’s ‘progress’ based their assessments on personal memories of their own abilities at the child’s particular age. Thus, changing circumstances and conflicting memories left doubt as to a child’s ‘true’ pace of learning. However, with increasing attention to smaller units of time, and the use of standardized measures of ‘progress’, students no longer could escape the label of ‘slow’ if they learned at a ‘slower rate’ than the norm (Apostle, 1969, p. 8). The threat of pathological labels looming over everyone’s heads makes the race to educate seem like the best option for students who wish to avoid those labels, but inspiration from corporate America is not the only mechanism that brings this discourse into schools.

## **Teaching Time**

The structure of schools was one way the discourse of universal time came to impact education, but to shape the next generation of citizens, society also had to teach these values, and in many schools those lessons came through textbooks. Many authors cite the McGuffey readers as an example of a discursive technology used for socializing subjects into the discourse of time at the turn of the 20th century and these texts certainly did promote a narrative of constant motion and linear progress (e.g., O'Malley, 1990). However, the narrative that texts like the McGuffey readers promote is not universal throughout the literature. In most cases, the McGuffey readers portray a world in which all is in motion, but there are lessons about patience and the quality of waiting just as much as there are lessons in being quick. Similarly, while analyses often use texts from the late 18th and early 19th century to demonstrate the application of 'timeless' biblical lessons, a careful examination of the Bible reveals many conflicting discourses of learning pace. Nevertheless, texts for young learners have been instrumental in promoting an education race, and as much as they may not teach any one discourse of linear time, they do represent a shift in the targets of power.

## **The Bible**

For those Americans who are literate, if we had chance to own only one book, many would choose to purchase a Bible. Similarly, many school texts published in pre-Revolutionary America draw lessons from scripture and many families then and now reinforce these lessons with weekly attendance to church services and daily readings from the Bible. As a disciplinary mechanism for the discourse of racing to educate, one can see that the King James Version of the Bible (the translation most used in English-

speaking regions of early America) does promote a clear normative dichotomy between 'fast' and 'slow'. However, the Bible does not suggest the same valuing of these positions as those held in the race to educate. For example, in the book of Exodus, Moses confesses to the Lord, "I am slow of speech, and of a slow tongue" (4:10), yet God entrusts him with the task of leading his people out of Egypt, and with communicating his Law. The timeless God, in this story, does not chastise Moses' pace, but instead guides Moses through his speeches; and it seems that Moses was successful in that task.

In the Bible, the pace of action seems to hold secondary importance to a normative dichotomy of laziness and work. Of the seventeen times the word 'sloth' appears in the King James Version of the Bible, a word connoting one's erratic willingness to work, twelve of those references are made in the book of Proverbs, and all frame laziness as a vice. For example, the book of Proverbs chastises "slothfulness" among people of God stating, "He also that is slothful in his work is brother to him that is a great waster" (18:9). Attention to work is a value the Bible communicates to its readers repeatedly.

Similarly, the King James Version of the Bible references the act of being "idle" or "idleness" eleven times (Exodus 5:8, 5:17; Proverbs 19:15, 31:27; Ecclesiastes 10:18; Ezekiel 16:49; Mathew 12:36, 20:3, 20:6; Luke 24:11; 1 Timothy 5:15), and in every usage, the word connotes a negative meaning. For example, Proverbs 31:27 sums up the sentiment well by stating, "She looketh well to the ways of her household, and eateth not the bread of idleness." It seems that these passages in the Bible expect readers to be working and this text reinforces a discourse of vigilance in one's labor. Attention to

labor seems to be valued throughout the Bible, but an emphasis on fast pace is not always there.

Of the fourteen times the word 'slow' appears in the King James Version, the only time a negative connotation is used is in the book of Luke (24:25) when Jesus scolds people for not believing in him. The term used by Jesus in this verse is "slow of heart" referring to one's unwillingness to have faith in His divinity, Jesus never implies that one is 'slow of brain'. In fact, of those fourteen times when 'slow' appears in the King James Version of the Bible, eight of them are in a context describing God's patience with unruly folk as "slow to anger." Using God's example as a prescription for human behavior, the book of James summarizes this ethic as, "let every man be swift to hear, slow to speak, slow to wrath" (1:19). One must be ready and open to listening to Wisdom, but in this verse, and in many other parts of the Bible, Divinity calls for one to judge and act 'slow'. In the race to educate, we expect students to be swift to hear, but also swift to speak when demonstrating mastery of privileged knowledge.

'Slowness to anger' may be a privileged virtue in this discourse, however, the base word 'quick' in the King James Version reveals a double meaning that may contribute to the race to educate. For example, the book of Genesis frames quick action as deceptive. When Isaac asks his eldest son Esau to hunt a deer and bring it for his meal, Rebekah, Isaac's wife, and Jacob, his younger son, plot to steal the patriarch's blessing. To beat Esau in serving a meal, Rebekah spices up a kid from the pen (i.e., baby goat) and Jacob serves it to Isaac before the eldest son's return. Subsequently, the father blesses the younger son instead of blessing the one who he had previously chosen (Genesis 27). While quick action puts Jacob at the head of the family, there is an implied

air of immorality in his deeds. Likewise, in the book of Revelation, God repeatedly threatens to “come unto thee quickly” at the last judgment (2: 5; 2:16; 22:7, 22:12) just as he “quickly” defeats his foes in earlier books (e.g., Deuteronomy 9:3; 9:12, 9:16). As is written in the book of Hebrews (4:12), “For the word of God is quick, and powerful”. Thus, God is “slow to anger” with his chosen people, yet he is “quick” to cast judgment on his foes. To be quick in this sense is a Divine right – His sovereignty to vengeance.

In reading these verses, I think of the militarism that supports the race to educate (Chapter IV) and I wonder if the race is rooted in some way in Americans’ desire for global supremacy. If God is “quick and powerful” in his judgment of his foes, must we also be ‘quick’ to deal with our military and economic rivals? The literature supports this notion that a ‘slow’ people, though godly in some way, are weak.

In a different usage of the word, ‘quick’ is framed with divine connotation when ‘quicken’ is used in reference to ‘awakening’ or ‘raising’ the dead. In John 5:21, Jesus states, “For as the Father raiseth up the dead, and quickeneth them; even so the Son quickeneth who he will”. One can render the implied meaning of ‘quicken’ in the King James Version of the Bible when one compares verses in which this phrase appears to other English translations of the same texts. For example, in Acts 10:42 the King James Version reads, “it is he which was ordained of God to be the Judge of quick and dead,” while the more recent translations in the New International Version and the New Living Translation translate “quick and dead” to read “living and dead”. Similarly, Psalm 119:50 in the King James Version reads, “This is my comfort in my affliction: for thy word hath quickened me.” However, a translation of the same verse in the 1984 New International Version reads, “My comfort in my suffering is this: Your promise preserves



my life,” and the same verse in the New Living Translation reads, “Your promise revives me; it comforts me in all my troubles”. In comparing these differing English translations, we see that whatever meaning was conferred from the ancient text was communicated through language one might interpret quite differently today. However, this comparison suggests that some people in the seventeenth century may have used the word ‘quick’ to connote ‘life’. And despite the fact that the word ‘quicken’ does not appear at all in the 1984 New International Version or the New Living Translation, the word is still used in the English-American lexicon and may still imply some of this hidden meaning. Thus, in a verse such as Psalm 55:15, the King James Version reads, “Let death seize upon them, and let them go down quick into hell.” One can interpret this statement to mean that God sends souls to hell in a violent torture of burning alive, but as the discourse of linear time gains power in our lives, we now may interpret this verse to mean that God sends souls to hell with anxious haste. I do not know which is worse, but each seems to carry a meaning that has differing consequences for how one might act. Regardless, the ire of God’s judgment may prompt many believers to move faster when learning His wisdom; one may race to educate oneself before God lets them go down quick into hell. Amongst believers, there is nothing more powerful than the panoptic gaze of Justice.

Another word one might examine in this text is ‘haste’. This word, or its derivations, appears in the King James translation over a hundred times. In many cases, the word reflects a meaning related to physical movement. For example, Genesis 45:13 reads, “ye shall haste and bring down my father hither” and Acts 22:18 reads, “Make haste, and get thee quickly out of Jerusalem.” However, unlike a modern discourse that

ascribes positive value to 'fast-paced' learning and 'fast-paced' movements, the Bible interrupts the universality of this value. First, in all of the verses in which the derivations of 'haste' appear, the language relates to either human actions or human desires. Furthermore, while there is a sense that this text calls for one to be 'fast-paced' in listening to God, 'fast-paced' action in most other contexts connotes either 'evil' action or one's reaction to danger. For example, Exodus 34:8 reads, "And Moses made haste, and bowed his head toward the earth and worshipped"; similarly Psalm 119:60 states, "I made haste, and delayed not to keep thy commandments" (see also Zephaniah 1:14) – in these passages, God expects one to be quick in showing obedience. Again a value that education officials promote in the race to educate.

However, the Bible also shows 'haste' to bring poor judgments. For example, Psalm 31:22 states, "For I said in my haste, I am cut off from before thine eyes: nevertheless thou heardest the voice of my supplications when I cried unto thee." Likewise Proverbs 28:22 reads, "He that hasteth to be rich hath an evil eye, and considereth not that poverty shall come upon him," and Proverbs 19:2 states plainly, "he that hasteth with his feet sinneth." In short, fast judgments and fast movements be damned.

Additionally, the King James Version of the Bible often positions commands for 'fast-paced' actions with oppressive forces and resultantly negative ends for those who oppress. For example, in Exodus 5:13 the Pharaoh's "taskmasters hastened them, saying, Fulfill your works, your daily tasks, as when there was straw" – it does not seem that the God of Exodus takes kindly to this power. Similarly, in Judges 9:48-54 Abimelech cuts a bough from the trees, and then commands his followers to "make haste, and do as I have

done” (9:48). Following Abimelech’s example, the people cut the trees and then follow him to set fire to the tower of Shechem, killing all the women and men inside (9:49). Aiming to move to his next conquest, Abimelech comes to the tower of Thebez, but in his rush to burn down the door of this tower, he is hit by a piece of falling millstone thrown by a woman trapped in the tower (9:53). So embarrassed by his defeat at the hands of the woman, Abimelech “called hastily” to one of his soldiers, and has this man slay him so “that men say not of men, a woman slew him” (9:54). Abimelech is so much in a rush to conquer cities and promote the power of masculine discourse, that he does not recognize the strength of a woman with patience, nor the power in one’s knowledge of gravity. Thus, a hastened pace in planning does not seem to have any benefit here. In the race to educate, most teachers hasten their students through their lessons in hopes of reaching education goals set by the state. These passages in the Bible give us pause to consider the consequences of this policy on our society.

While it seems clear that the King James Version of the Bible frames ‘fast-paced’ thinking and action as a means to making “feet run to evil, and make haste to shed blood” (Proverbs 1:16; Isaiah 59:7), it also communicates the lack of urgency required in one who follows God. For example, Isaiah 52:12 states, “For ye shall not go out with haste, nor go by flight: for the LORD will go before you.” In fact, it seems only humans call for others to make haste, even when calling to God. For example, Psalms 70:1 reads, “make haste, O God, to deliver me; make haste to help me, O LORD;” similarly, Psalm 71:12 states, “O God, be not far from me: O my God, make haste for my help.” Yet, these calls seem ineffective in the presence of an Eternal temporality. These calls seem similarly ineffective when asking some students to work at a pace that is not their own.

Temporal themes from the Bible found their way into religious sermons, and many of these lessons diffused into popular discourse. In 1868, for example, a Honolulu, Hawaii newspaper published one author's reflections on reaching the age of fifty. The author writes, "Slow learners we are of all the lessons of life, even under such a Teacher; yet if he be our Master, we do learn" (*Friend*, 1868, Jan. 1, p. 4). Humans could never acquire knowledge at the same rate as an all-seeing Master, and even the Teacher's lessons were not adequate in helping all of His children learn. A 1905 sermon published in the *Dallas Morning News* echoes a similar sentiment. The paper quotes a preacher saying, "It is hard to understand the cause of the things that come as providence and we are slow to learn the lessons God would impress" (*Dallas Morning News*, 1905, Feb. 13, p. 3). In these statements, and others like them (e.g., *Baltimore Sun*, 1874, Oct. 8, p. 1), it seems naïve, or arrogant, for one to assume that her or his race to learn leaves any impression on God's grace. However, the Bible, just like all other texts, is open to interpretation, and one's teaching of the lessons therein is subjective. One's reading of the Bible leaves her or him with the message that a 'slow' thorough life is holy, while another may see a message urging her or him to race in learning God's message. If one lives in accordance with the premises of an aesthetic ethic, one must consider all the words before determining a course of action, but rarely do people do that. Instead, we pick out the meaning we wish to hear, and we silence the rest so that it does not interfere with our 'fast-paced' lives. Thus, one may premise the race to educate with justifications from the Bible, but to do so, one must turn the page to a message that suggest a different pace for our lives.

## **Early American Texts**

The Bible was a staple teaching tool for many early American colonists as it still is for many Americans today, but the decades prior to the American Revolution also saw the first printing of texts written intentionally for use in American schools. While these first American textbooks still draw their lessons directly from the Bible, one may see how they communicate the discourse of progress in a Revolutionary culture affected by the Enlightenment.

In the earliest American textbooks, the lessons for young readers consisted of memorizing the Ten Commandments, learning moral tales from the Old Testament, and reciting the catechism upon command. In addition to this religiously based curriculum, primers prior to the Revolution, perhaps for obvious reasons, focus on social etiquette and advocate submission to authority – both Divine and Sovereign. Not necessarily concerned with a certain pace to life, these texts urge children to be ‘good’. For example, a 1754 primer printed by Timothy Green in New London, Connecticut titled *The School of Good Manners* instructs children on behavioral expectations at home. The book also instructs children on proper behavior at the meetinghouse, at the table, in company, in discourse, at the school, when abroad, and when among other children (Moodey, 1754). This text contains twenty “mixt [sic] precepts” for children’s behavior; examples of these being, “Fear God & Believe in Christ...Honour [sic] the King....Submit to thy Superiors....Imitate not the wicked....Be very desirous of learning....Love the school....Love thy school fellows...Let not play entice thee....Refrain thy tongue...” (p. 1-2). Additionally, in the lists of specific rules for behavior in school, the primer stresses bowing at appropriate times, and remaining silent until a superior speaks to you. The

rules of behavior do warn students against “trifling away thy precious time in play” (p. 18), this line relates to a command for students to stay focused on their work; play equating to idleness. Yet, nowhere in this text is there any mention of today’s precepts of “Learn thy reading by age 6,” “Make adequate yearly progress,” or “thou shalt graduate by 18.” Instead, this discourse reinforces the virtues of diligence and subservience. As stated in a 1769 primer, printed by the same publisher, the lesson is simple: “The child that does what good he can shall gain the Love of God and Man” (Green, 1769, p. 18).

After the Revolution, the discourse promoted by earlier primers changes, but Biblical teachings still influence the lessons. For example, a 1798 primer reminds readers, “better is a little, with the fear of the Lord, than great treasure and trouble therewith” (Thomas, p. 21). In addition, texts remind young students that they must pause at least one day a week for remembering the Sabbath. Drilled through recitation, a 1786 text teaches students, “The Sabbath is to be sanctified by a holy resting all that day, even from such worldly employments and recreations as are lawful on other days” (Steward, p. 6, question 60). Yet, the ‘timeless’ virtue of obedience as taught in *The School of Good Manners* gives way to stories teaching against idleness and lessons urging children to ‘improve time’. In short, the authors shift focus from promoting respect for sovereign authority to promoting Biblical teachings that emphasize the proverbial lessons against slothfulness and idleness. For example, in a 1798 primer printed in Worcester, Massachusetts, “Mr. I” is an “idle fellow” who is scolded by the author. He states, “An idle Man is an Enemy to the Nation, for he lives upon [sic] other people’s Labour [sic], and does nothing for his own Support” (Isaiah Thomas, p. 9). The text follows with a story of King Solomon, who warns against idleness. Similarly, an

1814 primer called *The Infant's Cabinet* reinforces the farmer's role in perpetual employment. The book describes the year's work of a farmer and frames him as one who is always preparing and laboring, never resting. These texts employ the gaze of the Divine to prescribe expected behaviors for republican bodies.

This discursive connection between Biblical power and a certain work ethic is, perhaps, first identified at the turn of the twentieth century by Max Weber (1864-1920). In writing about the *Protestant Ethic and the Spirit of Capitalism*, Weber (English translation published in 1930) connects the discourses of Divine providence promoted by Reformation sects (particularly Calvinism) with the emerging temporal orientation to labor and the rejection of piety as a virtue in one's path to Eternity. Weber speaks at length about the American Ben Franklin's potential role in shifting the discourse in America from one of sovereign obedience to one of perpetual labor. In his *Poor Richard's Almanac*, the most popular book next to the Bible in early America, Franklin reinforces the discursive connections between time, money, and labor. He states, "He that idly loses five shillings' worth of time, loses five shillings, and might as prudently throw five shillings into the river" (1900, p. 39). In a similar verse, Franklin writes,

Remember that time is money. He that can earn ten shillings a day by his labour and goes abroad or sits idle one-half of that day, though he spends but sixpence during his diversion or idleness, ought not to reckon that the only expense; he has really spent, or rather thrown away, five shillings (ibid, p. 41).

However, Franklin also reminds his readers that, "Little strokes, fell great oaks" (ibid, p. 14). Additionally, he writes, "Fools make feasts and wise men eat them" (p. 20); attention to industry is a value Franklin promotes, but great works take time, and for him, this is the only value one should hold – the famous American, after all, was well known for his lavish entertaining with admirers both here and abroad.

Similarly, the lessons in many of the early American texts that value employment over idleness do not assume an analogous relationship between ‘fast’ and ‘slow’. For instance, there is, at times, a discursive emphasis that one should be careful, pay close attention, and go slow if needed. A 1769 primer printed by Timothy Green in New London, Connecticut just prior to the outbreak of Revolutionary states, “the more pains and care they take, the more they will advance in learning and wisdom” (p. 70). In this text, the principle of non-idleness has more to do with “care and diligence” than with movement (ibid). Moreover, even fifty years later, in an 1818 primer printed by E. & E. Hosford in Albany, NY, the authors discursively link the value of continuous labor with the virtue of wisdom by writing, “How wisely and frugal the little Ant plies! Come higher, ye sluggards, and learn to be wise” (p. 5), but there is still no normative statements on the preferred speed of work. School texts printed during the eighteenth century teach children to work hard, but the race to educate does not saturate their education.

However, statements in many early American textbooks urging students to ‘improve time’ may show some trace of a discursive drive to increase the pace of one’s education. For example, a 1754 text states, “Be diligent to improve Time, and suffer not precious Hours of wast [sic]” (Moodey, p. 35). Similarly, a 1798 text reminds students of the reason for their constant labor: “Now is the accepted time, now is the day of salvation” (Thomas, *Picture exhibition...*, p. 23). Here the reader learns that attentive labor is necessary for avoiding poverty on the farm, but it is also required to avoid damnation.



In a society where many children did not see the age of 10, the ever-present gaze of Death reinforced this lesson. This disciplinary power is perhaps best felt when one reads the warning in the E. & E. Hosford text from 1818: “Mortals behold the Hour-Glass, and leave your worldly care: It shows how swift our minutes pass And bids us all for death prepare” (p. 12). There is no mistaking the discursive power of time or the gaze of Holy power in this statement, and for a text written at the very start of industrialization in the United States this reading reminds us that for some bodies, urgency in their behaviors made differences in both life *and* death.

Reflecting a discourse of republican virtue promoted by Benjamin Franklin, the texts published in the decades following the Revolution urge young people to believe in the value of perpetual labor. However, one can still see lessons oriented toward Biblical teachings and the value of methodical deeds. Thus, much like the Bible, these texts do not advocate an all-out race to education; it is not until school texts publishers find more secular groundings that they fully promote an ideal of ‘fast-paced’ learning and racing bodies. We begin to see these values in the nineteenth century McGuffey Readers.

### **McGuffey Readers**

With children learning the value of perpetual labor in their education, the Bible and other early American primers served as a disciplinary mechanism in promoting the discourse of speed in education; yet, with messages valuing one who is ‘slow to anger’, these texts did not instill the race to educate that we see today. However, as new secular texts entered American schools, the discourse of linear progress came straight to students’ desks and the race to educate gained converts who did not know any other

narrative. One can see an example of this transition when one examines the discursive lens in which the McGuffey readers frame their lessons at the mid-point of the nineteenth century versus the first year of the twentieth century. In the 1853 edition of McGuffey's *Newly Revised Eclectic Fourth Reader*, for example, the author unabashedly proclaims, "From no source has the author drawn more copiously than from the Sacred Scriptures. For this certainly he apprehends no censure" (p. 3). However, by 1901, the *Reader* at the same level makes no mention of scripture, and draws most of its stories from contemporary sources and stories based in American folklore (McGuffey, W.H. , 1901, *The New McGuffey fourth reader*). The 1901 McGuffey *First Reader* even boasts, "all the stories in this book are new, or have been rewritten especially for its pages" (p. 3). In the twentieth century textbook, the discourse of speed promoted in the Bible is either hidden or completely gone.

This change in the discourse is also exemplified by the 1901 *McGuffey First Reader*, which steps away from purely moral tales and begins to teach lessons that emphasize action. For example, in this text, "Frank" plays with a kite his father gave him; we learn, "He will run and the kite will fly. He can run very fast, and the kite can fly very high" (p. 36). The text reinforces a linear correlation between speed and achievement, and McGuffey ignores the fact that an experienced kite flyer does not require his own movement to fly a kite in the proper weather conditions. Similarly, we see three girls playing with dolls. The dolls "are as good as some children are. They have their books, and I think they will learn very fast" (ibid, p. 46). On this page, the author links speed of learning directly to the moral status of 'good'.

If a child at the turn of the century was not 'fast', the McGuffey Readers taught one that the least she or he could do is keep up. In the 1901 *McGuffey First Reader*, the author asks, "Can she catch the good little girl...Catch me, and you may have the doll. You may have it to play with" (p. 15). In this statement, a girl, who catches-up, belongs with the 'good', while she who falls behind loses her toy and any status attached with its ownership.

The *Reader* also introduces students to time-related consequences for not keeping up with their peers. For instance, one doll character in the book is punished with the sentence, "As soon as she can read well, she may go home and play" even though she "goes to school day after day, but she does not learn" (p. 47). The page seems to communicate the discursive rule that everyone must stay at the same pace or face punishment, regardless of differences.

The lessons in the 1901 edition of *The New McGuffey First Reader* teach children the value of 'fast-paced' learning, but it is not until the end of the book that one finds the lesson that cements it all together. On a page with a picture of a clock, one finds the author asking, "Can you tell what time it is?" (p. 110). The author follows with the questions, "How many hours are there in a day? How many minutes in an hour?" (ibid). The final sentence on the page reads, "Our clock at school tells us many things. It tells us when to work and when to play." To cement the narrative into young minds, McGuffey even prints the "Song of the Clock" on the next page. The tune contains the lines, "Tells me when the right hours are. For eating, for sleeping, for play and all, For rising and bathing, it sounds the call" (pg. 111). In their first year of schooling, the authors of this text teach children not that humans decide when to work and when to play, but rather that

it is the clock that tells us when to work and when to play! If one needs better evidence to see how the clock acts as a panoptic device in our lives, and how school textbooks play a role in socializing children into that discourse, I would not know where to look.

One must recognize, however, that the narrative that promotes perpetual movement does not apply to all subjects in the same way in the 1901 McGuffey reader. In fact, there is a clear value placed on staying close to home for at least one half of the students. For example, when describing a wagon ride taken by “Frank” and “Mary,” the text states, “He will give her the whip, and the horse will go fast. The horse will go fast and far, but he will not run away” (p. 33). Similarly, a kitten playing with “May” jumps and plays with a ball, but “It does not run far with it” (p. 32). When a “good girl” asks to fetch a “big red apple” in a tree, she is given permission, but only if “it is not too high” (p. 23). Two of these examples involve females and animals; boys run faster and faster, but the author presents girls as docile and domestic. These texts promote a hierarchy in which males run fast with few controls on their behaviors, animals are allowed to go fast but only with the whip at their back and the harness in place to pull them to a stop, and females are charged with the moral responsibility of regulating the behaviors of others and themselves. In the race to educate, the feminized profession of teachers is charged with the moral responsibility of regulating the behavior of children so that they maintain the correct pace.

Another example of this discourse comes when a young woman asks a young man to pick a green apple. Refusing to pick the green apple, the young man scolds her by saying, “They will grow and grow; and after a time they will be ripe, and yellow, and good to eat. Then we will come and sit here in the shade, and you may have as many

apples as you can eat” (p. 73-74). While superficially promoting a concept that quality takes time, it is not hard to miss the sexist adaptation of that other story involving a woman, man, and temptation to pick fruit from a tree. This time, with the male in control of his desires, McGuffey stresses that some things are worth the wait. The one time a female executes her own pace in decision-making, she is ‘brought down’ by a male. In the race to educate, feminized teachers are tightly controlled by the male dominated principal profession, and governmental patriarchs further regulate the pace of instruction with policies that establish standards for lesson planning.

The 1901 editions of the McGuffey readers are a fine example showing how, in the early twentieth century, a male-dominated discourse of universal time and linear progress had gained power in American schools, and it shows how a discursive race in education had begun entering the minds of American society. Yet, one should know that in 1901, texts still contained statements that interrupted the dominant discourse promoted within the books. For example, in the 1901 editions of McGuffey’s readers, there are still reminders of the values that were emphasized a century before. In the back of the 1901 *First Reader* a poem is printed, “To be memorized” (p. 112). The poem reads,

Children who may read my lay,  
This much I have to say;  
Each day and every day,  
Do what is right.  
Right things in great or small;  
Then, though the sky should fall,  
Sun, moon, and star and all,  
You shall have light.

The turn of the twentieth century stimulated many questions in the minds of the American people as they faced a changing world and the uncertainty of life in a modern

society. With these many conflicting messages simultaneously struggling to gain power as the dominant discourse of time and space in American life, educators, students, and parents were left to figure out what time was “right.”

### **Competing Philosophies of Time**

The discourse of universal time and linear progress built by Galileo, Descartes, and Newton provided the answer to what time was ‘right’ for many Americans living in the twentieth century as it still does for Americans living today. This narrative of time became dominant in discourses that shape American education and many other domains of life in the United States. With the clock, calendars, classroom lessons, and industrial culture all influencing our understanding of time, this notion of linear progress and universal time shapes our understanding of ourselves. However, one must be aware of the many voices that interrupt this narrative. Americans race in their education with certain conceptions of time and progress, but we forget that ancient philosophers such as Plato, Aristotle, and Augustine had much different conceptions about space and time than we have today. Furthermore, modern philosophers such as Martin Heidegger and Jacques Derrida have articulated differing conceptions of time. Additionally, we must explore the models of time that have built upon Newton’s theories within the discourse of natural physics, and we must not forget the millions of people who, still today, look to nature as the measure of time and ‘progress’. Thus, we must listen to these voices before we accept the model of universal time and linear progress that is currently employed in America’s race in education, and we must keep in mind the three questions that will help us determine the validity of this narrative: 1) Is history a linear progression of

knowledge? 2) Is time a universal truth knowable to all beings? 3) Can we predict future outcomes based on conditions measured at some arbitrary starting point? Many of the voices that we hear in the pages below answer “no” to at least one of these questions, if not all of them. These voices provide us with alternative models for time and alternative models for understanding human learning. These voices urge us to question the race in education.

### **Philosophies of Time in Metaphysics**

As Newton is famous for saying, his ‘discoveries’ rested on the shoulders of giants (Newton, 1676, Feb. 5). However, notions of truth have changed over centuries of human existence, and some of the earliest writings in the Western world on the topic of truth and time prompt us to question the validity of Newton’s assumptions (Foucault, 1970, *The Order of Things*). Newton may have stood on the shoulders of giants, but we now search for the individuals who struggle at their feet.

The Copernican revolution undermined a tradition of scholarship that one may trace back to Ancient Greece. In the Socratic tradition, Greek philosophers question the origin of truth in the world in which they lived, and for Plato, the search for truth is embroiled with a quest for the “original” – that which “is and has no becoming” (*Timeaeus*, 27). In *Timeaeus*, Plato looks to a world that is visible, temporal, and tangible – one that is fully present and intelligible (30c-31b) and he positions the truth in that world centered in a timeless constant, “before the beginning of years when time was not” (Plato, 1929, 31c, 1-2, *Timeaeus*). He analogizes the work of poets as “only the copy or likeness and not the eternal things themselves, they need only be likely and analogous to

the real words. As being is to becoming, so is truth to belief' (ibid, 29). In other words, Plato searches for another layer of truth that the poets were only mocking.

In *The Republic*, Plato attacks the truth created by poets and insists that society find "artists and craftsmen capable of perceiving the real nature of what is beautiful" (401c). Plato's truth, so to speak, predates the word of poets and historians – it is now their job to recognize it, not create it or even necessarily describe it (Arendt, 1958, p. 575). In Plato's world, the 'original' is timeless, and humans perceive movement in their striving toward perfection, but cannot achieve the result.

The best example of Plato's timeless truth is illustrated in the geometry of Euclid theorized circa fifty years after Plato's death. The Greek mathematician, founded the study of geometry on two-dimensional surfaces, and in Euclidean geometry there is no difference between time and space (Hawking 1996, p. 139). An equilateral triangle is permanent and can be compared to other triangles at any time to value its congruence to other objects – one can 'prove' that two triangles are identical. Truth was now in thought rather than the recorded deeds of men.

Euclid's geometry is the *episteme* in which Galileo, Descartes, and Newton formulate their understanding of the universe. For example, Newton communicates his theory of calculus through Euclidean geometry because a discourse for describing motion had not been introduced. In addition, Euclid's geometry supports the notion that time is universal and linear because we can model experience as a one-dimensional line knowable to all observers. However, for Euclid and Plato, time is static. One may model a time line, but there is no calculation of movement or progress. There is no race to educate, because timeless truth does not move or change; scholarship is an aesthetic



pursuit that allows philosophers like Socrates to sit all day and question the assumptions that others bring to him.

The Greek philosopher Aristotle follows Plato by putting little faith in observation. He, believing one could explain the world by reasoning, places the center of truth in pure thought alone (Hawking, 1996, p. 15). As a result, Aristotle and his followers do not pay close attention to actual phenomena in the universe, but rather assume logic can derive the laws of nature – a method of inquiry that was not displaced until Galileo challenged these assumptions (Hawking & Mlodinow, 2010, p. 33).

In Aristotle's *Physica*, one sees how the assumption of logical truth, shapes the philosophers notion of time. Aristotle equates time with motion, however, he rejects the notion that time is motion in general (Rau, 1953, p. 516). Aristotle speaks of the role of magnitude in the movement of time and states, "Because the magnitude is continuous, the movement too must be continuous, and if the movement, then the time; for the time that has passed is always *thought* to be in proportion to the movement" (*Physica*, IV, 11, 219, my italics). However, he continues, "we apprehend time only when we have marked motion, marking it by 'before' and 'after'; and it is only when we have perceived 'before' and 'after' in motion that we say that time has elapsed" (*Physica*, IV, 11, 219). For Aristotle, the passage of time is a matter of perception.

Aristotle even extends his argument to question the existence of time outside of human existence. He states, "If there cannot be someone to count there cannot be anything that can be counted" (*Physica*, IV, 14, 223). Resounding of the arguments made by quantum theorists in the twentieth-century, Aristotle here posits that time and reality are connected to observation; the measurement of movement, though it may go

unobserved, has no meaning unless there is documentation of the parameters and of the units of reference (Taylor, 1973, p. 314-315). In the measurement of time, Aristotle states, “it measures the motion by determining a motion which will measure exactly the whole motion” (IV, 12, 221). Without the specification of some arbitrary units, there is no possible meaning in time. Just as one must define ‘sheep’ before one is able to count them, one must define ‘second’, ‘minute’, ‘year’ before making any sort of measurement. In effect, because arbitrary units must be assigned, and one can only relate a “numbered number” of time and movement, these concepts are related only by virtue of their apparent relationship in nature and are merely analogies of outside values (Derrida, 1976; see Pressler, 1984, p. 333). The measurement of time, therefore, is discursive and subject to power. ‘Adequate yearly progress’ only has meaning because of the power that supports this knowledge.

While Aristotle’s apprehension about the nature of measurement has fallen to the wayside in modern educational discourse, the philosopher’s concept of time as a universal line of progression has gained favor. Aristotle sees time as both a continual progression of ‘now’ points and a line divided by ‘nows’ (*Physica*, IV, 2, 220). The points on the timeline are boundaries of potential intervals that set the reference points for past and future (Tegtmeier, 2009, p. 187). Just like modern education policy makers, Aristotle assumes that this line of time is universal to all things in every instance, “for the distinction of faster and slower exists in reference to all change, since it is found in every instance” (*Physica*, IV, 14, 223). However, just as Einstein will argue in his theory of time, Aristotle qualifies the comparison of moving bodies by saying the two subjects must move “over the same interval and with a regular movement” if they are to agree on

their measurements (ibid). In education, the intervals of learning are specific to individuals' prior knowledge upon entering school and no two students act the same, nor are they acted upon the same, once they enter school. Thus, with a notion of time understood by Aristotle, one must question how one is to judge the congruency of time intervals and the regularity of movement that is required in the race to educate. If no two students neither travel the same distance in their learning, nor follow the same movements in their learning process, than we cannot assign them the same time for completing their education.

Authors, such as Plotinus (2009, *Ennead, vol. 5, ch. 9*) support and build upon Aristotle's conception of time; however, some philosophers, such as Augustine, argue that this conception of time is insufficient for understanding the role of time in human existence (Taylor, 1973, p. 311). Augustine saw Aristotle's time as reliant on a certain conception of space and the movement of objects within it, but he sees time as a more subjective experience (Taylor, 1973, p. 312).

Augustine's turn toward subjectivity in measuring time comes even closer to Einstein's conception of time in relativity theory (Rau, 1953, p. 525). Augustine asks, "What then is time?" Moreover, he challenges us to capture its meaning in a way that can be communicated to another when he states, "If no one asks me, I know: if I wish to explain it to one that asketh, I know not" (Augustine, 2008, p. 166; see also Taylor, 1973, p. 311). Instead of orienting his perception towards the celestial heavens like Aristotle, Augustine looks toward the heaven of Christian theology for his answer to his question, but like Plato, Augustine looks towards his conception of original truth (Rau, 1953, p. 521 citing Augustine's *City of God*). Augustine states, "I heard once from a learned man,

that the motions of the sun, moon, and stars, constituted time, and I assented not. For why should not the motions of all bodies rather be times?" (Augustine, 2008, p. 171)<sup>20</sup>. In Augustine's heaven, instead of moving objects, he sees an eternity of Divinity in which "there are not three times...past, present, and future; but present only," and for Augustine, time is only a measure by which human destiny is determined for all eternity (Augustine, 2008, p. 168; see also Alwiess, 2002, p. 119). For the Eternal, there is no time, no change, or progress; all is present and there is no possibility in an all-knowing human. In this view, Augustine returns to a view of a static time, with human perception of a flowing and moving force only a deceptive illusion to an eternal reality. He states,

Nor is it properly said, 'there be three times, past present, and to come': yet perchance it might be properly said, 'there be three times; a present of things past, a present of things present, and a present of things future.' For these three do exist in some sort, in the soul, but elsewhere do I not see them (Augustine, 2005, p. 170)<sup>21</sup>

Reversing the conclusion of Plotinus, Augustine insists motion can only be measured with subjective notions of time; the only means for observing movement is by entering with preconceived assumptions of change. It is only because of this expectation of change that we connect two moments to make them linear and continuous; much as the mind creates movement when isolated frames are attached with film, the measure of time is merely an illusion. Augustine therefore concludes, "Time is nothing else than protraction; but of what, I know not; and I marvel, If it be not of the mind itself?" (Augustine, 2008, p. 173) In short, Augustine insists that he must not allow his mind to

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<sup>20</sup> It is interesting to note here that most authors prior to the nineteenth century did not cite their sources. Augustine is speaking of Aristotle here, but he does not identify the subject.

<sup>21</sup> Augustine resonates with a conception of time promoted by some Buddhist scholars (e.g. Thich Nhat Hanh, 2005) who argue that 'true' time is always in the present.

see time as something objective.<sup>22</sup> In the anxiety that drives the race in education, we do not question the meaning of time, or the effect that time has on our ontology.

During the twentieth century, philosophers continued to contemplate the truth of universal time and their work problematizes the discourse promoted by Isaac Newton. Some authors have even argued that one can study the metaphysics of time “largely in abstractions from the technicalities of physics” (Lango, 2000, p. 373). Martin Heidegger, for example, argues that the definition of humanity is our situation in a temporal world. Put a different way, the only discourse of existence at our disposal is a temporal one, and thus it is only from this perspective that we can understand time (Alwiess, 2002, p. 120). Furthermore, Heidegger argues that it is only through the philosophical clarity of what a clock is, that we are able to understand the importance of time (1992, p. 2, *Concept of Time*). In other words, it is only through the quantification of time that we come to understand ourselves in a sense of past, present, and future (Heidegger, 1996, *Being and Time*). Only when one accepts this discourse of time does one begin to orient one’s identity to the clock. Without the clock, and other measures of time, the education race has no meaning.

Heidegger’s discourse of time rejects a universal flow, and requires subjects to live under a common biopower in order to agree on its measure. He states, “the measurement of time brings about a making public of time, so that only in this way does

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<sup>22</sup> While Augustine sees the illusion of time much like Plato, the former’s use of Christian doxology, which extends the existence of the soul into an eternal afterlife, may have added to the anxious discourse of racing through life. The Christian saint challenges Plotinus’s conception of time as physical and universal, yet he places such a premium in proving one’s place in heaven, that his work may have done more to promote the ‘race’ in the minds of those who followed than it did to place doubts in those same minds about the characteristics of time. For, as others have argued (e.g. Weber, 1992, *Protestant Ethic*), this anxiety in reaching heaven may be an underlying motive for a work-ethic discourse in which time is of the essence. This work ethic may very well influence the discourse of time that shapes the American school environment.

what we usually call 'time' become familiar" (1996, p. 419, *Being and Time*). The requirement of an observable and public 'time' is a key point of understanding here. Only through discursive mechanisms can one truth about time become dominant in a society. Members of a society must come to agreement on which time is 'correct' and in most cases that means the most powerful members in a relationship have more influence on the final determination.

Jacque Derrida is another philosopher who has argued for a meta-physical understanding of time. In fact, he goes so far as to suggest that no account of time escapes the discourse of metaphysics (Spivak, 1976, p. xlix). For Derrida, meaning is only possible with one's perception of difference between two signs. Even a feeling of a present moment is only achieved through the deferral of meaning between two observations (Nigam, 2004, p. 76 citing Derrida, 1982, *Margins of Philosophy*). In these terms, the sign, which is understood in other discourses as an analogy for something 'real', can only be traced to an object – a 'past' – that is non-existent; for Derrida, any 'real' meaning is elusive (Wood, 1982, p. 146); any desire to uncover hidden truths, seems misguided. Thus, the search for 'initial-conditions' is a directionless task, and any conclusions obtained by such findings are based solely on one's subjective interpretation of meaning. In the race to educate all measures are subjective: the number of days between tests, and number of minutes given to complete individual tests; the amount of knowledge one must master between testing intervals, etc.

Building on discourses of time that question the objective flow of progress, many scholars in the field of psychology have also argued for a subjective conception. As early as 1904, psychologists such as W.P. Montague argued for a subjective understanding of

time. Orienting his argument toward the Law of Relativity, Montague argues that, “a change is great or small according to its relation to some other change which we take as a basis of comparison” (p. 2). For one’s perception of time, Montague states, “the further past an event seems, the more slowly does it appear to increase in pastness, while conversely, the events of the present are those which seem to fly by more rapidly” (p. 5).

Similarly, William James (1950/1890) posits a theory of time as sensation. While his writings on ‘time perception’ were later colonized by authors in the behaviorist discourse, James’ focus is on understanding a ‘present’ that by definition could have no earlier or later parts (Zimbardo & Boyd, 1999, p. 1271). Similar to a Buddhist conception of time, the ‘specious present’ does not allow for a linear arrow of time (Poidevin, 2004, p. 111). If everything happens ‘now’ then there is no room for non-simultaneous events, orientation to past, present, and future, are human creations for understanding what is no longer present.

Martin Heidegger’s analysis of time in relationship to boredom may also help us understand the context specific characteristics of temporal events. In the first of Heidegger’s three-state conceptualization of boredom, “becoming bored by...,” the individual seeks to shorten time, to speed up the clock so to speak. The person fights with time, which in the moment moves too slowly (Stafford & Gregory, 2006, pg. 156 citing Heidegger, 1983). In the second state, “being bored with...,” time is still an adversary but the individual increasingly has difficulty changing her or his condition because she places the source of boredom with herself or himself rather than the outside stimulus. In the third state of boredom, profound boredom, nothing appeals to the

individual and one has no impulse to make oneself interested or involved. In a sense, one becomes passive to the flow of time. Stafford and Gregory (2006) state,

We actively struggle to drive time on in the first form of boredom, less effort is expended in the second form, and the third form exhibits no effort at all, as subjects succumb to the overpowering nature of profound boredom (pg. 166).

The various forms of boredom align with differing feelings of efficacy in moving time. In this point of view, time may just be a matter of perception.

Mihaly Csikszentmihaly (1991) adds power to this narrative of time with his conception of flow theory. Csikszentmihaly conceptualizes the state of flow as a condition when one feels deep concentration, understanding, and enjoyments in experience (Lofty, 1995, p. 25). However, Sackett *et al.* (2009) suggest that the temporal schemas people hold also influence their perception of time. Subjects in the Sackett *et al.* study assigned pleasurable characteristics to events when they perceived time flowing quickly (i.e. on a sped-up clock), and conversely assigned negative characteristics to events when time was artificially slowed down (without their knowledge) (Sucala et al. 2010, p. 233). The researchers found that on *average*, one's orientation to time is influenced by the number of new distractions in one's life, and the perception of the temporality of these events. In short, time is felt to *fly* when an individual is having fun, conversely one feels *fun* when one perceives fast time.

This positioning of time as an effect of one's perception again challenges the notion of time as a universal truth. While classroom teachers who read the study cited above may look for ways of speeding up their clocks in hopes of making their classes 'fun', this notion of subjective time as an effect of sense perception should have an effect on the discourse dominant in schools. One must now question how much 'time' a student



really has for completing a test or reading a book. Just because the stop-watch reads 45 minutes, does not mean that the child perceived 45 minutes or experienced 45 minutes. Just as pleasure readers may feel time 'escape' when immersed in a good book, a student lost in 'deep' thought may not realize the discursive pressure to move on to the next assignment. Similarly, a six-hour school day, seemingly not long for most, may feel like an eternal hell for some students as they count the seconds until the final bell signals their freedom. This area of research especially deserves more attention in the context of children taking stimulant medications; it is my hypothesis that these medications can radically change students' senses of time and thus alter their abilities to navigate various time codes. Leaving that research project for another day, this conception of time in a psychological discourse allows us to turn back to discourses in the natural sciences, and allows us to examine some of the most powerful discursive arguments against universal time and linear progress.

### **Natural Time**

Galileo's and Descartes' conceptions of knowledge and time were not only in stark contrast to those philosophers privileged with positions as scholar-authorities, but they also contradict much of what the majority of people in the world know about time through their interactions with the natural world. As other historians of time have skillfully demonstrated, the many discourses of cyclical time found in nature have been eclipsed (no pun intended) by this Cartesian discourse of time divorced from personal experiences (e.g., Zerubavel, 1985; Barnett, 1998; Fraser, 1987).

Before the emergence and eventual dominance of the linear progression of time, lunar and solar cycles held supremacy in the minds of farmers and merchants alike. In the centuries before the invention of mechanical clocks, cultures used astronomical events and the locations of the rising and setting of the sun and moon to make time (Kramer & Ikeda, 2001, p. 85-86). The alignments of celestial events represented a connection between the heavens and human affairs, and this knowledge often meant the difference between death and survival (Gebser, 1949/1985). What we now view as natural and regular movements in the heavens carried a sense of mystery and randomness, and natural cycles directed human activity.

Some cultures still hold this sense of time today. In an Orthodox Christian monastery in Greece for example, the Byzantine discourse of time retains power and the start of time begins at dawn each day (Radliffe & Karzis, 2011). Similarly, a culture like the Amish community in the United States disavows the privileged notion of progress and stays loyal to certain timeless customs (Hostetler, J.A., 1993) – even many people in the dominant American culture stay loyal to certain time codes, just look at how many families practice the seasonal custom of Thanksgiving or the celestial oriented celebration of Easter. In discourses like these, a society does not acknowledge time because of the turning of any calendar, but rather because of direct experience with natural cycles such as the changing seasons, ocean tides, migration of wildlife, or the pragmatic need to digest and make room for apple pie.

Additionally, analyses of natural time often neglect the full impact of the body, especially the female body, on shaping certain discourses of time. Mumford (1934/1963, p. 15), for instance, takes note of natural rhythms in the body such as the beat of the pulse

and the breathing of the lungs, but he does not address the importance of the menstrual cycle as a natural timepiece. Before sundials and mechanical clocks, before lunar and solar calendars, many female bodies were, and still are, able to keep very regular measurements of time. As several authors have argued, this acceptance of a separation between knowledge and the body has had a significant impact on the power of feminist knowledge in education (e.g., Grumet, 1988; Salvio, 2007; Diller et al. 1996).

It is because of people's familiarity with a circular conception of time that the discourse promoted by Isaac Newton has gained such power. Newton employs an image of time and space that is constantly in motion, however, instead of keeping time in its understood cycle of repetition, he supports the notion of a straight line of progress. Additionally, one should note that the first clock faces were circles even though the discursive time they measured was linear. In effect, society hides the notion of linear progress behind the familiar circle on the clock.

Newton's theories helped to silence a discourse of time measured by the human body and the observation of natural cycles. His theories promote the assumption of a universal and constantly flowing progress of time. However, Isaac Newton's theories of predictable and measurable progress are threatened by truths 'uncovered' with this scientific method. If one measures the length of the Earth year as a tropical year – that is the time between two vernal equinoxes - the length of 1985 was 365.242191 days (Fraser, 1987, p. 70). If one measures the sidereal year – that is the time between Earth's return to similar references to other stars in the galaxy - the length of 1985 was 365.256363 days (ibid, p. 71) - that is a year 20 minutes longer than the tropical year. Additionally, if one were to measure the anomalistic year - length of the Earth year measured by the time

it takes to return to its perihelion, or closest location to the sun in its orbit - the length of 1985 was 365.259641 days. To complicate things even further, the measured lengths of different concepts of a year change with every revolution of Earth. Just as the moon's gravity affects the rotational speed of Earth, the sun's gravity does not allow the earth to maintain a stable orbit. While the length of the perihelion year 2000 was 367 days, the year 2001 was 363 days – each year and each day is slightly different (U.S. Navy, ND).

Neither the velocity of the earth, nor the environment in which it moves remains constant; while astronomers can input 'initial conditions' into a computer and calculate a century's worth of dates for the perihelion new year, a single meteor hit or even an earthquake can change the environment enough so that the calculations are significantly flawed. For example, the March 11, 2011 earthquake that struck northeast Japan quickened the earth's rotation by 1.8 microseconds – that adds up (CBS News, March, 13 2011). Yet because Newton's laws, and the other 'laws' that dominate the discourse that races children in their education are 'close-enough', few question their accuracy. 'Adequate Year Progress' has the same meaning regardless of if the time between standardized testing sessions is 365 days or 350 days. Thus, this analysis begs the question, who sets the clock? Who has the power in this discourse, and what happens to the people marginalized by such arbitrary measurements of time and progress?

### **Relativity Theory**

In 1965, ten years after Albert Einstein's death, the *Boston Globe* and *LA Times* ran a story proclaiming the scientist as a "famous dropout." (Toth, Jan. 17, p. 29).

Quoting Professor Martin J. Klein of the Case Institute of Technology, who had just published an article in *Physics Today*, the article recounts that, “[Einstein] had been a slow child; he learned to speak at a much later age than the average, and he had shown no special ability in elementary school.” In fact, Isaacson (2008) tells us that Einstein’s parents had consulted a doctor in their anxious race to hear him speak. In the *Globe* article, the author recounts how one of Einstein’s teachers had said he would “never amount to anything,” and subsequently urged him to drop out of school because “his very presence in the classroom destroyed the respect of the students” (Toth, 1965, p. 29). To this suggestion Einstein gratefully obliged, and though he returned to school and eventually attended university, this boy with his quirky sense of humor, and his often outspoken contempt for authority, went on to revolutionize the view of the universe held in the discourse of natural science (Isaacson, 2008). This individual identified as a ‘slow learner’, shunned as a problem child, did not share the same pace of learning as his peers, but without his articulation of the space and time he understood, much of our views of the universe would be radically different. Yet, much like the young Einstein growing up in Germany, Einstein, the adult, has been barred from schools and his theories of time have little impact on education policy or our own subjectivities. Thus, we must look at this discourse of time silenced within our schools and re-evaluate its role. Einstein’s work brings together the natural philosophy and the metaphysics discussed above. Furthermore, the theories of General and Special Relativity stand as a valid rebuttal against the power of universal time and linear progress now dominant in schools.

Since, this study deals with education, I’ll do my best to translate Einstein’s thought experiments into contexts of which most educators are familiar, in this case, let

us start with the friendly school bus. The first step in understanding relativity is accepting the concept of reference frames. Let the reader imagine she or he sits on a bus with a teacher clutching her favorite cup of caffeine as you head to a chosen field trip destination. Looking over her shoulder, our favorite teacher notices a paper airplane flying down the aisle only to land in her cup of Joe. When viewed from inside the bus, one might report the speed of that paper plane is 5 miles per hour. However, an observer viewing the bus from the side of the street would probably report this plane traveling at 5 miles per hour plus the speed of the bus, let's say 40 miles per hour total. So which is it? What is the true speed of the paper plane? Hawking and Mlodinow (2010) help us compound the problem with their reminder that not only are the observers inside and outside the bus going to report different speeds, but an observer standing on the moon, sun, or any other celestial body would record a different speed based on their own frame of reference (p. 93). For instance, the observer sunbathing on our nearest star would report the paper plane as traveling at about 18 miles per second (give or take a mile per hour). This begs one to ask, what is the 'true' speed of learning for our students? Which reference frame deserves privilege when measuring students' knowledge?

Einstein's leap in thinking was possible only because he considered the 'relativistic' properties of space and time as demonstrated in the previous paragraph, and he posited a quality of light that Galileo, Descartes, and Newton did not understand (Boi, 2004, p. 475). Ironically, astronomer Ole Christensen Roemer first posited the premise that light travels at a finite, and discernible speed in 1676 - eleven years *before* Newton published *Principia Mathematica* (Hawking & Mlodinow, 2010). But it took Einstein's hypothesis that light traveled at a constant speed regardless of reference frame for his

insights to have revolutionary implications. In Newton's theory, two observers who see a pulse of light travel from one point to another will both agree on the time it took, but they will not necessarily agree on how far the light traveled within that time. If the paper plane was a pulse of light, our teacher and the outside observer would both agree that the light traveled for a given period of time. But since the two observers would not agree on the distance the light traveled, and because speed is determined by distance divided by time (e.g. mph), the two observers would not agree on the speed of light as is what happened with our paper plane (Hawking, 1996, p. 21). In the theory of special relativity, however, the one universal truth is the speed of light (at least in a vacuum)<sup>23</sup>, and since the two observers still do not agree on the distance the plane traveled, the only conclusion available is to disagree on the amount of time the plane was in the air (ibid). As Hawking states, "the theory of relativity put an end to the idea of absolute time!" (1996, p. 22, *his exclamation point*). The clock held by our bus-riding teacher, and the clock on the wrist of the outside observer would not read the same time.<sup>24</sup>

The consequence of Einstein's theory of relativity is that the assumption of universal time inherent in the Newtonian discourse of space and time must be dropped when dealing with physics *and* education. Time in the discourse of relativity is no longer an independent and evenly flowing constant; time is now a coordinate on the fabric of

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<sup>23</sup> When matter is present, the speed of light does fluctuate given the medium through which it travels, but this only compounds the problem of arriving at a universal agreement of time.

<sup>24</sup> Confirmed in 1971 with the use of an atomic clock put onboard a circumnavigating jet, the theories of special and general relativity which posit an interconnected space-time has been validated both conceptually and empirically (Hawking & Mlodinow, 2010, p. 99). And while the speed of light is only universal in a vacuum, it should be noted that the 1971 experiment was conducted on a very air-filled planet. If two observers were to conduct a similar experiment in different physical environments (i.e., water vs. air), the assessment of time, space, *and* speed would all be suspect to doubt. If the reader needs further evidence of 'truth' in Einstein's conception of relativity, think about the GPS on your dashboard – without Einstein that device would get you even more lost than it already does (Welch, 1985, p. 230).

space-time. One now sees that two subjects who agree on one coordinate in the equation of space, time, or speed cannot agree on the other coordinates if the subjects occupy different reference frames. Since light travels at a constant speed, observers of similar events traveling at different speeds must disagree on either the distance traveled, or the rate of the clocks. The order of events and all measurements involving space and time, therefore lose their absolute significance (Capra, 1975, p. 50-51).

Though discussion of the speed of light seems irrelevant to an argument about grade school learning, I employ this narrative as metaphor when comparing the relative speed of learning that we assess in American schools. Education officials have set a universal standard for the pace of education, and the only reason this trajectory is required for all learners is the power that supports this knowledge. We praise or punish students for mastering (or failing to master) privileged knowledge by arbitrary deadlines set by those in power, but if learning takes a lifetime, and no one can claim knowledge of the 'true' time it takes to learn, then why do we insist on enforcing this structure? Each student in our classrooms travels a different distance in their process of learning; ought we to understand time as a relative variable when assessing student knowledge? We will return to this concept in the final chapter and play with the possibilities of an educational system premised on a theory of relativity, but for now it is enough to leave with the premise that Einstein's theories of relativity seriously problematize a Newtonian conception of universal time and linear progress.



## Quantum Physics

When discussing human learning, we must also remember that the human brain works on electro-chemical charges. The only way we presently know how to measure brain activity is by measuring its electrical activity, thus, while we may use Einstein's theories as metaphor for the relativity inherent in human thought, the laws of quantum physics may better describe what is happening during the learning process. Moreover, the implications of this theory trouble Newton's universal time and linear progress even more than Einstein's did. In the words of one author,

As modern biological science has penetrated down into the *subcellular* level of living matter, and in particular those that constitute the brain, it has indeed begun to encounter the eerie quantum effects that have confounded physicists for a century" (Satinover, 2001, p. 6).

Wilson (1990) writes, "the study of brain science will prepare one for quantum theory better than the study of classical physics would" (p. 39). Thus, if we accept the premises of quantum theory when they are applied to human learning, the race to educate comes into serious epistemological trouble.

If the reader is willing to play with this conception of human thought as a form of energy, let us go from the macroscopic world of particle physics to the subatomic world of electrons, protons, quarks, and photons. While the discourse of special and general relativity can explain the motion of perceivably large objects, it is not able to explain the physics of subatomic particles. The best answer for this problem has come in the discourse of quantum theory – a conception of the universe in which objects' locations, trajectories, and even their pasts and futures cannot be defined (Hawking & Mlodinow, 2010, p. 67). In fact, if one was to accept quantum theory as a model for student learning in education, the answer to all three of the questions posed at the beginning of this

chapter would be no. Boi (2004) goes as far as to conclude that quantum theory creates a picture of the universe where “there seems to be no ontology at all” (p. 470).<sup>25</sup>

A central premise of quantum theory that society can apply to educational settings is a property of energy Werner Heisenberg identified as the uncertainty principle. Heisenberg’s ‘toolbox’ opens possibilities for challenging the dominant discourse, and in our attempt to survey the borders of acceptable knowledge, this paradoxical theory must be considered.<sup>26</sup>

In the discourse of positivism promoted by Newton and LaPlace, one is able to predict the future position *and* velocity of a particle, as long as one is able to measure its present position and velocity accurately. Heisenberg determined, however, that the more accurately one is able to measure the position of an electron the harder it becomes to measure its velocity. Likewise, the more precisely one measures the velocity of a particle, the harder it becomes to measure its position. Thus, one is only able to report one of the measures confidently at a time making it impossible to predict the trajectory of the particle. Even when one measures the particle with the smallest amount of energy possible (i.e., one quantum), the very observation of the subject is enough disturbance to

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<sup>25</sup> The false dichotomy between competing conceptions of reality is what Hawking calls ‘model-dependent realism’ (Hawking & Mlodinow, 2010, p. 42). Put simply, “we see the universe the way it is because we exist” (Hawking, 1996, p. 128). For example, when contemporary researchers speak of electrons, quarks, and strings, the ‘empirical’ findings in their research are based on conceptual models of how these things are represented. When one experiments with the CERN particle collider in Europe, she or he does not watch sub-atomic particles split into gluons, quarks, and charges, but rather she or he watches a numeric representation of the phenomenon. For readers, who see practical aims in questioning time as a universal and linear phenomenon, I ask that we at least question this concept of time as a valid model for understanding human learning.

<sup>26</sup> In Hawking’s words, “Heisenberg’s uncertainty principle is a fundamental, inescapable property of the world” (1996, p. 57). While it may seem ironic for one promoting an epistemology of critical ontology to support a discourse of “fundamental, inescapable properties of the world,” the uncertainty principle is the concept that merges the philosophy of critical ontology with the philosophy of natural science. With the ironic acceptance of a universal maxim, we are more able to turn the discourse of linear certainty and natural universality against itself.

affect the findings (Hawking, 1996, p. 56). The positivist notion that precise measurements and tools can predict future outcomes based on measured conditions is broken (Slattery, 1995, p. 22, Time and Education).

One may demonstrate the theme of uncertainty in observation with, what is perhaps the most famous experiment in quantum theory – the double-slit experiment. In this experiment, a single subatomic particle of light (i.e., a photon)<sup>27</sup> is sent at a screen that is able to record its location upon impact. When a filter is put in between the light emitting device and the screen with a single slit in it, the detection screen records hits in what resembles a probability curve with most photons hitting the middle of the screen and some hitting the screen with decreasing regularity as one goes farther from the center. Even with the most precise tools firing photons in identical ways, one can only predict the final location of the particle through the statistical calculation of probability. Due in no part to the actions of the instructor, or the particle itself, the final assessment of the photon carries a great deal of chance – chaos (Hawking & Mlodinow, 2010, p. 66).

When one removes the filter and replaces it with one that has two slits, the screen begins to record even less predictable results. Instead of a symmetrical probability curve, the screen records an interference pattern with stripes much like the bars on a fence. While the screen still records more hits in the center, there are alternating stripes where the photons have significantly less probability of hitting, and stripes that record greater probabilities. Much like the effect of two merging waves of energy, the screen's measurements reflect interference and amplification. The experiment does not provide the results that one may expect if we were to run the single slit experiment twice, rather

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<sup>27</sup> Anton Zeilinger and his colleagues have tested this premise and found that this quantum reality works not just for photons but for protons, atoms, and even molecules (e.g., Zeilinger, 2010).

we see a series of light and dark bands that reflect the release of two waves of energy, even though only one particle (i.e., the photon) is released at a time. In this way, “it seems as if, somewhere on their journey from source to screen, the particles acquire information about both slits” (Hawking & Mlodinow, 2010, p. 75). Furthermore, the particle acts as a wave. From this, Richard Feynman concludes that the individual particles of light shot at the screen take *every* possible path to get to their destination. Additionally, particles not only take *every* path, but they do so *simultaneously* (ibid). In the Newtonian universe, this would be like saying that a student walking from her locker to lunch takes every possible path to get to the cafeteria, and does so all at the same time.

The key to understanding this quantum discourse of time and space, is accepting the role of observation and probability in determining truth. The Newtonian discourse does not require one to observe for the determination of truth – time is a universal truth knowable to all beings and we can predict future outcomes based on conditions measured at some arbitrary point. If a student walks from her locker to lunch, as long as we know her ‘initial conditions’ we can predict her trajectory and final location; we, if given complete data about her present position, can calculate a complete picture of her past. In fact, if she arrives to lunch at noon, and we know she walks at a certain speed, we can then record her location at any given time prior to her arrival, without observing her path – take out your algebra textbooks if you forget how to do that. However, in the double-slit experiment, when observers try to see which of the two slits the photon has traveled through, the screen records an entirely different pattern of light. Instead of the striped pattern, the screen records a distribution similar to if the experiment is being conducted by opening each single slit separately. In short, photons act as waves and as particles at

the same time. In effect, the double-slit experiment shows that observation shapes truth about the present. Our measurement of initial conditions affects the outcomes we predict from those measurements. Do standardized tests really measure student knowledge, or do they just measure what we plan to observe?

Additionally, when one conducts an experiment in which one delays the observation of the double-slit screen until right before the particle hits the detection screen, one may record identical results to when the experimenter observes the particles as they pass through the slits (see Wheeler & Ford, 1998). In this sense, observers determine the history of each particle when viewing them in the present. When Wheeler left his detection device off, the photons displayed wave-like detection patterns, but when he randomly chose to turn the post-slit observation device on, the photons displayed particle-like detection patterns. In the quantum world, therefore, there is no past or future until we observe it, and the process of measurement has an effect on the data we are able to assess (Hawking & Mlodinow, 2010, p. 82). Our observations affect the histories of the particles; our observations of students affect the histories they choose to display in school.

This data has led astronomers such as Stephen Hawking to conclude that “the universe doesn’t have just a single history, but every possible history, each with its own probability; and our observations of its current state affect its past and determine the different histories of the universe (Hawking & Mlodinow, 2010, p. 83). This conclusion of empirical and theoretical science is, perhaps, the most powerful reason in the discourse of Cartesian rationality for why one should be critical of her or his own identity – one’s identity is but one of many possible options. Also quantum theory turns Cartesian

rationality against itself in that one's search for universal knowledge outside the body find that observation of the world is affected by the body.

If we relate this theory to research in the field of education, the advice of Hawking & Mlodinow (2010) sounds like it could have come from the pages of one of Foucault's books. They write,

One shouldn't follow the history of the universe from the bottom up because that assumes there's a single history, with a well-defined starting point and evolution. Instead, one should trace the histories from the top down, backward from the present time. Some histories will be more probable than others, and the sum will normally be dominated by a single history that starts with the creation of the universe and culminates in the state of consideration. But there will be different histories for different possible states of the universe at the present time (Hawking & Mlodinow, 2010, p.139-140).

If one is to believe the truths of experimental science, one cannot believe in the ability to uncover one universal truth, and quantum theory forces us to question a history represented by linear progress. If there is no one truth about the observable world, then how can we justify assigning a label, such as "slow learner," to a child; a label that will forever influence that individual's future experiences?

For those who still question the applicability of this quantum discourse in the context of human learning and the race to educate, we need to look at probability. Richard Feynman's theory tries to resolve this disagreement between the observable Newtonian universe and the apparent laws of quantum physics. Using Planck's constant (i.e., the very small number used in calculating radiation), Feynman hypothesized that the universe we observe is created by the interaction of these quantum probabilities. Just as the photon waves passing through the two-slits create alternating interference and amplification, so too do the phases of matter line up and create higher probabilities for what we observe as the behavior of particles. Feynman was able to show that his theory could predict destinations of very large particles very close to those predicted by

Newton's theory. However, while large objects move as Newton predicted (keep that AP calculus class), the final destination of an object is only one of many possible outcomes (add AP Quantum Physics?).

The probability of Newton's equations being able to predict a trajectory is very nearly 100%, but we must respect that, even in a vacuum, they are not quite 100% (Hawking & Mlodinow, 2010, p. 79). In fact, because we are limited in our discursive language, we describe electrons, photons, molecules and humans in terms of particles; and we describe energy in terms of waves. However, the ideal language of quantum theory would not talk of particles at all, but rather we would use a language of waves as probabilities for conceptualizing positions, velocities, and times as human fabrications (Hawking, 1996, p. 189). To the point, one can observe a student walking to lunch ten million times and form probabilities concerning her trajectory; but those probabilities, while potentially cemented into discursive reality, cannot predict with 100% accuracy how the student walked to lunch yesterday, and cannot predict how she will walk to lunch tomorrow (Hawking, 1996, p. 58). I believe that is what we call freedom. Einstein's teachers predicted with near 100% certainty that he would end up dropping out of school or working in some dead-end job for the rest of his life, but they were not correct in what actually happened. Education officials today cut students short of exploring the full extent of their probabilities, instead we observe them from day one, and lay our judgments about their futures so few students have a choice of any other direction to turn.

Let us also consider the study of histories within a quantum reality. As illustrated by the volumes written about similar topics that each arrive at differing conclusions, the observation of sources has great influence on our understanding of the subject. Even if

two authors read the same texts, the reality of the statements may differ for each observer. Similarly, an astute teacher can see how differently a student acts when in class compared to how the student acts after school or on the weekend. We assign an identity to our students, or to historical subjects, based on finite observations, and very often the conclusions we reach about the subjects are so narrow they do nothing to clarify our understanding.

If we remember Einstein's relativity, each observer develops her or his own model of time from one's observations. The truths that each holds agree with her or his model of reality, yet when individuals from differing reference frames come together, the models of reality may conflict. Neither person in this situation is able to claim truth, but the most powerful individual in the relationship does have more influence in setting the discourse. This is an important point to consider because in education research, we employ all types of models in creating knowledge about human subjects. We must remember that these truths are model-dependent, and are only real within a particular discourse of reality, and the most powerful players win. If teachers take just one day to privilege the reality that students presented with their friends, I think we would have an entirely different understanding of our students – perhaps less hostile relationships with them as well.

With this said, we should heed Hawking's warning about confusing various models of probability. A concept of probability in education research is often used to diffuse over-confidence in results that are promoted as truth. In graduate schools, Ph.D. students learn to calculate the various statistical data to prove that their findings are 'statistically significant' enough for publication. Probabilities in this context are



conveyed as acknowledgement of our ignorance of a complete set of data and this problem with statistical modeling should be enough for one to doubt claims of 100% validity made by any quantitative research. While we will explore this conception of probability in a discussion of Chaos theory, Hawking & Mlodinow (2010) remind us that “Probabilities in quantum theories are different. They reflect a fundamental randomness in nature” (p. 74). No matter how precise one is able to shoot a particle, there is no way to predict with absolute certainty where it will land. No matter how much we “know” about our students, there is no way to predict with absolute certainty where they will go in their learning. We’ll return to play with how quantum theory may impact educational settings in the final chapter.

### **Fractal Space-Time**

Another concept from contemporary science that problematizes the assumptions in the race to educate is the concept of fractals. While we have already touched upon the problems in identifying a ‘year’, the concept of fractals challenges our abilities to measure a ‘year’, even if we could agree on what to measure. Benoit Mandelbrot (1977), who found scale symmetries in many places in nature, first articulated the phenomenon of fractal space. With this observation, Mandelbrot posits a conception of geometry as a repeating pattern of self-similar shapes (Gleick, 1987). The reader has probably noticed how many structures in nature repeat at increasing smaller scales; look at the branch structure of a tree, for instance, or the symmetry in a snow flake; one can look at the geography of river systems or the vascular structure of your own body. Data collected on environmental series (Burrough, 1981), heartbeat patterns (Ashkenazy, et al. 1998), and

even stock price volatility (Liu et al. 1999), have supported Mandelbrot's theory of a fractal geometry to space and time, and this concept has relevant implications in the power/knowledge that shapes assessments in the race to educate.

In two-dimensional space, this theory is best demonstrated with a Koch Curve. To picture a Koch curve, construct an equilateral triangle with each side three units, thus a perimeter of nine units. Next, construct three more equilateral triangles, each with a one-unit base centered on the sides of the first triangle, thus the new perimeter of our figure is twelve units, and the pictures should look something like the Star of David. For a third iteration of the curve, place another equilateral triangle, this time with sides each  $\frac{1}{3}$  unit long, in the middle of each side, thus a new perimeter of sixteen units. One can see by just comparing the first three iterations of this fractal that the total perimeter of the figure has jumped from 9 to 16 in just three steps. Theoretically, if one was to repeat this process an infinite amount of times, one would see a figure with an infinitely long perimeter, but because the divisions occur on increasingly smaller scales, the figure would look much the same as it did in earlier iterations (Chettiparamb, 2005, p. 325). A beautiful representation of this geometry is found if one looks for a figure called the Mandelbrot Set – there have been several computer simulations created that allow a participant to explore this fractal space – one can attempt to trace the perimeter of the Mandelbrot Set for weeks and never get any farther than where she or he started.

This concept relates to the race in education because of its revolutionary conception of scale and its effect on measurement. Let us imagine our Koch curve at the second iteration; beyond the second iteration, one might notice that the overall shape of the figure has little noticeable change unless one is able to 'zoom-in' on one of the sides.

In fact, if one was oblivious to the complex geometry of each side, one might assume that the perimeter of our Koch curve on iteration-two (i.e., 16) is the same as the perimeter of our Koch curve on iteration-three (i.e., ~21.33), never mind that on iteration-five (i.e., 37.92). If one was to back up far enough, one could even see the curve as a single one-dimensional point, rather than the two dimensional figure; much like a star-gazer's assessment of a star as a single point of light even when it is a three-dimensional (if not more) figure moving in space-time. In fact measurement in fractal geometry now requires the calculation of the Hausdorff dimension. This equation expresses the degree of fraction in a figure, or put simply, the number of yardsticks required for measuring a given fractal space (Imre, 2009, p. 90).

In measuring the speed of a runner such as Steve Prefontaine, the assumption of a one-dimensional trajectory is privileged; 'miles per hour' only recognizes a one-dimensional arrow of time on a one-dimensional line of movement. However, a more accurate assessment of speed must take into account the Hausdorff fractal dimension and we would calculate the tortuosity of Prefontaine's path (Imre, 2009, p. 90). Likewise, when measuring student 'progress', we view time and learning as one-dimensional concepts. We give few rewards to the student who travels far to find an answer. One is labeled a 'slow learner' even though the path one traveled in thought was much longer than one's peers were. Think of the Appalachian Trail: one can calculate its distance by measuring the straight length between the beginning point and the end point on a two dimensional map; or one can calculate its distance by walking the trail with an odometer wheel. The measurements will be different. Thus, one may conclude that the qualitative and quantitative assessment of a subject and the normative judgments that result, do not

have as much to do with the subject itself, but with the tools used for measurement and the scale on which the subject is measured (Chettiparamb, 2005; Gleick, 1987; Briggs and Peat, 1990). This begs the question for educational research, do we measure student learning on a scale similar to the second iteration of complexity, or do we measure on the fifth? The difference in identification of the subject based on these two different scales is potentially life changing.

While these examples relate to space (as most of us know the concept), one can also apply these principles to the measurement of time. Thus, much like Dr. Montague's (1904) articulation of time measurement as relative to human perception, Fractal theory too, leads one to view time measurement and as a subjective endeavor. However, unlike the geometry of space, the measurement of time is a little harder to hold. Laurent Nottale (1995, 2004, 2005, 2010) is perhaps the most prolific author who argues for the truth of a fractal space-time (Marek-Crnjac, 2009, p. 2697). Nottale, states, "space-time is considered to be fractal. The principle of relativity of scale then consists of requiring that 'the fundamental laws of nature apply whatever the state of scale of the coordinate system'" (Nottale, 2004, p.68). In a fractal space-time, each reference frame must carry its own laws intrinsic to its definition in a 'scale-space' (Nottale, 2004, p.69). When viewed as a fractal,

A continuous and nowhere differentiable function drawn between two points separated by a finite distance in the Euclidean plane has an infinite intrinsic length; such a function depends explicitly on the resolution  $r$ , and its length is such that  $L(r) \rightarrow \infty$  when  $r \rightarrow 0$ . In other words, it is fractal (in a general meaning) (Nottale, 1995, p.400).

In short, since Einstein linked space and time in the theory of special relativity, a fractal geometry of space requires one to accept a fractal geometry of time. When measured

with a small enough ruler, the distance between 1pm and 2pm on the clock is infinitely long (this brings new meaning to a long afternoon).<sup>28</sup>

With this conception of space-time, Nottale (1995) states, “the description of trajectories of particles becomes necessarily probabilistic” (p. 399), and he concludes that the discourse of Galileo’s time must be replaced if one is to understand the motion of large objects in quantum theory (p. 400).

Thus, I ask, what is ‘adequate yearly progress’? Why did we decide on a tropical year as the measure for learning? Some ‘educational’ programs (e.g., Dibles, NWEA) even call for standardized assessment more often than that, as frequent as several times a month. Is that the right scale for measuring the accumulation of facts and skills? It certainly was not a proper scale for little Albert Einstein, nor Steve Prefontaine, nor the millions of other students who have been ‘slow’ to master a privileged set of skills. If one is not able to regurgitate the required amount of knowledge after a privileged conception of a year of sitting at a desk, does that mean one is a failure? I ask the reader to think about how many people you know who have spent a lifetime practicing a skill only to master it in later age. Authors such as John Dewey and Nel Noddings have written their greatest works in their ‘golden-years’ of life (pardon me for implying her age). Personally, I thank heaven that my grade-school teachers promoted me through school, because if I was judged by my reading skills alone like many children are today, I would probably still be in first grade trying not to ‘zone out’ as I read in haste. And how many people drop out of school for various reasons only to return for their GED,

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<sup>28</sup> This fractal nature of space time, may help explain the phenomenon of an event horizon around a black hole (Hawking, 1996), if one is trapped in a near-infinitely stretched out piece of space, then time, for all intents and purposes comes to a stop.

Bachelor's degree, or higher? Is twelve years even an appropriate scale for measuring student learning?

Similarly, we must question the quantification of knowledge. Fans of sports are often very cognizant of quantified records, and it is fun to see if current competitors are able to beat the best times. However, the discourse of progress of which record setting is a part sets questionable precedents when judging individual performances. According to official USA Track & Field data, on April 27, 1974, Steve Prefontaine set an American record by running 10,000 meters in just under 28 minutes; however, on April 28, 2010, Chris Solinsky set a new record at that distance with a time nearly 45 seconds faster than Prefontaine's. This prompts us to raise the perpetual question of what are the limits of human abilities? Never mind, the question of what is human – would Solinsky have been able to beat Prefontaine if he was running in 1974 with the same technology? Every year, students are pushed to meet some quantified conception of expected human knowledge for each grade level, but how high can we go? How much should we expect students to know? In mathematics, a googol is not a website, but rather a 1 followed by 100 zeros; a googolplex is a 1 followed by a googol of zeros; is this what we should expect for the limits of human running? Is this quantified standard what we should set for human knowledge? However, there is a twist; in a fractal space-time, a googolplex of knowledge is no closer to the end of the curve than is 10 units of knowledge. With a quantified linear conception of knowledge, the difference between the student who scored a googolplex on the state test and the student who scored a 10 is purely normative. Thus, while we 'standard-reference' tests in an effort to escape this fallacy of 'norm-referencing', one's mastery of a standard compared to another is no less subjective than

testing one's position on a norm. In a fractal conception of school, one may choose to run, but racing gets you nowhere.

### **Chaos Theory**

Another concept from contemporary science that problematizes the narrative of an education race is chaos. In a discourse of chaos theory, one may argue that very slight variation in initial conditions can produce very substantial fluctuations in the behavior of particles *and* waves (Mason, 2008, p. 2). Perhaps, the most famous articulation of Chaos theory is in a description of what some authors call the 'butterfly effect' (Ward, 1995, p. 631). In 1961, Edward Lorenz recognized something interesting about the data he had collected on weather systems. He found that no matter how many variables he input for modeling a weather system (e.g., wind speed, humidity, temperature, lunar cycle, sunspots, etc.), his model was not able to accurately predict a long range forecast (I'll side-step the obvious dig at weather forecasters). Lorenz concludes that even if he holds a complete set of data for a weather system, the interactions of elements, and the introduction of unpredicted elements would make it impossible to predict the outcome of the system, or even the state of the system at any time past the 'initial condition' (Slattery, 1995, *Time and Education*, p. 13). Thus, a butterfly who beats her wings in Africa could be an important variable in determining the trajectory of a hurricane that devastates the American coast. Likewise, a flutter of the wings on either side of the original moment could impact the strength and trajectory of the storm. Therefore, the premises of this theory challenge the conclusions embodied in policies such as No Child

Left Behind and Race to the Top that privilege single-variable models of causation for human learning.<sup>29</sup>

The discourse of chaos theory gained strength in the disciplines of natural science when scholars showed the impossibility of predicting the movement of particles in open systems (Polite, 1994, p. 588). Researchers found that while linear, Newtonian, equations could predict results in isolated vacuums and theoretical environments, when those equations were used in open systems, the expected results became quite unpredictable (Ward, 1995, p. 631). Most science teachers who have ever tried to replicate an experiment from a textbook know that students' results never quite come out the same every time. We teach our students about the concept of 'standard error' in an effort to explain this fluctuation of results, and we promote the concept of 'average' in order to decide 'the answer', but in many cases, these data fluctuations result from chaos in the environment (Kellert, 1992, p. 34).

Just as in quantum theory, chaos theorists understand the history of events as probabilities. Most readers will acknowledge that while a butterfly may have some influence on the life of a hurricane, it does not hold the dominant role in its trajectory; however, it does affect the probability of possible trajectories. If enough of these minor, and often over-looked, variables add up, they produce new patterns of behavior impossible to predict. In this sense, 'chaos' does not refer to total randomness, but rather

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<sup>29</sup> While the word 'chaos' has Greek etymology, the term was first applied in this context by T.Y. Li and James Yorke, who in 1975 published a paper entitled "Period Three Implies Chaos" (Li & Yorke, 1975). Within fifteen years of their publication, there had been 125 books and over 4000 research papers devoted to the topic (Dresden, 1992, p. 10); however, in education research there have been few studies explicitly employing this concept (e.g., Slattery, 2006, Davis, Smith & LeFlore, 2008; Mason (ed.), 2008).



it refers to the complex and unpredictable characteristics of open systems (Ward, 1995, p. 629, citing Field & Golubitski, 1992).

We understand chaotic events as randomness because there is too much information for us to make sense of it. One must remember that chaos theory does not deny the laws of classical physics – this theory employs a Cartesian discourse in assuming that one can ‘understand’ a body with complete knowledge of the system in which the body lives. However, with such a mountain of ever-changing variables, one is foolhardy to claim knowledge of a subject’s trajectory. For our students, even if we could attain knowledge of their ‘initial conditions’, the smallest of inputs in the seconds after achieving that knowledge could make our predictions wildly inaccurate. Morrison (2008) summarizes chaos and complexity as a theory that,

breaks with simple successionist cause-and-effect models, linear predictability, and a reductionist approach to understanding phenomena, replacing them with organic, non-linear and holistic approaches respectively, in which relations within interconnected networks are the order of the day (Morrison, 2008, p.16).

In short, the world is not as predictable as we might think, and the models that we create for understanding the world are largely incomplete.

The result of these theories is that we cannot ‘calculate’ the performance of complex physical or social systems (Cilliers, 2005, p. 264). However, while we ought to be humble in our creation of knowledge, we instead tend to reduce the complexity of a system, choose which variables are valuable, and make conclusions based on these privileged factors. Yet, when we separate the disciplines into overly simplified models, we leave out many aspects of the system that we should consider. Relativity theory and quantum theory seriously challenge the truths of the Galilean, Cartesian, Newtonian discourse, but that does not mean that we should ignore this knowledge. Rather we must

consider them in conjunction with the other models of reality if one wishes to gain complete understanding.

### Summary

At the beginning of this chapter, I suggested that for us to understand how we came to race children in American schools, we must understand the metanarrative of universal time and linear progress that dominates society. I posed three questions to help us determine if this discourse is valid for use in educational settings, and I suggested that if the answer to the three questions is yes, then we have full right to identify the hidden truths of children and race them in their education. However, if the answer to any of these questions is no (or somewhere in between), then we must question this discourse, and examine alternative discourses that may better explain the phenomena of human learning. In no particular order, these questions are: 1) Is history a linear progression of knowledge? 2) Is time a universal truth knowable to all beings? 3) Can we predict future outcomes based on conditions measured at some arbitrary starting point?

Does contemporary philosophy and science find acceptable answers to these questions? In the model of time supported by Galileo, Descartes, and Newton, the answer to each of these questions is yes. Galileo articulates a theory of trajectories and implies a linear progression of history and knowledge; Isaac Newton modeled the universe as a clock-like mechanism with underlying universal truths that determine the movements of bodies within the system; and Descartes supported a theory of science in which we search for initial conditions that help predict future actions. However, if one accepts contemporary models of time and space described by relativity theory, quantum theory, fractal space-time, chaos theory, and our observations of natural cycles than we

must doubt the validity of the aforementioned model. Quantum theory demonstrates that time and space are not necessarily linear; objects (and thoughts) may be in two places at once, and observation affects what information we receive from a subject. Einstein's relativity demonstrates that the measurement of time is determined by one's reference frame, and like quantum theory, Einstein supports the idea that any notion of universal truth is purely discursive. Chaos theory demonstrates that if one were able to uncover hidden universal truths, those truths would only be good until the chaotic universe altered the contextual conditions necessary for those laws to work. When applied to the phenomenon of human brain function, these latter theories are scientifically valid models for describing human learning and education officials must consider them before we engage in any race to educate our children. However, these theories are given little attention, if any, and the model of time and learning promoted by Isaac Newton remains dominant in our schools.

The discourse of universal time is dominant in American society and in our schools because of discursive technologies that support its power. Mechanisms such as the clock and calendars provide a panoptic gaze that instills the power of this discourse into our lives. Furthermore, a narrative of efficiency has gained power through the industrial political economy and writings from authors such as Frederick Winslow Taylor. Moreover, lessons in the Bible and early American textbooks have promoted the discourse amongst children who attend school, although each text interrupts its own narrative by providing conflicting messages about the value of 'fast-paced' learning. Though we continue our examination of how we came to race our education in the next chapter, the history articulated in this chapter at least answers part of how this discourse

became the time for school, and it leaves us with questions of why this discourse remains dominant when there are better models for understanding human learning.

## Chapter IV

### CREATING PROBLEMS: CHARACTERIZATIONS of the 'SLOW LEARNER' SUBJECT

#### A Cold Comparison

In 1980, a group of American teachers visited schools in the Soviet Union. The Soviet teachers showed the Americans their schools and their methods of education of which one visitor observed, “the program you just showed us is very impressive” (Gibson, 1980, p. 264). However, the fascinated delegate followed with a question that was sure to catch the proud Communists at their political game; the American asks, “What do you do with your slow learners?” (ibid). The reply: “What is a ‘slow learner’?”

American teachers concluded the host was spouting “party rhetoric;” and Gibson explains how the Soviet system segregated children suspected of embodying learning differences as young as five years old into institutions for “differentiated care” just as was done in the United States (ibid).<sup>30</sup> The author posits that while the Soviet teacher may

not have ‘known’ about ‘slow learners’, their existence in that country was undeniable if one only knew where to look. However, this

*I believe that our readiness to create pretty little boxes to place persons in is a wonderful means for satisfying our own needs for security but does not solve anything (Southworth, 1966, p. 323).*

anxious search for ‘slow’ ‘defective’ children is what sustains the race to educate.

Without identifying the tortoises among us, we have no reason to race.

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<sup>30</sup> A system, we should note, described very similarly to those of institutions designed to house individuals labeled ‘feeble-minded’ built in the United States during the 1800s (Trent, 1994).

This disagreement about the identities of students is evidence that the 'slow learner' subject is positioned within the race to educate as an object of power. As others argue, the act of labeling children has more to do with the social norms in communities than with any pathology embodied in these individuals (Jordan, 2005, p. 131 citing Harry & Anderson, 1995). Jordan (2005) states, "certain learning disabilities do not exist independently of the people who produce, define, and study them, but are created within a context of people who interpret learning outcomes in particular ways" (p.131). Thus, a century ago, the subject who education officials identify with a 'learning disability' today, was identified as 'defective' or backwards. Fifty years ago, education officials identified students with similar attributes 'slow learners'. Consequently, while education officials labeled deviant students 'backwards' or 'insane', the race to educate has little impetus. School officials removed marginalized students from schools, or just ignored them until they left on their own accord; however, when society creates the 'slow learner' label and frames the subject as a threat to society, the race to educate begins in haste. Officials use these labels, not because they discover new pathologies in the brain, but because they must employ dividing practices to secure control over the education system. Thus, just as Gibson positions the Soviet education system as an example of 'backwards' education policy to be rejected by 'progressive' American educators, without the creation of a 'slow learner', American educators have no subjects to use as counter-point in their discourse of 'fast-paced' education. Without these subjects, the race to educate children in America has little power. Thus, I repeat the question reportedly posed by the Soviet teacher, "What is a 'slow learner'?" A history of this label helps us answer how we came to race our kids in their education.

## A Subject of National Security

A vignette highlighting the tension between the United States and the Soviet Union is an appropriate way to start an analysis of how the ‘slow learner’ subject is used as an object of power in the race to educate because anxieties over national security, whether economic, military, or eugenic, are the backdrop for this discourse. I began this study reflecting on the statements and policies of Presidents George W. Bush and Barack Obama, and it should be no surprise that statements and policies of previous government officials have likewise promoted an education race by framing ‘slow learning’ as a danger to national prosperity. Thus, with government officials sounding anxieties over education’s role in our national security, students identified as ‘slow learners’ become likely targets being positioned as enemies of society. This chapter therefore, examines how American society has built this anxiety, and it examines how we frame the ‘slow learner’ as a locus of pathology that threatens our nation’s existence. These dividing practices are a powerful tool in promoting America’s race to educate.

*I believe there is a time for everything and children need TIME to grow intellectually, physically and socially. Why the rush, and where to? What are we trying to prove? (Irish Indian, 1965, Dec. 24, p. 10)*

## A Nation at Risk

President Washington was the first chief executive to bring the nation’s attention to the need for an educated populous. He proposed that the establishment of a National University focused on the teaching of arts and sciences was necessary for securing the “National prosperity and reputation” (Washington, 1776, Dec. 7). His stated belief was also that a “common education” would produce homogeneity amongst citizens, and with

that, greater prospects for a “permanent Union” (ibid). A common education in the sciences would bring ‘progress’, but more importantly, it would bring social harmony to the fragile nation.

*“Human history becomes more and more a race between education and catastrophe”  
(Wells, 1920, p. 1100)*

Thomas Jefferson echoes this narrative with his statements supporting the establishment of institutions for the pursuit of scientific knowledge. Jefferson argues,

A public institution can alone supply those sciences which, though rarely called for, are yet necessary to complete the circle, all the parts of which contribute to the improvement of the country, and some of them to its preservation (Jefferson, 1806, Dec. 2)

In an earlier letter to his future son-in-law, Thomas Mann Randolph Jr., Jefferson articulates his preference for a curriculum extensive in “Astronomy, Natural Philosophy (or Physics), Natural History, Anatomy, Botany & Chemistry,” but he also adds recognition to the importance of studying ancient and modern history during the “portions of the day...when the mind should be eased” (Jefferson, 1786). However, Jefferson makes clear that attending courses on history “would be a waste of time” compared to just reading books.<sup>31</sup>

James Madison, too, calls for the establishment of federally funded universities. For Madison, these institutions of science promote “enlightening opinions,” “expanding patriotism,” “social harmony,” and “the structure of our free and happy system of government” as graduates diffused through society (Madison, 1810, Dec. 5). According to Madison, the pursuit of science was necessary for the cohesion of a diverse population.

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<sup>31</sup> One must not ignore the difference between Jefferson’s statements on education and those made in the discourse of racing to education kids. He writes, “Knowledge indeed is a desirable, a lovely possession, but I do not scruple to say that health is more so. It is of little consequence to store the mind with science if the body be permitted to become debilitated. If the body be feeble, the mind will not be strong – the sovereign invigorator of the body is exercise, and of all exercises walking is best (ibid). One just needs to survey how many American schools, in the decade following the passage of No Child Left Behind, have cancelled recess times, arts programs, physical education, and other experiences that enrich the bodies *and* minds of children. And for those schools that still do provide time for their children to gain some physical exercise, how many encourage the ‘slow’ experience of walking?”



Thus, while these statements certainly do not call for a race in any way similar to that articulated by Presidents Bush and Obama, these ‘founding fathers’ certainly communicate an urgency in organizing American education – the fate of the Union rested in the balance .

Perhaps not surprising, when the United States engaged in an era of heightened sectionalism and when society promoted democracy by the ‘common man’, individual arguments for a federally organized common

education go silent. Andrew Jackson set the tone with statements arguing that states, not the Federal Government, were responsible

*For we must consider that we shall be as a City upon a hill. The eyes of all people are upon us- John Winthrop, 1630 (Winthrop, 1867, p. 19)*

for “education and other public objects” (Jackson, 1829, Dec. 8). Thus, the presidents that followed him paid little notice to public education as a Federal responsibility.

Perhaps more famous for the length of his inaugural address than for its content, President William Henry Harrison, for example, does not discuss education once in his nearly two-hour speech (Harrison, 1941, Mar. 4). Similarly, Presidents Tyler (1841, Dec. 7), Polk (1845, Mar. 4), Taylor (1849, Mar. 5), and Fillmore (1850, Dec. 2) rarely make any mention of their education policies – there was nothing of which to speak.

A symbol of the ‘self-taught American’ today, Abraham Lincoln, similarly makes few attempts to reshape an education system that left many children ‘behind’.

Celebrating the life of Kentucky Senator Henry Clay, a man who also found success despite having little formal education, Lincoln states,

Mr. Clay’s lack of a more perfect early education, however it may be regretted generally, teaches at least one profitable lesson; it teaches that in this country, one can scarcely be so poor, if he will, he can acquire sufficient education to get through the world respectably (Lincoln, 1852, Jul. 6).

According to some, education is a personal responsibility, and anyone who fails to reach success in the public sphere has only herself or himself to blame.

When the carnage of the American Civil War settled, political officials renewed the discourse of education as a unifying force, and as a means towards ‘progress’. President Ulysses S. Grant, for example, calls for increased Federal funding for education “to aid the States in the general education of their rising generation, is a measure of such great importance to our real progress” (1872, Dec. 2; see also Grant, 1873, Dec. 1). Grant articulates the role of education in supporting social solidarity and democratic citizenship in his seventh annual message to Congress. In this address, President Grant iterates the fragility of a republic that does not have an educated citizenry. The President remarks,

A large association of ignorant men can not [sic] for any considerable period oppose a successful resistance to tyranny and oppression from the educated few, but will inevitably sink into acquiescence to the will of intelligence, whether directed by the demagogue or by priestcraft. Hence the education of the masses becomes of the first necessity for the preservation of our institutions (Grant, 1875, Dec. 7)

Unlike most of the presidents who came before him, Grant places education as the top priority of the nation – perhaps common knowledge would bring “social harmony” to a nation scarred by Civil War.<sup>32</sup>

For Rutherford B. Hayes, education policy under national authority would do just that. In his inaugural address, Hayes frames Federal involvement in local education policies as a means to “wipe out in our political affairs the color line and the distinction between North and South, to the end that we may have not merely a united North or a

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<sup>32</sup> I am tempted to say that Grant is the first U.S. President to position education as a national priority, but more knowledgeable scholars may disagree. Washington & Jefferson speak of education as a national endeavor, but no president before Grant seems to put as much priority in Federal attention to it.

united South, but a united country” (Hayes, 1877, Mar. 5). For Hayes, a united education policy would ensure a United States of America.

President Garfield continues this narrative by citing continuing disharmony between the North and South, and positioning education as the remedy. In his inaugural address, Garfield states,

All the constitutional power of the nation and of the States and all the volunteer forces of the people should be surrendered to meet this danger by the savory influence of universal education (Garfield, 1881, Mar. 4).

A universal education would bring the nation together, and help a country with deep wounds ‘move forward’. The president reminds the nation, “It is the high privilege and sacred duty of those now living to educate their successors and fit them, by intelligence and virtue, for the inheritance which awaits them” (Garfield, 1881, Mar. 4). The nation was in danger, and the president called all Americans to help in the cause.

If nothing else, the education of American citizens was part of their ‘Manifest Destiny’. Perhaps no other statement speaks to the growing urgency given to education in the United States than that given by William McKinley in his first inaugural address. McKinley states,

Nor must we be unmindful of the need of improvement among our own citizens, but with the zeal of our forefathers encourage the spread of knowledge and free education. Illiteracy must be banished from the land if we shall attain that high destiny as the foremost of the enlightened nations of the world which, under Providence, we ought to achieve (McKinley 1897, Mar. 4).

Just as American pioneers blazed west to claim their ‘God-given’ right, so too would American educators “spread knowledge” in an attempt to ‘enlighten’ those who lived in the darkness of illiteracy. In President Hoover’s words,

Our objective is not simply to overcome illiteracy. The Nation has marched far beyond that... We can not [sic] hope to succeed in directing this increasingly complex civilization unless we can draw all the talent of leadership from the whole people... The full opportunity for every boy and girl to rise through the selective processes of education can alone secure to use this leadership (Hoover, 1929, Mar. 4).

The survival of 'civilization' itself rested on the successful education of American boys and girls.

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Along with concerns about national unity, political officials also express anxieties about citizenship and the role of schools in establishing a well-educated electorate.

Rutherford B. Hayes, for example, positions education as a condition of universal suffrage. In his inaugural address, he states, "Universal suffrage should rest upon

universal education" (1877, Mar. 5). To support this end, Hayes calls for "liberal and permanent provision...for the support of free schools by the State governments, and, if need be,

supplemented by legitimate aid from national

authority" (Hayes, 1877, Mar. 5). Citing that "many who now exercise the right of suffrage are unable to read the ballot which they cast," Chester Arthur also calls for

Federal aid in "the work of education" (Arthur, 1881, Dec. 6). Similarly, Herbert Hoover

states, "self-government can succeed only through an instructed electorate" (1929, Mar.

4). Democracy is fragile, and if the Republic was to survive, these officials believed that

the Federal government had to ensure that every state was providing an 'adequate education'.

*To separate them from others of similar age and qualifications solely because of their race generates a feeling of inferiority as to their status in the community that may affect their hearts and minds in a way unlikely ever to be undone. – Brown v. Board of Ed. (Warren 1954, p. 2)*

The promotion of universal education may sound benevolent if one does not recognize the context in which these officials made these statements. With the passage of the Thirteenth Amendments to the U.S. Constitution in 1865, maintaining the power of dominant White-American discourses in the lives of recently emancipated peoples became an increasing concern for many. When the nation ratified the Fourteenth (1868) and Fifteenth (1870) Amendments, the urgency of educating away difference became a prevalent theme in political discourse. In 1869, ten months after Congress passed the Fifteenth Amendment, President Grant called upon the Legislative Branch to transfer responsibility for “the education of freedmen” from the Secretary of the Interior to the Commissioner of Education (Grant, 1869, Dec. 6), and five years later, he states,

Education of the people entitled to exercise the right of franchise I regard essential to general prosperity everywhere, and especially so in republics, where birth, education, or previous condition does not enter into account in giving suffrage (Grant, 1874, Dec. 7)

If Black Americans were going to play a role as enfranchised citizens, officials had to educate them into the norms of the privileged society.

It seems little surprise then, to see Rutherford B. Hayes praise, “those States in which slavery formerly existed” for showing “evidences of increasing interest in universal education” (Hayes, 1877, Dec. 3). President Hayes and other presidents (e.g., Coolidge, 1926, Dec. 7) use this rationale to justify increasing Federal aid for education in Southern states (see also, Hayes, 1880, Dec. 6). The Federal Government had a vested interest in bringing Black-Americans ‘up-to-speed’ if officials wished to maintain racial harmony and keep America ‘moving forward’.

Yet, positioning education as a means for ‘progress’ also allows officials to use it as a criterion for citizenship. Americans who are able to demonstrate mastery of the

privileged knowledge are framed as competent citizens; society frames those who do not demonstrate that knowledge as immature. In his 1875 message to Congress, Ulysses S. Grant calls for compulsory education as a means “to deprive all persons who can not [sic] read and write from becoming voters after the year 1890” (Grant, 1875, Dec. 7). In a similar statement, William Howard Taft states,

Hence it is clear to all that the domination of an ignorant, irresponsible element can be prevented by constitutional laws which shall exclude from voting both negroes and whites not having education or other qualifications thought to be necessary for a proper electorate. The danger of the control of an ignorant electorate has therefore passed (Taft, 1909, Mar. 4)

According to these officials, education is necessary for ‘progress’ and all citizens who do not show their ability to ‘keep up’ with ‘universal’ skills are not welcome to participate in shaping the future of the nation. For a citizenry eager to participate in the democratic principles on which this nation is founded, there is not stronger motivation to race in their education.

Officials intent on keeping Black Americans disenfranchised had thus successfully constructed a double-bind for those they wished to keep from the polls. On one hand, a citizen can follow a script consistent with the privileged discourse, or, on the other hand, a citizen can reject that script and play a different narrative. With either choice, however, the prospective voter loses power in shaping the discourse that dominates society. Even the literate Black voter is educated, in most cases, with a curriculum that privileges a discourse that aims to disenfranchise people once held in slavery. Thus, education is framed as an urgent requirement for the ‘progress’ of America, but only for those members of society who are willing to position themselves within prevailing discourses without threatening to change them. For many schools,

therefore, education is less about producing a critically thinking electorate, than it is about pacifying perceived threats to social harmony.

This narrative of education as a means of pacifying ‘hostile others’ is present in presidential statements dating back to the ‘Founding Father’. For many Commanders-in-Chief, the solution to American security is found in the establishment of military academies. Washington argues that a Military Academy is needed because the nation, “ought never to be without an adequate stock of Military knowledge for emergencies” (Washington, 1796, Dec. 7) – education was a matter of national security.

John Quincy Adams also argues for the establishment of a naval academy for training seaman and ship builders. Adams argues that this knowledge is necessary to “place our officers on a level of polished education with the officers of other maritime nations” (Adams, J.Q. 1827, Dec. 4; see also Van Buren, 1837, Dec. 5; Pierce, 1855, Dec. 31; Lincoln, 1863, Dec. 8). In the twentieth century, this narrative of education as a means for maintaining supremacy over rival nations becomes dominant in the minds of many Americans.

By 1880, President Rutherford B. Hayes was able to report that the United States had seventy-eight schools operated by the Army (Hayes, 1880, Dec. 6; see also Cleveland, 1893, Dec. 4), and by the early decades of the twentieth-century, some officials were positioning these institutions as factories for the production of military resources. Woodrow Wilson, for example, summarizes the commodification of the American student in his 1915 message to Congress; the President states,

What is more important is, that the industries and resources of the country should be available and ready for mobilization. It is the more imperatively necessary, therefore, that we should promptly devise means for doing what we have not yet done: that we should give intelligent federal aid and stimulation to industrial and vocational education (Wilson, 1915, Dec. 7).

The efficient education of American students was necessary if the country wished to be prepared for war. Furthermore, military preparedness requires constant 'progress'. In 1941, Franklin Roosevelt states,

The Army and Navy, however, have made substantial progress during the past year. Actual experience is improving and speeding up our methods of production with every passing day. And today's best is not good enough for tomorrow (Roosevelt, F.D. 1941, Jan. 6)

Though he is speaking of armament production, Roosevelt's words are echoed in statements pertaining to the production of human resources in the form of the American student.

Military academies were one way to defend against the influence of foreigners, but many government officials took on a preemptive approach to addressing this concern. Closer to home, the education of Native Americans was of great concern for many administrations who saw these people as a threat to national security. Framed repeatedly as a threat to American 'progress', many members of society saw educating Native American children into privileged American culture as one way of 'civilizing' these 'unpredictable' people (see Baxter, 2008). In his second inaugural address, James Monroe, for example, asks Congress to establish a permanent fund for the education of Native children (Monroe, 1821, Mar. 5). Similarly, Andrew Jackson speaks of "the important concern of education" when setting up policies for the emigrant nations who had been removed from the Southeast (Jackson, 1834, Dec. 1). Following Jackson, James Buchanan speaks of the "rapidly advancing education" amongst the Cherokee, Choctaw, Chickasaw, and Creek nations settled west of Arkansas was a reason for incorporating Oklahoma into the Union as a sovereign state (Buchanan, 1857, Dec. 8).



Despite the fact that many people in these nations were already literate in their own languages, already had a sophisticated arts and crafts culture, already governed their own territories, and already owned successful plantations in the Southeast, it was the American education in “the arts of civilization and self-government” that made American Indians safe to join the United States.<sup>33</sup>

After the Civil War, concerns about educating American Indian populations took on an air of urgency similar to those found in statements about other marginalized subjects. Rutherford B. Hayes, for instance, argues that Native peoples expressed a “general and urgent desire” for the federal government to educate their children. According to the president, this request was “sufficient proof that they will be found capable of accomplishing much more if they continue to be wisely and fairly guided” (Hayes, R. B. 1879, Dec. 1; see also, Hayes, 1878, Dec. 2; Hayes, 1880, Dec. 6). Theodore Roosevelt similarly cites, “widespread illiteracy due to lack of public schools in the Indian Territory” as reason for calling on Congress to fund additional education programs for people contained on reservations (Roosevelt, 1903, Dec. 7).<sup>34</sup> For many members of the dominant American society, American Indians represent the unpredictability of nature, and education is a way of making this ‘wild’ people more predictable. The race to educate is a strategy of pacifying those who society deems unpredictable.

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<sup>33</sup> I certainly hope the reader comprehends my sarcasm in this statement. Education policy was one way American officials tried to ‘Whiten’ American Indian cultures as thousands of American settlers moved into their territory. American Indians who wished to survive under White American domination had to learn the privileged culture or face death.

<sup>34</sup> See also Arthur, 1881, Dec. 6; Cleveland, 1880, Dec. 3; Cleveland, 1893, Dec. 4; Cleveland, 1894, Dec. 3; Cleveland, 1896, Dec. 7; Senate Committee on Labor and Public Welfare, 1966, Apr. 1.

At the turn of the twentieth-century, as the United States expanded its reach beyond the North American continent, several government officials looked to education as an instrument of foreign policy. William McKinley, for example, references education repeatedly in his discussion of policy for territories conquered in America's 1898 war with Spain (McKinley, 1900, Dec. 3; see also Coolidge, 1926, Dec. 7; Coolidge, 1927, Dec. 6). Similarly, Theodore Roosevelt urges Congress to pass policies to "help in every practicable way in the education of the Chinese people" (Roosevelt, 1907, Dec. 3; see also Kennedy, 1962, Jan. 11 in the context of Latin American Republics). William Howard Taft articulates the role of education as a discursive mechanism. In his fourth message to Congress, the President states,

Through the unifying forces of a common education, of commercial and economic development, and of gradual participation in local self-government we are endeavoring to evolve a homogeneous people fit to determine, when the time arrives, their own destiny (Taft, 1912, Dec. 3)

Taft is speaking about his policy for the Philippines Islands here, but this statement captures the discourse of education policy for any population on the margins of American society. 'Freedom' for all, but only after individuals demonstrate their discursive homogeneity. Priority membership into the dominant American in-group meant racing to learn the knowledge privileged in society.

In war-torn Germany, officials framed education as the principle means of rehabilitating a people who had found appeal in fascist discourse. Reporting on the proceedings at the Potsdam Conference, President Harry S. Truman states, "They seek to rebuild democracy by control of German education" (Truman, 1945, Aug. 9). In the Cold War, only a fast education would prevent countries from falling behind the Iron Curtain.

During his presidency, John F. Kennedy used education as a preferred weapon in the Cold War. Days before taking office, in a speech in front of a Massachusetts audience, Kennedy reiterated America's position as a "city upon a hill" and states, "We do not imitate – for we are a model to others" (Kennedy, 1961, Jan. 9). Two months later, President Kennedy unveiled his plans for a Peace Corps (Kennedy, 1961, Mar. 1). The Peace Corps is "a pool of trained American men and women sent overseas by the U.S. Government...to help foreign countries meet their urgent needs for skilled manpower" (ibid). Kennedy emphasized that this Corps is not "an instrument of diplomacy or propaganda or ideological conflict," but audiences are naïve if they believe this mission of peace has no effect on foreign cultures. In the same speech, Kennedy describes how Corps volunteers transport "that decent way of life which is the foundation of freedom and a condition of peace" – continuing American imperial policy, Kennedy uses education as a diplomatic shield against foreign discourses. For some officials, the faster we educate 'others', the faster they can claim national security.

Following Kennedy, Lyndon Johnson, similarly articulates this discourse in his 1966 State of the Union Address. Urging Congress to pass his International Education Act of 1966, Johnson states, "We will aid those who educate the young in other lands, and we will give children in other continents the same head start that we are trying to give our own children" (Johnson, 1966, Jan. 12). By 1966, education was a race of national priority, and the Federal government looked to give their allies a Head Start.

## Foreign Affairs

Ironically, the xenophobia expressed by American leaders does not prevent them from using foreign countries' education systems as foils for the American system when promoting the discourse of 'fast-paced' education. Throughout the twentieth-century, government officials heralded school systems in countries such as Germany, the Soviet Union, Japan, and China as examples for the American system, and with our ancestral roots spread throughout the world; one may understand how this gaze abroad had power in affecting American opinions about schools. In effect, American officials use the prestige other countries have in American society as a mechanism for spreading anxiety about our education system. In short, Americans are desperate to 'keep up with the Joneses'. However, who we look at, and the reasons we look abroad have not always been the same, yet no matter towards whom our gaze turns, the examination of ourselves next to that subject inspires a race to compare.

*To walk is too slow:  
children run through time  
leaping cracks as though  
to play a sidewalk game  
(Farber, 1953, p. 8)*

Thomas Jefferson, for example, is an early American who wrote much about European education. In a letter to John Banister, Jr. dated October 15, 1785, Jefferson offers advice to his friend about where to find the best education in Europe. Jefferson decides on schools in Geneva and Rome, but recommends that if one desires to "taste the fine arts, more particularly those of painting, sculpture, architecture, and music" (Jefferson, 1785), one finds the best choice in Rome. In a criticism ignored by twentieth-century commentators who looked to Europe, Jefferson chastises Geneva because of their revolution that had, "rendered it a tyrannical aristocracy, more likely to give ill, than

good ideas to an American” (ibid). However, even though Jefferson was willing to advise his friends on the benefits and conflictions with boarding schools in Europe, and even though his educational philosophy was oriented towards Enlightenment thought flowing out of France, his preference for model schooling remained in the United States. In fact, Jefferson spends most of his letter to Banister criticizing a European education telling him, “consequences of foreign education are alarming to me, as an American” (ibid). For Jefferson, one finds the best model for education at home.

Jefferson’s disdain for European models of education did not have a lasting hold on the American conscience, however. President John Quincy Adams, for instance, argues that an American Naval Academy needed to model its curriculum on that of “other maritime nations” who produced officers with “polished education” (Adams, J.Q. 1827, Dec. 4). By 1856, Americans had a watchful eye on novel pedagogies coming out of Europe, and often, the methods that gained privilege in the United States were those that worked to modify the pace of education.

In 1856, Henry Barnard reported on a presentation at the London Educational Exhibition of 1854 that showed the apparatuses of Frederick Froebel’s “system of Infant Garden training and instruction” (Barnard, 1956, p. 449). Froebel’s “German system,” called for an education program “based upon principles analogous to those which best develop *bodily* health and strength” (ibid, original italics). This education, was to commence “with the earliest age at which the infant manifest the power of receiving impressions from external objects” and Barnard notes that one school had already opened in London (i.e., the capital of America’s chief economic rival at this time). According to Barnard, America was already behind in its education of children.

Additionally an 1889 publication of *The Kindergarten* summarized the principles of Froebel's pedagogy worked to justify an early start to schooling for toddlers. Citing Barnard's (1879) *Kindergarten and Child Culture*, on the first page of the issue, the journal announces, "The task of education is to assist natural development towards its destined end. As the child's development begins with its first breath, so must its education also" (Stockham & Kellogg, eds., 1889, p. 65)<sup>35</sup>. The discourse of child development and the requisite anxieties about timing were now being broadcast in a journal intended for consumption in both the academy and in homes. And by the turn of the century, Froebel's theories had gained such prominence that curriculum theorists such as John Dewey (1900; 1916) addressed Froebel's theories directly, warning against this pedagogy, whose genealogy branched back to an authoritarian German regime (see Allen, 1995, p. 100)

In what turns out to be a long list of poorly chosen education sweethearts, many Americans looked to the rapidly industrializing German / Prussian state and its education system for a model of schooling in the United States at the turn of the twentieth-century. Even on the verge of war breaking out in Europe, authors such as Franklin W. Johnson, in a 1914 article in *Popular Science Monthly*, still looked to Germany with lustful eyes. Johnson points to Germany as an example of education excellence citing their average age of graduations from medical school at 23 (the average age in the US was apparently 26) (p. 41). He also cites the average age of 19 for Germans' graduation from their gymnasium system (i.e., US high school plus two additional years) and concludes that

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<sup>35</sup> The reader might also notice how children in many of these articles are referred to by the dehumanized pronoun "it." This language, in my opinion, signifies a recognized separation between theory and the bodies that the theory affects, even though there is no such separation.

American youth “are about two years behind those of Germany” (ibid). However, Johnson seems to ignore the qualitative differences between a 26-year-old doctor and a 23-year-old doctor. Furthermore, the author obviously does not see the inherent irony in supporting an education system that produces a populous ready for war. Yet, one could claim this theme as a common thread that runs throughout the writings of many who idealize ‘faster’ education systems and search for role models in this effort. American society wants a populous ready for war, and an education race is the chosen strategy for preparing young people for that task.

By 1931, the story was a bit different in American newspapers – perhaps out of relative arrogance regarding the decade of economic problems faced by post-war Europe. Reporting on a trip made by the head of the Kindergarten and Primary Education Department of Los Angeles city schools, the *LA Times* recounts Madilene Veverka’s impression of the European education system. After spending a year as a fellow at the University of Prague and visiting many European schools, Veverka cites a system that is “formal and often clumsy” with “much that is wasteful” (Sept. 27, pg. A3). Americans had usurped the German system but now we could do it better. However, the article emphasizes that children in Europe “are not catered to” and “they have no special rooms for slow children” (ibid). Exercising claims of superiority, this article simultaneously demeans the European system and holds it as an exemplar of disciplinary methods for ‘slow learners’. It is apparently hard to communicate a unitary portrait of a European education system, yet, here we see the ‘slow child’ framed as a ‘problem to be solved’ if American society wishes to outdo the Europeans.

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During World War II America lost its crush on Europe, but also in many respects the discursive race to educate all but vanished. On October 12, 1942, Franklin Roosevelt used one of his 'fireside chats' to ask school authorities in all states to work out plans for giving high school students time off from school. In the wartime economy, society needed young men and women to help farmers raise and harvest their crops and they were needed for working in war industries. For Roosevelt, taking time off from school was the best way older students could "contribute their bit to the war effort" (Roosevelt, F., 1942, Oct. 12). 'Total-warfare' in an industrial society, meant all capable bodies contributed to military production; in a post-War society obsessed with a 'space race' however, 'total-warfare' meant society needed all capable bodies to learn at the 'fastest rates' possible.

In the 'space age' society of the 1950s, many Americans looked to understand the schooling approach of our newest educational crush, and several people traveled aboard to peak behind the iron curtain that shrouded its details. Contrary to what some may believe, our love affair with the Soviet education system started before the launch of the rocket containing Sputnik (i.e., October 4, 1957).<sup>36</sup> For example, on March 28, 1956, the *Washington Post* printed Labor Secretary James P. Mitchell's warning about Russia's "impressive gains in the field of engineering and science" in which they added 1.2 million trained workers to the market compared to only 900,000 in the United States (Lindsay, 1956, p. 27). Mitchell then calls "for a vigorous nation-wide program at all

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<sup>36</sup> I apologize to any reader who is offended by my use of sexual imagery in this section. However, I believe this is a metaphor appropriate for, and worth exploring in this context. After all, the American education discourse has, for two centuries, sampled many questionable regimes of truth, and like many promiscuous lovers, who cannot help but search for the next affair, the American system has picked up some lasting souvenirs along the way. Unfortunately, while many have tried to treat the symptoms of these encounters, the disease just does not seem to go away. One could also explore a Freudian interpretation of these encounters, but we will save that for another day.



levels of Government education and industry to increase the number of skilled workers and to broaden the competence of the entire workforce” (ibid). American society was embroiled in a Cold War and educators needed to race to prepare students for the fight ahead.

On September 2, 1957, an article in the *New York Times* even outlined the Soviet school schedule and the course of study for students in middle schools. In the article, the author levels criticism at the Soviet system’s poor grading structure and the low pay for teachers. However, in the same section the author adds, “The teacher is under great pressure to acquire extra skill” (Frankel, 1957, Sep. 2, p. 15). The pace of education was a concern in our self-examination while gazing at the Soviet model, and those who looked for a panoptic devise to instill this drive towards faster education got what they were looking for on October 4, 1957. Nothing has the power to instill anxiety about ones security like a seemingly invisible tin ball sending radio signals overhead.

On January 21, 1958, the Senate Committee on Labor and Public Welfare met to discuss the role of science and education for national defense. In hearings that lasted three months, the Committee reviewed the scientific programs in the Soviet Union and considered legislation to authorize Federal spending on programs for science education (Senate Committee on Labor and Public Welfare, 1958, Jan. 21). By 1959, the U.S. government had done their homework, and on September 6 of that year, the United States Office of Education published a 135-page report titled “Soviet Commitment to Education” (Hechinger, 1959, Sept. 6, pg. 1). The document summarized the findings of an eleven-member tour of the Soviet education system headed by U.S. Commissioner of Education, Lawrence G. Derthick. In it, the committee concluded that the Union of

Soviet Socialist Republics viewed education “as one of the chief resources and techniques for achieving social, economic, cultural and scientific objectives in the national interest” (ibid) – if only we could do the same.

In the years that followed the launch of Sputnik, the news media printed many more articles that promote education as a weapon in the Cold War. For example, on January 6, 1958, the *LA Times*, reported on a trip made by UCLA Chancellor Raymond B. Allen to Moscow in which the chancellor found, “Russian students are far more advanced than ours in the educational fundamentals” (Turpin, 1958, pg. 2). The article goes on to quote other education officials who argue for “less waste” in education and, who echo a recurring theme in this discourse - more attention needs to be paid to “gifted children” (ibid; see also *LA Times*, 1958, Jun. 8, p. B4). The Soviets winning the first leg of the space race provided reason for American officials to enact strict demands on educators and their students.

In 1958, Congress responded to growing anxiety about the Soviet Union with new education policies. The National Defense Education Act requires “the fullest development of mental resources and technical skills” of America’s students (P.S. 85-864, 1958, Sept. 2, p. 1581). Citing the “present emergency,” the law states, “The defense of this Nation depends upon the mastery of modern techniques developed from complex scientific principles” and it calls for “additional and more adequate educational opportunities” for students (ibid). America had to race if it wished to catch the Soviets.

By 1959, the media was reporting on the Soviet university system and their teacher education programs. In accordance with the precepts of the discourse promoted by Newton and Descartes, many of these articles analyze the Soviet system

quantitatively. For example, Hechinger (1959, Sept. 6) reports that Soviet student-teachers spend “40 per cent of their time on preparation of their major subject, 15 per cent on technological application of their specialty and 15 percent on the specific method of teaching their major subject” with the remainder of the time divided amongst general education classes (ibid). If American teachers could somehow match, or improve upon, these figures, we could beat Russia in the race to educate.

However, much like the fascination with the German model, the American crush with the Soviet education system faded over time, and although some portray the late 1950s as a time of national unity in calls for faster education, there are many voices who interrupted the discourse – though their voices were muffled. For example, a year after Sputnik’s launch, Adine Lough (1958) warned readers not to see the American education system as wanting. In a *LA Times* article, the author discusses the Soviet program of differentiation for ‘gifted’ and ‘slow’ learners; ‘gifted’ get an education, ‘slow’ get work in the fields. Lough concludes, “I wonder if any system which drops the majority of its students by the wayside and crams the minds of a select few with concentrated scientific data is one we care to emulate” (p. B4). In America’s race to educate, we do just that.

Similarly, a 1959 article printed in the *LA Times*, criticizes the Russian model for its “neglecting the humanities.” The author reminds readers that the Soviets have “superior work in art, dance and music,” but would an American education system ‘neglect’ these areas of learning in their haste to promote math and science (*LA Times*, 1959, Sept. 20, p. B4). This early critique of the paranoia that rationalized a race to educate is indicative of a weakness in this discourse during a time when it is supposedly the strongest, and it reminds us of what we have forsaken in the latest round of haste.

How many schools across America today have dropped their arts and music programs so that students can take one more session of reading or one more lesson in math in preparation for the standardized test?

In 1960, John F. Kennedy and Richard Nixon articulated each side of the fractured discourse in their October 21 presidential debate. In their exchange, Nixon defends the American education system of which, as the incumbent vice-president, he had been partially responsible. Dismissing Kennedy's claims that the Eisenhower administration left America behind the Soviets, the vice-president states, "the fact of the matter is that the space score today is twenty-eight to eight – we've had twenty-eight successful shots, they've had eight;" dismissing a similar claim that the Eisenhower administration left America second in education behind the Soviets, Nixon states,

I have seen Soviet education and I've seen ours, and we're not; that we're second in science because they may be ahead in one area or another, when overall we're way ahead of the Soviet Union and all other countries in science (Kennedy, 1960, Oct. 21).

According to Nixon's data and his personal observations, the United States was well equipped to 'keep-pace' with the Soviet Union, and there was no need to hasten change in American schools.

In his response to Nixon's claims, however, Senator Kennedy first rebukes the Vice-president for misquoting him, and then goes on to reinforce a narrative of American education that frames schools as an impediment to technological 'progress'. Kennedy states, "What I said was that ten years ago, we were producing twice as many scientists and engineers as the Soviet Union and today they're producing twice as many as we are, and that this affects our security around the world" (Kennedy, 1960, Oct. 21). According

to the senator, the United States was 'behind' in 'producing' the same number of engineers and scientists as the Soviets, and,

any citizen of the United States must come to the conclusion that the United States no longer carries the same image of a vital society on the move with its brightest days ahead as it carried a decade or two decade ago (ibid).

For many Americans, John F. Kennedy represented the future of the nation, and if he said that American schools were too slow, then something had to be done.

Continuing this narrative as President of the United States, Kennedy [mis]quotes H.G. Wells and states, "'Civilization...is a race between education and catastrophe.' It is up to you in this Congress to determine the winner of that race" (Kennedy, 1962, Jan. 11)<sup>37</sup>. Out of one side of his mouth Kennedy states that America is "a model to others" (Kennedy, 1961, Jan. 9), but out of the other side he positions the nation on a trajectory towards disaster. According to him, the speed of education has to increase in a world that is changing "fast" (Kennedy, 1960, Oct. 21). The future was upon us, and Americans had to race to defend our homeland and achieve our destiny.

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The 1960s and 1970s saw noticeable struggles in shaping education policy, but after two decades of struggle, President Ronald Reagan lent his powerful voice to support the education race. Throughout the twentieth century, education was discursively linked to economic 'progress' and it was linked to national security, but Reagan articulates a version of the discourse that triangulates discursive anxieties in education, national security, and the economy to shape a powerful narrative for the pace of learning. In

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<sup>37</sup> "Human history becomes more and more a race between education and catastrophe. Against the unifying effort of Christendom and against the unifying influence of the mechanical revolution, catastrophe won" (Wells, 1920, p. 1100).

1983, standing in front of an American history exhibit at Walt Disney World, President Reagan scolded the American education system for not producing enough engineers in the decades following Sputnik's launch, just as previous presidents had done. Citing increases in the number of engineers educated in France, Germany, and Japan between 1964 and 1979, Reagan called for renewed efforts in American schools to produce qualified employees.<sup>38</sup> Would these countries threaten the United States again if we did not keep up? Turning to the Soviets, Reagan cites their output of engineering students and states, "we must do better or we will be overtaken" (Hayes, 1983, pg. EHT5). Reagan sounds the alarm and he reminds Americans that we are once again under attack – this time, an economic attack.

However, the fear of being overtaken expressed by Reagan in 1983 is not the same sentiment as that expressed in similar articles during the 1950s. Massachusetts Senator Paul E. Tsongas, quoted in the same article sums up the mood this way: "I have no desire to see high technology....lost to the Japanese" (ibid). The race to

*It is here that the major failure in our effort to educate the "slow learner" becomes apparent. We want to believe that there is such a group of youngsters, and we want to define them by characteristics that have heavy value weights in our world. In this way we go about indirectly excusing ourselves from setting very high goals and permitting ourselves to continue to play the role of teacher as we have in the past (Mahan, 1965, p. 81)*

educate in 1983 is a mix of national security concerns with a twist of economic worry – the same flavor of propaganda employed by the Bush administration for No Child Left Behind and the Obama administration for the Race to the Top. In 1983, Tsongas references Japan as America's closest rival – our favorite crush in the 1980s – and in the 1990s and first decade of the twenty-first century, the gaze has focused on China. Yet,

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<sup>38</sup> We won't worry about the fact that these three countries were in ruins in 1945 and had lost significant percentages of their populations due to the War.

the equation is the same for both: choose a foreign country rising in world influence, throw out a bunch of fuzzy economic statistics making the U.S. look like we have an inferior workforce, follow with dire predictions of economic collapse, and impose an education policy that consolidates power and imposes tighter regulations for speeding up the pace of education.

At the forefront of Reagan's education policy was a document entitled, *Nation at Risk* (National Commission on Excellence in Education, 1983). This document has inspired many to believe the discursive drive for national curriculum standards, standardized assessments, novel pedagogy, and a race to educate kids. However, as powerful as this strategy is, it still is not satisfactory in explaining how we came to embrace this race in education, and it certainly is not enough to explain how we came to identify ourselves as subjects based on temporal values. Gazing overseas leaves uncertainty in people's minds about the value of such education policies; society needs a subject for closer examination, and that subject is the 'slow learner'.

### **A 'Dangerous' Subject: The 'Slow Learners'**

A threat to our national security is abstract when one cannot identify the opposition. Few Americans, for example, paid attention to our government's fight against Osama Bin Laden before his ideology hit us at home. Thus, despite calls from powerful government officials to increase the pace of education, this discourse has little influence on our lives unless we 'know' the subject who threatens our way of life. Consequently, while officials regulate a threat level that originates abroad (i.e., we fight in Afghanistan), popular support is secured when members of society become anxious about a threat that originates from within (i.e., we secure airports; we profile Muslim

Americans; we monitor internal communications). In the discourse that pushes Americans to race in their education, government officials cite statistics about rival nations, report novel pedagogies for 'faster' lessons, and structure educational institutions in a way that fosters the education race (e.g., standardized testing), but without a threat from within these measures gain little support. Therefore, in America's race to educate, the 'slow learner' subject is framed as a threat to society, a national security risk who burdens society in our march towards progress. With the 'slow learner' as an object of power, members of society can examine themselves to determine if they are learning 'fast' enough. Tortoises and hares can see how they measure up to the social ideal.

The discourse conveys the meaning of the 'slow learner' subject with various metaphors that frame the subject as a social liability. For most of the past hundred years, American society has used the label of 'slow' as a determinant diagnosis for treating less-privileged students, as a characterization for individuals who identify with differing cultures, and as an insult for describing incompetence amongst public officials. However, in all cases the media proliferates the meaning of slow as a label that designates something wrong with the subject – a deficit in character or ability. Thus, in this discourse if society wishes to eliminate defects in character amongst the population, one method of treatment is accelerating the pace of education.

The 'slow learner' insult has appeared in the discourse for over 130 years. For example, an article in an 1875 edition of the *San Francisco Daily Evening Bulletin* chastises city board members for not knowing the details of an upcoming civic project and states "they must either be slow learners or confused" (San Francisco Bulletin, 1875, Oct. 28, p. 1). In 1908, a Minnesota newspaper criticized Congress for not building up a



merchant marine fleet, stating, “This seems to be a slow learning, though a quick acting people” (Duluth News, 1908, May 14, p. 6). In other cases, the media has communicated the “slow learner” label to insult presidential candidates (Greenberg, 1972, Sep. 12, p. A18), city officials (Washington Post, 1966, Nov. 22, p. A16), State and local governments (Truman, 1947, Jun. 29), and other government agencies that are not popular with politicians or newspapers’ editorial boards (NY Times, 1971, Apr. 20, p. 42).

In the twenty-first century, this term still appears in the media. For example, *MetroWest Daily News* sports writer, Lenny Megliola called the Boston Celtics “slow learners” when they struggled to win a game during the 2008 NBA playoffs (Megliola, 2008, May 11).<sup>39</sup> Similarly, in 2010, the *Weekly Standard* called Barack Obama, Harvard Law School alum, former Illinois Senator, and president of the United States a “slow learner” because the author was frustrated with the President’s economic policy (Barnes, Fred, 2010, Jan. 25) – the *episteme* shields no one from this label if they violate expected norms of ‘progress’.

Perhaps because of its origins in educational settings, the media commonly uses the ‘slow learner’ label as an insult to criticize school officials – often in articles related to the education of less-privileged students. For example, the *New York Times* quotes Dr. Theodore Huebener, assistant director of the foreign language department in New York Public Schools as saying,

It is amazing what a skillful teacher can accomplish with ‘slow groups’...One might venture to say that in many cases where the teacher continually complains about ‘slow’ pupils, that adjective should be applied to the teacher and not to her class (*NY Times*, 1938, Feb. 19, p. 17).

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<sup>39</sup> The label of “slow learning” must have served them well that year because they went on to win the championship.

Huebener places responsibility for 'progress' onto teachers.

Similarly, a *New York Times* article from 1954 quotes a high school principal calling educators "slow to learn" pedagogy appropriate for training "pupils with lower than average intelligence" (Aug. 20, p. 9). One *New York Times* article insults officials at the nation's leading university as "slow learners" for surrendering to unpopular reforms (1969, Apr. 26, p. 36).

Even individuals with the highest measured I.Q. scores are characterized as "slow learners" when their actions do not conform to social norms. During the social tension that accompanied the Civil Rights era, officials applied this label to those who blocked school desegregation. For example, a 1956 article in the *Washington Post* quotes Dr. Horace Mann Bond, president of Lincoln University, as saying the Congress members who opposed racial integration in public schools "fall into the slow learning category" (Cormier, 1956, Dec. 20, p. B8). Similarly, a 1962 article in the *Washington Post* titled "Slow Learner" discusses Maryland schools' failure to desegregate (Mar. 1, p. A20). For many, the 'slow learner' was the individual who did not fulfill her or his duty as a member of society.

One might assume that people use the 'slow learner' insult without much meaning attached to it, but this term carries a supplement with a powerful history. Historian Mary Van Hoosan (1965) thought she knew the characteristics of the students in her class of "slow learning bilingual child[ren]." Like a recipe for baking, the author describes her students as a mix of

low I.Q., a little emotional disturbance, some immaturity, a smidgeon of cultural deprivation, a bit of malnutrition, some seasonal crop migration, plus a large portion of language barrier (p. 507).

This blend of characteristics creates a subject who some describe as “unteachable” (ibid).

In a society expecting a certain pace of ‘progress’, the ‘slow learner’ represents all that could be wrong with a child; if one is concerned about work ethic, the ‘slow learner’ is “lazy”. If one is concerned about poverty, the ‘slow learner’ is a “poor student”; if one is concerned about behavior, the ‘slow learner’ is the ‘unruly child’; if one is concerned about English literacy, the ‘slow learner’ is illiterate. In this discourse, the ‘slow learner’ is any subject who embodies a deficit in one or more privileged character traits society views as essential to ‘progress’; if society wishes to be secure, it must make ‘progress’.

In 1969, C.N. Apostle listed the many characterizations of the ‘slow learner’ that the media and academic literature had promoted in the first seven decades of the twentieth century. The full list of labels Apostle highlighted includes,

Abused child, anti-deductive reasoned, backward, bored, culturally deprived, delicate pupil, defective learner, deprived, disabled, disadvantaged, discontented, disturbed, dropout, disinterested child, dumb child, dunce, emotionally deprived, exceptional child, handicapped child, impaired child, insufficient re-enforcement, illiterate, lazy, limited ability, low I.Q., low scorer, maladjusted, mental dullness, misbehavior, misguided, misdirected, non-adaptive, non-involved, poor student, retarded, slow poke, sub-normal, stupid, too practical, un-coordinated, underprivileged, unhappy, unmotivated, unruly child, unsuitable, unteachable, underachiever(1969, p.5)

In short, for those who believe in ‘social progress’, the ‘slow learner’ is anyone who poses a threat to that ‘forward movement’.

### **Characterizing the ‘Slow Learner’ on the Great Chain of Being**

To understand how the ‘slow learner’ subject has come to be an object of power in America’s race to educate, we must consider the role of the narrative of Darwinian

evolution that has power in our society. By 1900, evolution helped explain the diversification of species, extinctions of animals, and why individuals like Theodore Roosevelt were economically successful compared to others languished in urban slums. For many, this narrative also explains why some societies dominate others and why those who are dominated 'fall behind'.

The most powerful metaphor of this narrative of evolution is the Great Chain of Being (Lesko 2001, p. 19-47). In Lesko's words,

The Great Chain of Being refers to the hierarchy of animals, people, and societies that portrayed evolutionary history and a sociological ranking extending from European middle-class males and their republican government on the top, through women to savage tribes, with the lower animals at the bottom (p. 22)

Justified with science, American society uses this metaphor to explain 'social progress,' and anything, or anyone, who 'stands in the way'. Roosevelt had power in society because he had 'progressed' in his evolution farther than other individuals who still struggled to overcome their 'primitive instincts'. Many believe that if the virile white-man is the epitome of human evolution, then anybody that is not congruent to the privileged form is 'behind' in their evolution.

The visible power of the scientific thought used in this discourse is so historically unique, a historian of the subject can identify the publication year of books employing this metaphor just by their contents (Cravens, 2006). However, power hides, and although studies overtly advocating conceptions of society along the Great Chain of Being are no longer published, the narrative that it conveys remains. By the late 1800s, science had gained status as the "nonpolitical, unbiased arena of knowledge" and disciplines within natural philosophy garnered prestige and influence in shaping American discourse (Lesko, 2001, p. 31). Charles Darwin's *On the Origin of Species*,

published in 1859, was one catalyst for this transformation of social, political, scientific, economic, and historic discourses. Stemming from Darwin's theory of evolution, and supported by the prestige of 'science', a plethora of pseudo-sciences followed attempting to explain much more than the survival of the species. Thus, people used Darwinian evolution as a premise for conclusions about the mind and body, and its influence on individual's physical and mental structures explained differences in abilities, behaviors, and thoughts (Cravens, 2006). Philosophers at the turn of the twentieth century, such as G. Stanley Hall, were influenced by a scientific discourse supported by Darwinian evolution so strong that they used this narrative to explain nearly everything they saw.

One of the scientific 'truths' supporting the narrative of a Great Chain of Being is ontogeny recapitulates phylogeny, or recapitulation theory. Recapitulation theory posits that individuals relive the evolutionary experiences of their ancestors as they mature into adulthood (Demos & Demos, 1969). As embryos, humans relive the primitive stages of life on this Earth and then with birth begin a process through human evolution that takes individuals from 'savage' to 'civilized.' The discourse of recapitulation theory requires members of society to recognize development stages, and requires them to accept behaviors that corresponded to those stages. Under universal time, society expects every child to develop at the same rate, and those who do not adhere to the norm threaten social 'progress'. Yet, while variance in the growth patterns of humans is great (both mental and physical), researchers such as Hall applied this

- I. *Past performance does not guarantee future results...*
- II. *Current performance may be lower or higher than the performance data quoted...*
- III. *An investor may obtain performance data current to the most recent month-end, unless the advertisement includes total return quotations current to the most recent month ended seven business days prior to the date of use (SEC, 2003)*

framework to everyone, privileging the ‘fast’ predictable white middle-class and muscular male (Lesko, 2001). Instead of fitting a theory to the child, they fit the child to the theory.

With Charles Darwin’s *On the Origin of Species* in hand, the theory of recapitulation, and the narrative of the Great Chain of Being at their disposal, scientists at the turn of the twentieth century mixed the discourses of statistical interpretation and natural selection into a toxic soup. Herbert Spencer (1820-1903), who coined the term “survival of the fittest” (1864, p. 444), and his followers posited a theory that became known as social Darwinism, which argues that individual success in a society is based largely on biological attributes. In the hands of Darwin’s cousin, Francis Galton (1822-1911), the theory of evolution and natural selection justified policies of eugenics (Kramer & Johnson, 1997, p. 38). Galton’s works, such as the 1869 *Hereditary Genius* and 1889 *Natural Inheritance* argues that individuals inherit intelligence and that the survival of human ‘civilization’ depends on selective breeding. Following Galton, Thomas Huxley (1896) is another scholar who advocates a eugenics movement based on the ‘survival of the fittest’. Huxley argues that society should trust ‘experts’ to select the best breeding stock for humanity.<sup>40</sup> According to this line of reasoning, for society to ‘progress’ into the future, it must separate individuals who threaten our survival. Those who are not at the top of the Great Chain of Being face extinction.

It is in this discourse of evolutionary anxiety, combined with economic and political pressures to maintain social dominance that Alfred Binet (1857-1911) and

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<sup>40</sup> Ironically, in an obituary written for Charles Darwin published in his collection of essays titled *Darwiniana*, Huxley tells of how “the collective intelligence of the staff of Shrewsbury School could find nothing but dull mediocrity in Charles Darwin” (p. 258).

Theodore Simon (1872-1961) put forward a method of identifying threats to society – a test. In Binet’s early writing, he plays with several of the founding principles of the eugenics movement; citing the work of Galton and Huxley, Binet, in works such as *The Psychology of Reasoning* (1899), *The Psychic Life of Micro-Organisms* (1897), and *On Double Consciousness* (1896) tries to articulate a relationship between psychological states and physiology (Kramer & Johnson, 1997, p. 37-38). It is with this foundation, that Binet and Simon develop their tests for intelligence with the expressed purpose of identifying ‘defective’ members of society.

As Foucault articulates in *Discipline & Punish*, the conception of time promoted by the theory of evolution makes a temporal dimension in the exercise of power possible (p. 160). Darwinian evolution invents a time in which societies march towards a terminal, stable point *but* also a serial time in which individuals are born into a society with the means of moving it ‘forward’. This sense of time promotes a discourse that drives people in American society to an anxious march towards ‘progress’ (Lesko, 2001). Well-grounded in the evolutionary theories of Darwin and Lamarck, the work of G. Stanley Hall (1844-1924) rests as firm evidence of Americans’ anxieties concerning their race to an evolutionary future. While Galton and Huxley may have been intent on breeding-out social deviance, Hall was more interested in educating-out these social problems.

While *Adolescence* is Hall’s most famous text, his view of “adolescence” appeared twenty years earlier in a *Princeton Review* article titled “The Moral and Religious Training of Children” (Hall, 1882). Hall characterizes “adolescence” as a time of “storm and stress” when teenagers lack emotional steadiness, have violent impulses,

demonstrate unreasonable conduct, and lack enthusiasm. He said during this transitional time, “a new individual is in process of being born” and “all is solvent, plastic, peculiarly susceptible to external influences” (p. 48, quoted in Demos & Demos, 1969, p. 635).

Hall viewed “adolescence” as a biological stage, and while he thought environmental and social forces exacerbate the “symptoms” of this stage, the behaviors of teenagers are inherent and dictated by evolution (Mintz, 2004).

Hall analogized “adolescence” to the metamorphosis of insects. He states,

The young pubescent, achieving his growth in the realm of fundamental qualities, dimensions, and functions, comes up to adult size at eighteen relatively limp and inept, like an insect that has just accomplished its last molt, and is therefore far more in the need of protection, physical care, moral and intellectual guidance;...this last great wave of growth throws the child up onto the shores of manhood or womanhood relatively helpless as from a second birth (Hall, 1904, I, pg. 47-48).

According to Hall, it is society’s responsibility to promote “proper” growth during this time and protect young people from the harmful influences hidden in civilization.

“Adolescents” who are not protected will slide back into their child state or, worse, face premature exposure to adult behaviors and be corrupted away from responsible adulthood. Reformers who followed Hall used his work to justify reorganization of schools, to explain juvenile delinquency, and to justify tighter controls on young people (Kett, 1971).

The theories of recapitulation and social Darwinism that Hall and others promote are dividing practices used to justify and explain a differential treatment of people with differing rates of growth. These theories do not explain the lives of most Americans, nor do they explain social inequalities; yet, the narrative of the Great Chain of Being is alive in the twenty-first century, and perhaps even more powerful than it was at the turn of the last century. The narrative that is promoted here legitimates and sustains the social



position of both privileged and marginalized individuals, thus, it serves as powerful knowledge that supports the race to educate despite few people recognizing that it is there.

Education officials position students who enter American schools on the Great Chain of Being, and the 'slow learner' subject is an artifact of this narrative. For example, the media often portrays individuals labeled as 'slow learners' as subjects whose ontological meaning is something less than human – in other words, the subject embodies a deficit in human evolution. This sense of individuals labeled 'slow' as a 'non-human' comes through in a 1954 scholarly article that claims,

Those of us who have taught homogeneous groups of slow learners in junior high school have undoubtedly wished at one time or another that school boards would amend their pedagogic theories to grant us the right to use chloroform, tear gas, and riot guns (Barber, 1954, p. 203).

The author claims that by the end of a class period with this group teachers return to their classrooms “with dark thoughts of murder or suicide or both” (ibid). Apparently, the best solution for a failed relationship is homicide – the author frames the subject with none of the rights that others would expect for all humans in American society.

In many cases, society dehumanizes the subject by framing individuals identified as 'slow learners' as savages or animals. For example, a *New York Times* article printed in 1879 compares 'slow children' to animals stating, “That animals cannot entertain abstract ideas is not at all surprising, seeing how slow children are to do the same” (Nature, 1879, p. 4; see also *NY Times*, 1957, Mar. 13, p. 33). One Salt Lake City, Utah elementary school principal frames 'slow learners' as vermin infesting his school. The principal states, “All my years in education I've been haunted by those little slow learners, slipping behind the class, trapped in a pattern of failure right at the beginning of

their lives” (Rogers, 1971, Feb. 7, p. B11). Deborah Sue Yaeger discusses a pre-school screening program to “ferret out slow learners” (Yaeger, 1975, Mar. 24, p. c2). At worst, society characterizes individuals identified as ‘slow learners’ as evasive rodents that school officials frantically try to eradicate; at best these students are unripe produce waiting for the day they will “bloom” (e.g., Shepherd, 1953, Feb. 9, p. 15; Glock, 1972, p. 405). To avoid such stigma, society expects students to learn ‘fast’.

The media frames ‘slow learners’, if not portrayed as animals, as the prehistoric ancestors of more-privileged members of society. A 1975 article in the *Boston Globe*, for example, mocks “Jerry F.” as “kind of a slow learner” and tells him, “you must be living in a cave” (McGrory, 1975, pg. 6). According to these articles, the subject who does not learn at a proper rate, or one who does not learn the desired knowledge does not deserve the privilege of modern housing or even classification as a modern human. As this last example illustrates, in many cases, if ‘slow learners’ were humanized at all, they are portrayed as being prehistoric or ‘backwards in time’. Many believe that if society wishes to defend itself from attacks that threaten to delay ‘progress’, then something must be done about these ‘slow learners’.

At the turn of the twentieth century, scholars looking to divide students framed marginalized individuals as ‘backward’ on the Great Chain of Being (e.g., Schwegler, 1914, p. 46). Furthermore, some authors use the term for identifying otherwise ‘normal’ individuals who were not successful in school (Franklin, 1994, p. 13). For example, at the 1909 meeting of the Conference on the Education of Backward, Truant, and Delinquent Children, McNeal described eighteen categories of ‘backwardness’. Children labeled as ‘backward’ were those who could not speak English, had unsatisfactory school

attendance, identified with weak study skills, or did not complete required schoolwork. The following year, Howard McQueary, speaking at the seventh annual Conference on the Education of Backward, Truant, and Delinquent Children, states that the term 'backwardness' refers "more to school attainment than to mental status, that is our emphasis is upon failure to make regular progress in grades with the average group of children" (quoted in Franklin, 1994, p. 14). The identity 'backwards', shifts from a label used for students whose assessed intelligence and learning rates deviate significantly from the norm, to those students who "are slow or dull and cannot progress at the rate that our ordinary school curriculum presupposes" (Goddard, 1914, p. xvi). Regardless, however, in the race to educate the 'backward child' poses a threat to a society eager to move 'forward' in their evolutionary trajectory. Though labeled with differing terms, subjects characterized with this trajectory that threatens the Great Chain of Being are those who officials identify at various times as 'retarded', 'slow learners', 'learning disabled', 'at-risk', or 'struggling students'. Yet, the characterization of these individuals as subjects who impede the march of 'progress' does not go away when the label of 'backwards' falls out of style. Anyone in society who cares about her or his social ranking is aware of how these labels impact one's status, thus individuals and teachers race to educate so as to avoid identification as a threat to America's future.

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Corbett (1996) argues that a "damaging paternalism" works to infantilize marginalized subjects (see also Gilligan, 1982). On the Great Chain of Being, society infantilizes the most marginalized subjects into a state of dehumanization. Consequently, in this line of reasoning, less-privileged individuals must struggle to have their voices

heard as “adult voices” (p. 77) – many must struggle to have their voices heard as “human.” With this insight, it should be little surprise to see that a discursive connotation between the pace of education and maturity is perhaps the strongest trope employed for describing individuals labeled as ‘slow learners’. The Great Chain of Being is a spectrum with the most privileged individuals framed as White, affluent, mature and masculine, and the least privileged, as we discussed, dehumanized.

Thus, by 1914, American guidebooks on how to use intelligence tests, such as the Binet-Simon tests, report that education officials may use these assessments “as a definite measure of relative mental unfoldment” (Schwegler, 1914, p. 7). Adopted in 1904 by the Parisian municipal government for use in city schools, the original purpose of testing intelligence is expressed by Alfred Binet and Theodore Simon as “a guide to the admission of mentally defective children to special schools or classes” (1914, p. 10-11). They wanted to divide society so that individuals judged ‘defective’ would not interfere with the education of others. However, they saw potential to track individual ‘development’, and published a series of fifty-six tests aligned to age norms in 1908 (ibid).<sup>41</sup>

When Henry Herbert Goddard (1866-1957) brought the tests developed by Binet and Simon to the United States, the measurement of intelligence received a discursive twist (Carlson, 2005, p. 114). Mixing the discourses of eugenics, social Darwinism, the Great Chain of Being, and quantitative measurement, the intelligence test in the United

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<sup>41</sup> A second modification was published in 1911 and shortly after Binet’s death, a third scale was published under his name (Schwegler, 1914). One should also note that despite Binet and Simon describing children as “defective” or as “defectives almost 200 times in their 180 page English translation of *Mentally Defective Children*, they say that it is “chimerical and absurd to judge the intelligence of a child by one test alone” (Binet & Simon, 1914, p. 67). Despite this warning, millions of children were (and still are) judged based on just that – one test.

States became a way, not only to explain mental deviations from the norm, but also a way to track individual progress towards becoming the 'average man' (ibid, p. 147).

Binet and Simon's test was different from previous attempts at assessing intelligence. G. Stanley Hall used questionnaires that did not provide acceptable quantitative comparable results, and the nineteenth century method of craniometry, the measuring of human skulls for assessing intelligence, was difficult for measuring intelligence in growing children, never mind scientifically invalid (Montagu, 1975, p. 146). However, the intelligence test promoted by Binet, Simon, and Goddard, could gaze into the minds of subjects, and detect the 'feeble minds' that were hidden from plain sight (Carlson, 2005, p. 146). As one author notes, "Intelligence tests may describe ability to grasp problems, to invent ways of meeting them and help criticize ways of working out situations" (Marke, 1949, May 4, p. B7). Just like the x-ray machine invented at the end of the nineteenth century, intelligence tests offered trained experts a glimpse at what was inside the body.

Despite rigorous criticism by members of the psychiatric field, such as Abraham Myerson who challenged the eugenic premises involved in identification techniques such as intelligence testing, the appeal of having the ability to identify hidden 'defectives' in society won wide support (Trent, 2001, p. 34). For example, a study published in 1923 by Carl Brigham argues that what he saw as declining scores in intelligence tests, were resulting from the large numbers of immigrants of 'inferior racial groups' examined with culturally biased tests (Trent, 2001, p. 42). Under the prestige of medical discourse, and with its apparent ability to identify previously invisible 'morons' (an invented classification), the intelligence test was positioned for success in the United States.

In 1914, Schwegler boasted that with the intelligence tests, “the teacher, the parent, the social worker and the juvenile court should find in this scale an invaluable instrument for the solution of many complex problems” (Schwegler, 1914, p. 3). If individuals delayed on the Great Chain of Being threatened social ‘progress’, then these tests would identify those individuals and assess the extent of the problem. For the Binet-Simon test in 1914, the determination of an individual’s mental age was a simple calculation:

[If a subject of] ten years of age, passed all the tests in Age VIII, he passed four tests in Age IX, passed two tests in Age X, one test in Age XI, and one in Age XIII, the basic age, that in which he passed all the tests, is eight years. He passed in addition 8 higher tests:  $8 / 5 = 1.6$ . Eight years plus 1.6 years = 9.6 (Schwegler, 1914, p. 45)

Thus, officials could consider an individual to have a mental age of 9.6 despite having lived for ten years – bad news on the Great Chain of Being.

From that calculation, the next step was the identification of bodies based on arbitrary determination of ‘normal’ and ‘defective’:

The child who lags three years behind his chronological age is classed as backwards...The child which shows a mental age of from 0 to 2 years is classed as an idiot...The child with a mentality of from 3 to 7 is classed as an imbecile...the child with a mental age of from 7 to 12 years ranks as a moron – a term substituted for the earlier word “feeble-minded” (Schwegler, 1914, p. 46).

The author reminds us that these classifications are only temporary for the developing child, and that its final determination of deficit should only be determined after “the age of final crystallization has been reached” (ibid).<sup>42</sup> However, the identification of pathology is nearly impossible to dispel in a society so anxious about the future.

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<sup>42</sup> If we follow Schwegler’s argument and we call upon more recent neurological research that finds the brain not ‘crystallizing’ until age 20-25 (Blakemore et al, 2011), shouldn’t we delay labeling students until that point?

The birth of intelligence testing and the classification of mental age give power to the characterization of marginalized students as immature humans. For example, Ingram (1935) identifies pupils assessed with intelligence quotients between 50 and 75 as “mentally retarded” and frames these individuals with mental ages between 5 and 10 years regardless of the number of years they have lived on Earth. Similarly, Ingram identifies students assessed with intelligence quotients of 75 to 89 as “dull normal” and frames them with mental ages rarely advancing past 12 years (p. 22). In these classifications, the perception of intelligence deficit automatically labels an individual as a juvenile regardless of their age.

This characterization of individuals labeled ‘slow learners’ as immature learners is communicated often in the context of reading instruction (e.g., Stahlecker, 1962, p. 80), and the link between reading ability and maturity levels often comes from assessments of reading speed. Many academic assessments, such as DIBELS, assume that reading fluency is the distinguishing characteristic between those who are ‘normal’ and those who need interventions (Newkirk, 2012). In 1958, for instance, the *Washington Post* reported on a meeting between Harry W. Lewis Jr., the supervisor of the District’s public schools’ Reading Clinic and Nila Banton Smith, a “reading expert” from New York University (Knoll, 1958, Mar. 25, p. A1). The article quotes Lewis as saying that “reading maturity” is about 200 to 250 words per minute – a speed achieved by most students by the end of sixth grade. If one reads slower than 200 words per minutes, the implication is that she or he is an ‘immature’ reader, and an ‘immature’ human.

Likewise, the discourse promotes an idea that readers’ fluency should progress at standard rates. For example, Karlin (1961) provides a “simple formula” for determining

students' 'normal' reading levels. The author states that teachers should take the number of years in school multiplied by a student's I.Q., divide by 100, and add one (p. 281). Officials should thus expect a child entering ninth grade with an I.Q. of 80 to read at the seventh grade level. For many students, failure to meet the norms created by these equations leads to dramatic academic and personal consequences. For example, while many readers may think the current policies linking standardized test scores and grade retention are an invention of the No Child Left Behind law, in 1981, a New York City policy required 17,500 students to stay back due to unsatisfactory standardized test scores in reading (Price, 1982, Apr. 26, p. A16). Students who did not progress with their reading ability at the normal rate, were, and still are, held back in school – a clear motivation to race.

While I do not dispute the importance of teaching students how to read by providing them with texts appropriate for their reading abilities, the perception of 'blind-objectivity' in these types of formulae is dangerous. In many cases, the prescription for teaching students identified as 'slow learners' how to read has been to supply these students with easier texts (e.g., Heavey 1951, p. 9). Yet, in many cases, the persistent use of equations for determining reading level and the use of a pedagogy that reinforces a static notion of relative ability bars these students from developing reading skills at their own paces. For example, Karlin (1961) writes, "the youngster who is pushed to achieve beyond his present limits may suffer damage that can be difficult to remedy" (p. 281). In other words, once officials calculate a student's supposed reading level, teachers and students risk "damage" if they deviate from the prescribed reading lists. This type of



pacing helps create a situation in which students learn in a system that recognizes a deficit and simultaneously holds them captive to this identity – a double bind.

Furthermore, the assignment of texts based on a mathematical calculation of reading ability, no matter what the equation, has led to a notion that students identified as ‘slow learners’ and students identified as ‘normal learners’ have different interests in what they read. A 1932 *Christian Science Monitor* article describes a classroom in which this differentiation is in full motion; the author describes a teacher who “entices [‘slow learners’] to read through fascinating and simple picture books” (Tuttle, 1932, Mar. 1, p. 6). Similarly, a study published by McCracken (1954) supports the idea that ‘slow learners’ need picture books. Scorning educators who teach students labeled as “dull children” with materials that are “academic” and “bookish,” McCracken writes, “the slow-learning child learns more rapidly from experiences which are vivid, colorful, meaningful, detailed, concrete, and interesting to him” (p. 103).

In accordance with this line of thought, comic books are popular during the Cold War era as a means for helping some students learn to read. A 1972 article published by the Associated Press quotes a reading teacher who states, “Remedial readers need comic books to spark their interest in other literature” (1972 Oct. 31, p. 10). Likewise, a 1979 article printed in the *LA Times* profiles a teacher of “slow-learning eighth graders” who uses “Classic Comic books with the back pages torn out” to help her students enjoy reading (*LA Times* 1979, Jul 22, p. B2). The author of this last article adds that the teacher gets students engaged with the comics then swaps in “*real* books to find out how the stories ended” (ibid, italics added). Students are given pictures books until they “mature” as readers, at which point they are given the “real” books.

This last sentence raises questions about the nature of “real” literature and the value of canonized texts. Although I will not explore that concept here, when viewed in terms of a discourse of maturity the message is clear – “mature readers” read fast and they read texts without pictures; “immature readers” read texts with pictures and they read slowly; thus, students identified as “slow readers” are immature.<sup>43</sup> Differentiated reading materials within the classroom thus work as a disciplinary mechanism for the race to educate; all members of the class can see who is ‘fast’ and who is ‘slow’, who is ‘backwards’ on the Great Chain of Being, and who is ‘advanced’, who is a valuable member of society, and who is a threat.<sup>44</sup>

However, the *episteme* in the race to educate does not allow us to hear that many of the same individuals monitored closely by education officials because of their ‘immaturity’ are the ‘mature’ unsupervised caretakers at home. This message does appear at times; for example, in 1971, the *Boston Globe* brought attention to a teenaged girl named Mary Ann who is described as ‘a slow child’ by her social worker, but who writes to the *Globe* asking for help in bringing a toy to her twelve-year-old brother for Christmas. Mary Ann was educated in a special school for children who had difficulty keeping pace, but without any requests for herself, she takes on the role her ill mother was not able to play and she advocates for her family (Sales, 1971, Dec. 20, p. 17). Individuals like Mary Ann interrupt the narrative that frames individuals labeled ‘slow

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<sup>43</sup> As Newkirk (2012) argues convincingly, that line of reasoning has serious flaws.

<sup>44</sup> The infantilization of individuals labeled ‘slow readers’ is made even more visible with the surveillance of community volunteers. For example, a 1967 *Boston Globe* article celebrates the volunteer work of unpaid community members who, “look like grandpas and grandmas” (Ross, 1967, Jun. 25, p. F15). The article describes how these “housewives, former auto mechanics, toolmakers, railroad workers, [etc.]” work one day a week as “personal tutors” for ‘slow learners’ (ibid). While other students play the adult roles of scientist, historian, writer, and mathematician with their school work, these students are presented as children who require the loving support of a grandparent.

learners' as immature subjects. However, communication of stories like these is rare, because without this characterization the urgency to race education cannot be communicated to the public.

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The Great Chain of Being is a dominant metaphor in American society's explanation of educational difference and socio-economic inequality in this country. Consequently, issues of race and racism are at the foreground of many important discussions about social justice in American education, and attention to this issue is integral to one's understanding a history of America's race to educate kids. The 'slow learner' stigma is associated with individuals perceived to embody deficits in privileged knowledge and skills, but the discourse also joins it, most powerfully, to characterize individuals with perceived deficits in the body itself. On the Great Chain of Being, remember, the white-body is the one privileged and anyone of color is framed as evolutionarily 'backwards'.

Even before Charles Darwin published his theories, eighteenth century authors, such as Carl Linnaeus and Georges-Louis Leclerc framed non-white subjects as "stupid" and "savage." Darwin's theories on evolution strengthened the narrative and an American society structured to promote racial segregation only reinforced such misguided ideas to the point that many people believed them as fact (Cramer & Johnson 1997 citing Popkin 1973; see also Lesko, 2001). Yet, American schools are as much a part of the structural proliferation of this discourse as any other institution. When society expresses anxiety about the pace of education, in many cases, that focus translates into

increasing attention on new immigrants and students of color. Many European immigrants and poor white children can escape examination if they know how to 'play school', but children of color are easier to target because of perceived racial differences (e.g., *Christian Science Monitor*, 1958, p. 18). Thus, the race to educate gains power by focusing society's gaze on schools with large populations of students identified as African American, Latino, and immigrant. In a nation anxious to maintain progress on the Great Chain of Being, these students stand as a threat to society.

Beginning after the Civil War, when increasing numbers of citizens of color migrated out of the South seeking social justice and economic opportunity, and increasing numbers of individuals from Eastern Europe and Asia immigrated to the United States seeking the same, privileged subjects concerned about 'social progress' were able to position new arrivals to their communities as foreigners. Consequently, society framed individuals who were foreign to the privileged culture, as 'slow learners' because they had not mastered the knowledge required for inclusion. Subsequently, society framed those individuals already positioned as 'slow learners' as foreigners to the privileged knowledge. In this strain of the discourse, the 'slow learner' is the subject who embodies a deficit in knowledge of privileged American culture.

With the mass migrations that occurred during the nineteenth century<sup>45</sup>, many Americans searched for backwards immigrants who they believed impeded the 'progress' of American civilization. In 1900, two-thirds of the people living in New York City were

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<sup>45</sup> Northern cities in post-bellum America experienced drastic population shifts; for example, Chicago's population increased fivefold from 1860 to 1880 and then doubled again during the later decade (Gross & Sheth, 1989, p. 709 citing Abbott, 1936, p. 26). Similarly, the population of New York City in 1900 almost equaled the population of the entire country a half-century before (Gross & Sheth, 1989, p. 709 citing Boyer, 1978, p. 123).

identified as immigrants and their children (Gross & Sheth, 1989, p. 709 citing Boyer, 1978, p. 123). However, unlike earlier migrations by groups from Western Europe, the populations that came into the country or migrated from plantations in the South at the end 19<sup>th</sup> century were from increasingly different cultures as far as perception was concerned (Gross & Sheth, 1989, p. 709 citing Ripley, 1908, p. 224). For example, historian Arthur Schlesinger (1921) notes the changing populations and argues that the newest immigrants are the cause of increasing social problems in America's urban centers (Gross & Sheth, 1989, p. 706 citing Schlesinger, 1921, p. 83).

With concerns about assimilating new immigrants, Theodore Roosevelt, in his first annual message to Congress, argues for an immigration law that would require an "educational test" of immigrants' "intelligent capacity to appreciate American institutions and act sanely as American citizens" (Roosevelt, 1901, Dec. 3). These tests, according to Roosevelt would "decrease the sum of ignorance, so potent in producing the envy, suspicion, malignant passion, and hatred of order, out of which anarchistic sentiment inevitably springs" (ibid). Many officials believed that 'slow-learning' foreigners were trouble for a society that desired social harmony and economic 'progress', never-mind any threats to evolutionary trajectories.

Similarly, President Warren G. Harding frames foreigners as the cause of "excessive illiteracy" in American schools. For Harding, it was the Federal Government's job "to devise means and effectively assist in the education of the newcomer from foreign lands, so that the level of American education may be made the highest that is humanly possible" (Harding, 1922, Dec. 8). According to the President, education was a means to "Americanization," and one who wished to exercise the duties

and privileges of American citizenship had to demonstrate the requisite knowledge (ibid). Immigrants who assimilated to the privileged discourse would be “American;” those who did not assimilate would remain foreign and marginalized in the society.

Those citizens concerned with this perceived threat to America’s progress adopted several differing strategies in hopes of keeping the nation ‘moving forward’. In many cases, turn of the century Progressives searched for ways of assimilating new immigrants into the dominant discourses of American culture. For example, reformers such as Jane Addams argued against the social structures that hinder immigrants’ adoption of American cultural norms. Addams spoke out against the “industrial exploitation” immigrants faced, and urged politicians of that era to rethink their policies (Addams, 1920). Similarly, Mary Richmond addresses the perceived filthiness of immigrants and their communities as a result of poor income and lack of time due to their employment conditions (Richmond 1907, p. 312). Progressives, like Addams and Richmond, argue that immigrants would Americanize if society only gave them the opportunity.

Reformers working for improved housing and better labor conditions for immigrant populations helped the discourse of Americanization gain power in the early decades of the twentieth-century. However, the apparent benevolence of this work hid a message to those who wished to retain their native customs and to those who did not assimilate fast enough. In their examination of these documents, Gross & Sheth (1989, p. 717) argue that the guise of improving social mobility promotes an assumption that urban slums were not necessarily a result of structural inequality, but rather that problems in these areas resulted from characteristics of the inhabitants themselves. While criticism of these policies were voiced by reformers such as Grace Abbott (1917, p. 295), the

dominant narrative for explaining impoverished immigrants in American society became one in which they chose life in the slums and their inferior native way of life hampered their demanding anything better (Gross & Sheth 1989, p. 718). Thus, society labels anyone who rejects Americanization or who does not assimilate at the privileged pace 'slow'. However, the logic of this narrative dictates that those individuals already labeled 'slow' are also foreign, and anyone who lives in poverty comes to embody deficits in the knowledge and practice that make one an economically successful American.<sup>46</sup>

In 1946, Robert T. McMillan published a study that supported just such a conclusion. He writes, "The progress of children in school depends more largely upon the family's socioeconomic status and other influences outside the school situation itself than is generally recognized (McMillan, 1946, p. 126). McMillan argues that while education officials tend to over-emphasize other individual characteristics to explain differences in students' 'progress' in school, differences in socioeconomic status account for significant deviations in students' trajectories. Thus, economically poor students are 'at-risk' of having 'slow progress' in school. However, the discursive race in education does not pause to examine the structural causes of poverty, instead it promotes a narrative in which 'slow learning' is the cause of poverty and the cure for such social ills is a faster education.

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<sup>46</sup> This discursive link between foreign culture and the pace of learning is seen in the language used to describe 'slow learners' during the early twentieth century. Throughout the newspaper accounts and academic journal articles published at this time the word "sloven" or "slovenly" is often used when referring to 'slow learners'. For example, in a study on English errors made by 'slow learners', Rothenberg (1943) states, "a major source – of illiteracy among slow learners is slovenly speech. While the more academic student of similar background may speak with equal slovenliness, he is more inclined to write in standard English than is the nonacademic student" (p. 552). A foreign language user, when speaking and writing in school, becomes an automatic qualifier for the 'slow learner' label.

Consequently, concern for the “culturally deprived child” becomes a focus for educators and policy makers who wish to address ‘slow learning’ in American schools. For example, Black (1965) describes “the deprived individual” as one who “is relatively slow at cognitive tasks, but not stupid,” and one who “often is slow, but may be persistent when the content is meaningful and valued” (p. 465 citing Riessman, 1962). According to Black, the subject also,

often appears to be anti-intellectual,...traditional, superstitious...somewhat religious...inflexible...feels alienated...holds others to blame for his misfortunes...deficient in auditory attention and interpretation skills...is deficient in the communication skills...[and] has wide areas of ignorance (Black, 1965, p. 465-466, citing Riessman, 1962).

Some scholars even argue that this “cultural depravity” stands as a block to students achieving their “true potentialities” (Lammers, 1967, p. 298; see also Block 1937, Jun. 6; Keyes, 1965; Grant, 1965, Dec. 8, p. A1). Few individuals in this discourse argue that school officials block students’ “true potentialities” with labels of “cultural depravity.” This double bind traps students in a narrative of deficit and enters them in a race they cannot win.

For individuals already marginalized in American society, this anxiety about eradicating “cultural depravity” within a society that privileges White middle-class male knowledge makes them the targets of power in the race to educate. In the first decade of the twenty-first century, for example, African American students are significantly overrepresented within the categories of mental retardation and emotional disturbance (Jordan, 2005, p. 128). As Jordan states,

These children were therefore positioned at the bottom of the educational system, and were often segregated or excluded from public education. Such discriminatory practices were premised upon white American’s assumption of African American intellectual inferiority which some psychologists sought to validate through the use of IQ tests (Jordan, 2005, p.132).



Through the disciplinary technologies of the gaze and the examination, as well as the sovereign power of structural discrimination, society traps students of color in a discursive narrative of deficit.

Throughout the twentieth century, authors' statements continued to frame students of color as 'slow learners'. For instance, Long (1940) argues, "On the average in the South the Negro pupil must spend 9.2 years to get the same amount of school attendance as the white child gets in 8 years of elementary education" (Long, 1940, p. 458). With expectations like these present before students even entered the school, students of color had to race just to avoid falling into the narrative set for them.

Thus, a noticeable level of racial segregation based on students standardized test scores comes through in several newspaper reports. According to a 1944 *Daily Boston Globe* report, seventy-five percent of the pupils in one Boston area school for "retarded children" were Black girls (Lyons, 1944, Nov. 1, p. 6). Similarly, an article about the four-track system in Washington, D.C. schools, reports the following enrollment figures: "honors, 18 whites, 18 Negroes; college, 14 whites, 56 Negroes; general, 38 whites, 132 Negroes; basic, 38 whites, 109 Negroes" (Furman 1957, Feb. 24, p. 43).<sup>47</sup> Similarly blatant discrimination was noted by authors who observed IQ based racial segregation in schools that severed (or under-served) other racial minorities (e.g., *LA Times*, 1968, Aug. 1, p. C2C).

For some, inferior status on the Great Chain of Being justifies inferior opportunities in school and in society; individuals who do not overcome this structural

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<sup>47</sup> The discrepancy in the distribution of White students and Black students in the various 'tracks' is so noticeable I feel no need to argue the point with reference to statistical analyses.

discrimination then validate their status as threats to society's 'progress'. In the same article, Furman reports that the District's student achievement scores had garnered Congressional oversight due to their 'poor showing'. However, instead of examining test validity or systemic discrimination in social resources, school officials dismissed the low scores citing "the large percentage of Negro pupils here" (ibid). Students' racial designation is framed as the direct cause of the school's problems rather than the cause of discrimination that leads to inequalities in educational assessments. *Brown v. Board of Education* had forced schools to integrate, but officials were quick to frame any student who refused to assimilate as a 'slow learner' and positioned them as a threat to society. The 76 white students enrolled in the District's two least privileged tracks may have scored no better on those tests than their similarly segregated peers, but according to some, it was the Black students' fault for the school's failure.

The discriminatory structure of standardized intelligence tests did not escape the ire of a watchful public, however. In 1958, for example, Marie Smith reported on a meeting of the National Council of Negro Women in which the executive board voted to launch a "crash program" to address the discriminatory practices against minority groups in public schools (Smith, 1958, Jan. 18, p. C4). Citing Dorothy I. Height, national president of the Council, Smith reports that the group agreed, "to urge mothers everywhere to examine school tests to determine whether they are discriminatory, and where they are, to take action" (ibid). According to Height, school officials used standardized intelligence tests to label Black pupils "slow learners" or "hopeless students" and to push them toward less-privileged careers (ibid). The power of this discourse could not hide from all.

Similarly, in 1959, New York City teacher, David Engler gained attention with his book questioning the validity of I.Q. tests. Engler argues that standardized tests cannot measure the depths of individuals' potential, but rather only measure the "surface indications" of intelligence. Thus, Engler's book, *How to Raise Your Child's I.Q.* attracted controversy when he advised concerned parents how to improve their child's test scores (NY Times, 1959, Jan. 20, p. 41). Many in society did not want marginalized people to know this justification for individuals' place on the Great Chain of Being was empirically flawed.

Similarly, Israel & Riefe (1974) cite standardized tests biased along lines of socio-economic class. In an article concerning a ballot question that would eliminate 'tracking' and IQ testing in Boston area schools Israel & Riefe write, "Of course, working class kids do worst, which seems to confirm what teachers learn in most teacher-training programs – that poorer kids are 'less able' to learn due to 'bad backgrounds'" (Israel & Riefe, 1974, Nov. 5, p. 22). These authors communicate how 'working-class' students struggle against a double-bind that reinforces stereotypes concerning their abilities to learn privileged knowledge.

Furthermore, a 1977 *Los Angeles Times* article proclaims that intelligence exams, "have failed to pass the test as the sole factor in determining what a child knows, and what he is capable of learning." This statement coincided with many states and the Federal government passing laws banning the use of written IQ tests as criteria for segregating students (Lane, 1977, Oct. 13, p. SE1). Lane reports that a Black woman in San Francisco sued her school after she was placed in a class for students labeled "educably [sic] mentally retarded" due to her results on an IQ test (ibid). In 1979, a

federal judge held unconstitutional California's use of IQ tests in placing students because of their tendency to place a "grossly disproportionate" number of black students in classes for subjects labeled "mentally retarded" (Hager, 1979, Oct. 17, p. A16). Standardized intelligence tests are culturally biased, and the Federal Courts recognized that fact – for a few years at least.<sup>48</sup>

Yet, despite a history of authorship arguing for cultural tolerance in schools' curriculum planning, this powerful discursive link between poverty (however you wish to define it) and 'slow learning' has inspired neither acceptance of differing cultures, nor has it successfully enacted equitable economic conditions in America. Some authors continue searching for empirical links between race and intelligence. Arthur Jensen, for example, suggests that hereditary factors account for about 80% of intellectual capacity, and that "genetic inferiority" accounts for a fifteen-point deficit in Black students' IQ scores. His 1980 book, *Bias in Mental Testing*, caught the attention of reporters who thought this line of reasoning had died with the criticisms launched by critical scholars who dismissed this line of reasoning as racially biased (Lopez, 1980, p. C5; see also Miele, 2002; *LA Times*, 1968, Aug. 1, p. C2C). However, despite many Americans dismissing Jensen's conclusions, this discriminatory practice is still powerful in shaping school policy and students' lives (see Taubman, 2009).

This discursive link between poverty and the pace of education has also justified practices that race to assimilate perceptively poor students into privileged norms without

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<sup>48</sup> Today the power of IQ tests in the process of segregating students and differentiating treatment of schools is hidden by the use of "achievement tests," such as those mandated by No Child Left Behind, but for many students, the effects have not changed despite the different format and name. Achievement tests identify students who have not mastered privileged knowledge at the expected rate and justify discriminatory educational practices labeled under the guise of "educational interventions."

simultaneously changing the structural and discursive barriers that block them from privileged status in society. According to officials like President Lyndon Johnson, the eradication of poverty requires an official declaration of war; however, this war leaves children as “refugees” in a conflict where the means only delay the ends (Waters, 1967, May 31, p. 14). The 1965 Elementary & Secondary Education Act enshrined this narrative into law; Title II, Sec. 201 reads,

Congress hereby declared it to be the policy of the United States to provide financial assistance...to local educational agencies serving areas with concentration of children from low-income families to expand and improve their educational programs by various means (including preschool programs) which contribute particularly to meeting the special education needs of educationally deprived children” (PL 89-10, 1965, Apr. 11, p. 27)

If American officials wish to maintain ‘progress’, they must assimilate ‘foreigners’ and ‘refugees’ who have been ‘slow’ to adopt a standard-English language, ‘slow’ to adopt a ‘Protestant work-ethic’, and ‘slow’ to adopt the other cultural norms required for economic success in privileged White American culture – even if those ‘foreigners’ and ‘refugees’ had been born and raised in the United States. This discourse, thus, supports a narrative in which students entering school from a position of racial minority or economic poverty risk being labeled as ‘slow’ and any student who is labeled as a ‘slow learner’ is regulated under the threat of economic poverty if she or he does not make efforts to quicken her or his pace.<sup>49</sup>

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<sup>49</sup> Ironically, one innovation for treating ‘slow learning’ was the invention of a new written language. In 1962, Phil Casey wrote about a solution that may have solved language issues with students labeled ‘slow’ altogether (Casey, 1962, Nov. 17, p. B17). Reporting on the work of Sir James Pitman, Casey outlines a ‘treatment’ that promised to help children read “relatively easily and quickly” and ensure that “slow learners make better progress” (ibid). The solution for Pitman was a new alphabet with 42 letters; C’s, Q’s, X’s, and other multi-phonemic letters were replaced with 19 new symbols that would “clarify inconsistencies of sound and letter in the standard alphabet.” The alphabet, according to Casey was never intended to replace standard English, but rather help students prepare for the traditional alphabet by introducing them to reading and the sounds that made up the language. Instead of working out the  
*Note continued on next page.*

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The double stigma of the 'slow learner' label with racial classifications reinforces the power that marginalizes less-privileged individuals in society. The label of 'slow learner' is supplemented with characterizations that often describe students of color; conversely, one's position as 'raced' is supplemented with characterization that often describe students labeled as 'slow learners'. This compounding of status is an effect of society framing individuals with these labels at similar positions on the Great Chain of Being. Thus, society uses the stigma of one marginalized identity to frame less-privileged individuals into an even less powerful social position.

One can see this strategy of power when society juxtaposes labels of learning speed and labels of gender just as one can see a similar juxtaposition of the former labels with labels of race. As the discourse correlates a relationship between individuals' racial identity and their status as 'culturally impoverished', 'immature', and 'slow', one can see a similar promotion of women as, 'infantile', 'slow', and 'foreign'<sup>50</sup> with the reciprocal discursive implication that individuals labeled 'slow' are 'infantile' and 'feminine' (see Bederman, 1995). For example, in his syndicated "Let's explore your mind" column, Dr. Albert E. Wiggam (1936, Sept. 18) promotes this idea with an article citing "brilliant boys'" apparent disdain for feminine literature. Citing a study by Harriet Estabrook O'Shea, Wiggam states that the "brightest children of both sexes – but especially the

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phonemes in the sentences, "Little bear sat in the top of a high tree. He looked all about him at the wide, wide world," the "Pitmanese alphabet" would read "litttle baer sat in the top ov a hie tree. hee lookt aul about him at the wiede, wiede world" (ibid). Simple, right? Apparently, this solution did not catch on in Pitman's native country, or in America, but others kept searching for methods that would have wider appeal.

<sup>50</sup> e.g., *Men are from Mars, Women are from Venus*

brilliant boys – either cared little for or else disliked such books as ‘Little Women,’ and Pollyanna books in general, whereas such books were much better liked by the average and slow children” (p. 29). Wiggam does disclaim that the author could not determine why there was a difference in literature preference between the groups of students, but the message is clear to any reader –feminine topics are for children identified as ‘slow’.

This discursive link between ‘slow learning’ and femininity stirs much anxiety when labeling students in schools. A concern for keeping boys ‘normal’ affects school policies across the nation. For example, when some elementary schools chose to level classes, many schools chose to minimize the influence of IQ scores (the previously touted objective measure) because boys were underrepresented in the most privileged groups of students. According to some, if White masculinity is the privileged status in American society, then ‘normal’ boys have no place in classes for ‘slow children’.

During the twentieth century, newspaper advice columns were filled with parents anxiously writing for help concerning their ‘slow learning’ sons, but on many occasions the reply contained reassurance that the boy was progressing at a normal pace. In one example a concerned mother wrote, “Our pediatrician tried to console me with the fact that many boys don’t offer much conversation until age three. He also advised me that this was no indication that my son would be a slow learner in school!” (Ma-Da 1970, May, 2, p. 12). There is no need for concern as long as your child is the subject on which the norm was based. It is everyone else who needs to race to keep up with the norm.

For women, however, this powerful trope of ‘feminine’ as ‘slow’ leaves many individuals caught in a double bind. As one example, a friend scolds a female beachgoer in a 1909 *Bellingham Herald* article for wanting to learn how to float. The friend states,

“Oh, you are slow. Learn how to sink, then some handsome young man is sure to dash out and rescue you” (p. 3). The beachgoer has a choice to either position herself as a ‘slow learner’ in regards to proper feminine etiquette or position herself as a ‘slow learner’ in regards to her swimming skills. With either choice, society bars her from a position of privilege and her only option is to join the status of other subjects who have failed to ‘keep up’ with privileged White males.

The feminized ‘slow learner’ characterized as embodying an immature mind is further characterized as emotionally unstable. On one end of this spectrum, ‘slow learners’ are sometimes portrayed as having no interests in the world around them. For instance, a 1914 article in the *Idaho Daily Statesman*, states,

The dull, slow child, for instance, is backward in his school work. He is backward in everything. He seems to be little interested in the things around him. His inert, retiring nature makes it difficult for his youthful companions to engage him in their games (p. 4).

In 1959, a scholarly article even proclaimed it to be a “fact that slow learners tend to have few interests” (Foster, 1959, p. 169); after admitting that there are many exceptions, this article concludes that the prevailing assumption that ‘poor’ academic learners will do well with “learning activities requiring manual skills” is false (ibid). Furthermore, citing a study by Irene C. Hypps, a 1962 *Washington Post* article says ‘slow learners’ “daydreamed more than is usual, tired easily, fell asleep in class, cried readily, were shy and easily hurt” (1962, Jun. 17, p. A7; see also Sierles, 1962, p. 362). The ‘slow learner’ according to these perspectives is a blank slate, emotionally fragile, and content to remain intellectually empty (see also Huebener, 1951, p. 437; *NY Times*, 1964, Mar. 29, p. SM87). With knowledge of the subject embodying these characteristics, one is apt to comply with societal expectations.



If not totally disinterested in schoolwork, the media portrays individuals identified as 'slow learners' as bored children. One commentator in the *Boston Globe* explains how, in her school experience, "the bored child was the slow learner, not the child who was familiar with the material" (Jenny, 1966, p. 11). A 1955 *Washington Post* article lauds a new curriculum plan for the city's schools because "slow students would be lured into learning as much as they could" (*Washington Post*, 1955, May 12, p. 21). Many believe 'slow learning' students need a special hook to bring them to school; all learners need a hook, only many teachers only employ one type of lure.

If the disinterested, or bored, child does not raise concerns amongst social observers, portrayal of 'slow learners' as mentally disturbed just might. This link between 'slow learning' and mental illness has been the subject of investigation for over a century, and researchers in the early decades of the twentieth century, such as William Healy (1915), worked to associate intellectual differences with mental illness. Furthermore, researchers in later decades state that academically struggling students "are too emotionally disturbed to be able to learn school subjects" (Freeman, L., 1950, p. 30). Promoting this connection between 'slow learning' and mental illness, a 1952 *Washington Post* article cites Willard C. Olson, dean of education at Michigan University, who claimed, "The child who is growing slowly...is more likely to become emotionally disturbed and a subsequent discipline or delinquency problem" (*Washington Post*, 1952, May 11, p. M15). Similarly, in 1953 the *Daily Boston Globe* reported on a symposium presentation by Frank Penton of the University of Rhode Island who claims that seventy-four percent of 'slow learners' had "apparent emotional disturbances" (*Daily Boston Globe*, p. 9). According to the *Globe*, Penton went on to state that thirty-three

percent of 'slow learners' are "overly aggressive," sixty-four percent are "timid, shy and meek," and three percent are "actually despondent" (ibid). A similar report describes "slow learners" as "children who either possess low intelligence quotients (IQs) or have mental conflicts that prevent them from adjusting to a regular classroom situation" (Rogers, 1955, Oct. 5, p. 17). Likewise, a 1955 article in the *Los Angeles Times* explains, "Reading and learning problems of young children are more liable to be due to emotional disturbances in the children than to faulty teaching methods" (*LA Times*, 1955, Nov. 13, p. A12). Citing Dr. Leo Rangell, president of the Southern California Psychiatric Society, the article states "emotions have such a powerful effect on the intellect that a person with either normal or superior intelligence, may, if emotionally disturbed, act in such a way as to be suspected of mental retardation" (ibid; see also Dumbell, 1964, Mar. 31, p. A6). Furthermore, Morse & Dyer (1963) report studies which posit the claim that intellectual and personality variables correlate – in other words, individuals' scores on the Wechsler Intelligence Scale are valid predictors of the subjects' emotional health (Morse & Dyer, 1963, p. 113 citing Enburg, Rowley & Stone, 1961 and Spivack, Levine & Sprigle, 1959).

If nothing else, the discourse frames individuals labeled as 'slow learners' as having a "short attention span, hyperactiveness or restless, explosive behavior" (*LA Times*, 1972, Jun. 14, p 13), and often students identified with either pathology find themselves placed in the same classroom (*Washington Post*, 1967, Jan. 11, p. B10). If the subject is not suspected of embodying 'normal or

*"We are happy sometimes and sad sometimes – just like anybody else"*  
(Gorneiro, 1978, Dec. 20, p. E2)

superior intelligence' then she must just be "emotionally disturbed" (see also Block 1937, Jun. 6; Robey & Cody 1966, p. 38)

Similarly, Shehan (1969) communicates a discourse of 'slow learners' as "emotionally immature" (p. 181). The author states,

They are unreasonably 'touchy' and supersensitive to ridicule and embarrassment, to nagging, and to the impatient or despairing tone in a teacher's voice. They deeply resent being made to feel inferior either by an assignment too difficult for them to accomplish successfully or too 'childishly' simple (ibid)

I'm not sure who wouldn't feel resentment toward a teacher who assigns inappropriate school work and who ridicules and embarrasses students, but for authors who identify 'slow learners' as emotionally disturbed learners, the solution is to be found in the student, not with schools.

Positioned on the Great Chain of Being, individuals identified as 'slow learners' risk positioning themselves within one or more other less-privileged subjectivities. Framed either as impoverished, immature, 'raced', foreign, or feminine, in a society that frames middle-class White men as the epitome of social progress, the subject is positioned as a threat to 'progress' and thus a threat to society. Although an evolutionary narrative for 'slow learning' may inspire individuals to race in their education in hopes of avoiding a 'backwards' slide on the Great Chain of Being, and they may inspire 'normal' members of society to examine their pace, there are other ways society positions the subject as an object of power. With support from narratives in criminal justice, national security, and economic discourses the race to education gains power that is hard for society to ignore.

## Characterizing the 'Slow Learner' as Threat to our Homeland Security

The portrayal of individuals identified as 'slow learners' within a frame of less-privileged status on the Great Chain of Being allows society to position the subject as the cause of most problems in society. For example, officials framed 'slow' assimilation into White middle-class values as the reason for poverty in America; if marginalized individuals learned 'fast' enough, they too could enjoy the bounty of American wealth. Similarly, society frames 'slow learning' as the reason for juvenile delinquency, and as the subject is characterized as a disinterested emotionally disturbed child, the media did not have to look far for a cause for crime. Positioning students labeled 'slow learners' as threats to our homeland security gives further reason for society to race in their education.

*If I were pressed to give a description of the general attitude and behavioral mood of our children, it would be that they are responsive, generally happy, and very enthusiastic. When my children are placid I feel that it points the finger of failure at me, either in choice of materials or in presentation (Hardesty, 1966, p. 24)*

A 1905 article in the *Duluth News-Tribune* claims to know the trajectory of these "mentally deficient" children who "cannot keep pace with the child of average intelligence." According to the article, the "mentally 'slow' child,"

cannot keep up in his studies and, as a consequence, is dropped from one class back into the one next below until he becomes discouraged and starts a career of truancy to end – God knows where and how. From this class many criminals are recruited (*Duluth News-Tribune*, 1905, p. 4)

In addition to this gloomy outlook, the *Duluth News-Tribune* also reports that the 'slow child' "retards the advancement of his fellow pupils." According to media reports like this one, these individuals represent a double-threat to society.

Theodore Roosevelt also promotes this image of 'slow learners'. In his 1906 message to Congress, the President states, "The lowest and most brutal criminals, those

for instance who commit the crime of rape, are in the great majority men who have had either no education or very little” (Roosevelt, 1906, Dec. 3). If education was a sign of ‘civilized society’, then those who committed crimes were obviously ‘deficient’ in their education.

The characterization of the ‘slow learner’ as a potential criminal gains strength throughout the twentieth century. In the early decades of the 1900s researchers such as William Healy (1915) searched for and promoted the correlation between delinquency and intellectual disabilities. In 1939, one contributor to the *Daily Boston Globe* states, “I work with these children and feel I know something of what causes this misbehavior” (Teacher, 1939, Aug. 20, p. B45). By mid-century, many media outlets assume this connection between delinquency and ‘slow learning’ and they promote a narrative that links the growing number of children identified as ‘slow-learners’ as “a fertile source of delinquents” (Freeman, L., 1950, p. 30). For example, Albert Wiggam ponders the question, “Are children who ‘play hookey’ [sic] from school above or below their proper grades?” (Wiggam, 1941, Dec. 23, p 11) Wiggam identifies three causes of truancy: 1) “putting slow children in grades where the lessons are too hard for them;” 2) “Putting fast children in grades where the lessons are too easy for them;” and 3) compulsory education (ibid). Wiggam notes that while these ‘abnormal’ children are prone to wander the streets during school hours, “A normal boy or girl whose family is starving feels he [or she] should get out and earn money” (ibid). According to this author, ‘slow learners’ and those children whose learning was ‘slowed’ were a threat to society and their families. Thirteen days after the attacks at Pearl Harbor, his message inspired many to seek the ‘normal’ life.

Similarly, Catherine Mackenzie (1944, Mar. 19) writing in the *New York Times* describes Peter Taglione, a boy caught stealing tires off a '42 sports roadster as “crippled and a slow learner, looking 10 though he was 14” (p. SM23)<sup>51</sup>. A scholarly article printed in 1951 summarizes the prevailing discourse about this subject by stating,

It is, of course, common knowledge that slow learners are frequently trouble makers. They are often rebellious, aggressive, destructive, indifferent, hypercritical, insolent, noisy, lazy, and untruthful. In fact, many persons, including some teachers and psychologist, have been so impressed by the ‘un’, and ‘non’ and the ‘anti’ qualities of slow learners’ social behavior that they have concluded slow learners have constitutionally inferior personalities (Featherstone, 1951, p. 325-326).

Yet, this particular article worked to dispel some of these characterizations stating,

there is very little scientific data to warrant any such conclusion, and a great deal to warrant the conclusion that slow learners, if given an opportunity appropriate to their capacities and their circumstances, develop quite as wholesome personalities as anyone else (ibid, p. 326).

However, despite voices like this one crying out against the misrepresentation of individuals identified as ‘slow learners’, negative portrayals proliferate. For example, a 1952 article warns parents that it is “important to take into consideration the reliability of the child” (Gesell Institute, 1952, Jul. 4, p.18). The authors suggest that a delay in a child’s response to a parent’s request could be a sign of the child “expressing real resistance to his parent” (ibid). Likewise, in a 1959 scholarly article describing a “program for the problem child,” the ‘slow learner’ is described as a student “who is below average in intelligence and who also lacks motivation;” the ‘slow learner’ is “either shy and hard to know” or “aggressive” leading to “trouble with the court” and “difficulty getting a job” (Pellmann & Liddle, 1959, p. 174). One article in the *Los*

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<sup>51</sup> This examples serves as another illustration of the co-morbidity of pathologies often assigned to marginalized individuals. Mackenzie couples the characterizations of the ‘slow learner’ as a delinquent with the one portraying the subject as immature.

*Angeles Times*, printed in 1960, reports that of the 900,000 youth who had dropped out of school, 450,000 of this population had “court records, are slow learners or are children of minority groups and migratory farm workers” (*LA Times*, 1960, pg. 12). The author groups the ‘slow learner’ with other marginalized subjects and leaves the reader to assume the cause-effect relationship between school drop-out, delinquency, and ‘slow learning’ (see also Sammis, 1967, Sep. 16, p. 11).<sup>52</sup>

In their review of studies dealing with “the emotionally and socially handicapped,” Morse & Dyer (1963) cite several studies that link poor academic performance with social delinquency. For example, Morse & Dyer cite a study by White and Harris (1961) who report that forty-five percent of children identified with “behavioral disorders” have “academic difficulties;” twenty-seven percent of those identified have “mental retardation” (Morse & Dyer, 1963 p. 110). Similarly, Briggs, Johnson, and Wirt (1962) suggest that ‘adolescents’ who are “delinquency-prone” also have “very little high academic achievement” (Morse & Dyer, 1963, p. 113).<sup>53</sup> Stereotypes abound allowing members of society to construct marginalized subjects as monsters.

A *Boston Globe* reporter left no such judgment to the reader’s imagination. In a 1964 article, Desrochers writes, “[slow learners] often become delinquent, social and economic problems; and frequently end up in correctional institutes” even when “the city provides vocational opportunities to those children who graduate from a junior high school” (p. 14). Similarly, Mahan (1965) writes, “Confronted with an unattainable goal,

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<sup>52</sup> The readers should not this article as another example of how the ‘slow learner’ subject position is juxtaposed against other less-privileged subjectivities adding power to the implied threat level.

<sup>53</sup> See also House Committee on Education and Labor, 1957, Mar. 19 et al; Ilg & Ames, 1964, Sep. 10, p. 46; Morgan, 1965, May 13, p. A1; Mahan, 1965, p. 81; Johnson, 1964, p. 148.

the slow learner is now forced to deny and devalue this goal, to destroy its importance for himself... That he drifts into deviant behavior of one sort or another is no surprise, given this situation” (p. 81). The dominant message in this discourse is that ‘slow learners’ are responsible for any negative life events, whether or not schools provide appropriate educational experiences.

For those students who remain in school, the framing of ‘slow learning’ as a personal failure leaves them vulnerable to accusations of responsibility for larger societal failures. This disciplinary gaze also urges students to examine themselves as to monitor their pace of learning. At the school level, this theme is well illustrated in a 1979 *Washington Post* story about perceived worsening conditions at an area high school. In this article, the author uses the ‘slow learner’ to explain why the high school does not resemble its image from the past. The article opens with two quotes, one from an illiterate young man, and one from a student headed to Harvard; the author subsequently positions the ‘slow learner’ as the cause of lost prestige. Those who wished to hold on to the ideals of a past era, were thus inspired to race in educating those subjects they perceived as a threat to the social order.

Following the launch of Sputnik in 1957, many reports focused on efforts to “dispel the pall of mediocrity” in American schools. Authors often attacked efforts to ‘democratize education’ by instilling fears that less discrimination in schools would lead to the ‘slowing-down’ of the ‘fastest’ learners. For example, a Los Angeles school director writes, “Democracy in education is not to be conceived of as an invitation to share a common mediocrity” (Mirman, 1969, Feb. 14, p. B8). Americans were anxious



that they would lose the Cold War and any subject who posed a threat was not welcome in society.

Yet, while education ‘experts’ developed statistical norms and standardized testing to help them identify ‘slow learners’, these quantitative measures had little influence when policy-makers chose to compare American students to our enemy *du jour*. No matter how fast American students could recite their times-tables, it was not fast-enough for citizens who perceived their country losing ground to our economic and military rivals. Thus, any student who could not keep pace put the nation’s security at risk – that is what the narrative wants Americans to believe.

One can see students identified as ‘slow learners’ framed as security threats throughout the twentieth century. For example, in the early years of the Great Depression, William C. Bagley (1933) argued that the American education system contributed to the “calamity”

*It will have taken George Eggers 37 years to meet the requirements for a bachelor's degree from Princeton University when he graduates in June, 1980, but it's not because he is a slow learner. What occupied most of his time was a 33-year stint in the United States Army...Mr. Eggers, now 52 years old, was drafted out of Princeton in the middle of his sophomore year in 1944 (Reiss, 1978, Dec. 10, p. NJ28)*

America was experiencing at that time. He states, that the education system, “far from producing this leadership of brains, actually hinders its emergence by holding the keener intellects to the pace of the average” (1933, p. XX5). The key to economic recovery was in allowing ‘quick-learners’ to go even faster – it would be their destiny to fix a Depression that was first created by the ‘brightest’ minds in America. Thus, if average students were holding back the economic recovery, one can only imagine how commentators like Bagley felt about students who learned at a below-average pace.

Chester Swanson, quoted in a 1962 *Washington Post* article, does not even hint at the social danger presented by 'slow learners'. Citing high unemployment figures for school drop-outs, the professor of school administration at the University of California states outright that "special reluctant learners" are "social dynamite" (Dec. 1, p. C2 see also Everitt et al. 1962, p. 8). Addressing concerns about the cost of educating these students, Swanson is quoted as saying, "While special reluctant learner programs are costly, the cost of not providing such programs runs even higher" (ibid). According to commentators like Swanson, if society did not do something about this 'problem,' the future of American society was in jeopardy. Students identified as 'slow learners' were explosives, ready to take down American 'progress'.

In a similar article from 1964, Lisonbee & Fliegler ask, "Of what worth are the 'slow learners'?" According to these authors "an enlightened citizenry capable of positive action" was required for a changing world in which there were "rapid shifts in technology, and the possibility of nuclear war" (p. 334). Lisonbee & Fliegler argue that education must take-on the primary role in developing citizens ready for this changing world, and that the circumstances, "quite conclusively" lead one to become "increasingly concerned with those groups of individuals who are not realizing their maximum productivity;" needless to say, the subject identified by the authors is the "slow learner" (ibid). Lisonbee & Fliegler go on to state that individuals labeled as 'slow learners' represent "one of the most critical societal problems facing American education today" (ibid). The authors seem frantic about the possibility that thirty million 'slow learners' over the age of twenty-one, or one of four adults, could potentially vote. For some, the future of our democracy depends on society finding ways for educating these students

into the 'proper' etiquette of citizenry, and preparation for the future requires 'fast' education.

Lisonbee & Fliegler then switch to economic concerns by bemoaning the "deplorable loss in productive manpower" represented by this group of individuals who represent "the vast majority of delinquents, drop-outs, and unemployed." In accordance with the times, the authors' argue the solution to this problem is in exposing these learners to science – not teaching them science, or showing them how to be scientists, but in teaching them how to appreciate science. Apparently, students labeled as 'slow learners' can appreciate the power of science, but cannot contribute to the formation of knowledge (ibid, p. 335). Perhaps Albert Einstein should have stayed working at the patent office instead of engaging in science.

Andersen (1966) communicates a similar narrative with his conceptual study of students labeled as 'slow learners' in science. Arguing that students identified as 'slow learners' should participate more in science classes, Andersen states, "They too are human beings who will share with others the responsibility of building and maintaining an ever-improved democratic society" (p. 200). However, Andersen also employs the language of medical pathology when discussing the future of students assigned the 'slow learner' label in the ever-changing job market. The author states that unless schools provide special education for these students, "the problem will magnify itself beyond cure" (ibid). Society frames individuals identified as 'slow learners' as a virus in a technology-based economy rather than framing technology as a disease affecting society in an aesthetic existence.

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American society framing individuals labeled as ‘slow learning’ as threats to national security leads to an intense focus on education. However, even when this concern seems abated, society still positions the subject as a social burden. With the nineteenth century drive for compulsory schooling and the twentieth-century phenomenon of centralized educational institutions, society took this perceived threat off the street and relocated it in the classroom. Yet, to communicate this threat that had once been visible in the streets, less-privileged learners are portrayed as an impediment to learning for students identified as ‘normal’ and the subject is framed as a drain on school resources.

For example, an 1896 *New York Times* article highlights the conditions in a city classroom with sixty pupils. The author suggests that in a classroom so large, “the bright children...are able to take care of themselves anyway;” however, “backward and slow children leave that class with a very imperfect knowledge of the subjects taught in it” (*NY Times*, 1896, Apr. 19, p. 9). While I do not advocate sixty pupil classrooms, the reader should note that the author frames children labeled ‘slow’ as a group of students who officials may justifiably segregate from the rest of their peers. The author implies that a classroom of sixty ‘normal’ students would have a satisfactory learning environment. However, one must question how anyone can form meaningful relationships with any group of sixty individuals, no matter what the perceived learning speed.

Similarly, in 1953, Nelson S. Burke writes, “It is not uncommon to find classes of 40 pupils with one-half of them considered slow learners and some completely uneducable. An effective educative process simply cannot function under these conditions” (Burke, 1953, Oct. 6, p. 14). Again, the author positions the education of

individuals labeled 'slow learners' as a reason for why forty-pupil classes are unacceptable, implying that society would have no need to worry if the educator had that number of pupils with the label of 'normal' sitting in the overcrowded classroom.

Promoting the notion that students identified as 'slow learners' require a 'special education' allows officials to justify the 'individualized treatment' of the subject – school officials can rationalize the dividing practices they employ. One can see this type of statement in a 1952 editorial written by the Los Angeles Superintendent of Schools: "slow-learning pupils may be salvaged educationally if their needs can be treated on an individual basis rather than as a part of a large group" (Stoddard 1952, Jan. 24, p. A4). The Superintendent follows this apparent concern for the welfare of "slow-learning pupils" by warning,

Failure to provide remedial instruction for such pupils results not only in their being turned out into society poorly prepared to meet life's problems but also detracts from the amount of instruction time that can be devoted so profitably to the boys and girls who do learn in a normal and rapid manner (ibid).

The Superintendent combines the characterizations of "slow-learning pupils" as a threat to their peers and as a threat to American civic life. For some, dividing practices, and a 'faster' pace to education, are the only way to prevent these two tragedies.

In an example from a 1955 edition of the *Washington Post*, the author is much more forthright with her disdain for the inclusion of students labeled 'slow learners' in the common-space classroom. She states,

One blank-faced, slow-learning child is a drain on educational progress in any regular District classroom. The dull, retarded pupil takes an undue amount of a teacher's time to the detriment of normal pupils (Rogers, 1955, Oct. 5, p. 17; see also NY Times, 1953, May 9, p. 21).

By the second half of the twentieth century, the narrative of ‘slow learners’ as an impediment to ‘normal’ learning rates was codified into school policies across the country. Even when school officials wrote policies under the auspices of protecting the education rights of individuals labeled with ‘disabilities’, this underlying characterization of the subject as a burden on society is still clearly visible. For example, one city’s school policy published in 1964 states,

Pupils unable to achieve their potential in a regular classroom because of certain learning and behavior handicaps...shall be provided with special attention for their own benefit and for the purpose of minimizing interference with the optimal learning of others (LA Times, 1964, Nov. 19, p. SG2).

Educators are required to care for “handicapped learners” so they do not become menaces to society, but at the same time, teachers are charged with not allowing their care for these students to interfere with the learning pace of others (see also *Washington Post*, 1957, Apr. 26, p. C23; Ilg & Ames, 1961, Oct. 20, p. 20). This policy employs a discourse of universal time to justify segregating students by privileging students with the ‘fastest’ learning rates and separating anyone who does not meet that rate of learning.

If education officials cared for students labeled ‘slow’, and segregated them away from students identified as ‘normal’, then subjects’ danger to society and their threat to the pace of education would predictively dissipate. However, smaller classes and increased attention on the learning needs of students labeled ‘slow’ positioned the subject in another double bind – a burden on society regardless of policy. This increased focus requires additional resources, and many feel that means educating ‘slow learning’ students is a drain on school districts’ finances (e.g., Wiggam, 1942, Apr. 21, p. 17; *Washington Post*, 1953, Nov. 22, p. R13; Waters, 1967, May 31, p. 14).

One may gain the sense that students labeled ‘slow’ are an economic burden on school districts while reading a 1964 *Washington Post* article debating the merits of school regionalization. The author writes, “Special instruction for the usually bright and usually slow learners becomes prohibitively expensive” (Jan. 30, p. A18). In 1981, a *New York Times* article goes as far as framing the education of students labeled ‘slow’ as a waste of money. In an article titled, “Broken Promises on Reading,” the author questions the wisdom of spending “\$176 million annually in Federal funds, along with another \$73.5 million from the state and special services” for “reading tutors and smaller classes, aimed at slow learners” when there were no noticeable gains in reading scores (Aug. 26, p. A22). Society expects schools to be efficient, and according to many a ‘slow’ education for students who learn at a different pace is a waste of money.<sup>54</sup>

When viewing artifacts for illustrating the power of the social-efficiency discourse in public education, one should note that students labeled ‘slow’ and other less-privileged students are routinely the target of funding cuts when citizens are unhappy with budgets. Rarely do we hear complaints that funding for high school football programs are a waste if a team has a losing season, never mind if their scores do not progress with linear regularity, but how often do we hear threats of funding cuts if students do not ‘progress’ at a linear rate with their standardized test scores? For over a

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<sup>54</sup> The narrative of efficiency ascribed onto regionalized schools comes through in an editorial cartoon published in a 1922 edition of *The American School Board Journal* (vol. XLV, no. 3, cover). The cartoon is divided into two frames; in the top frame a horse leads children to a one-room school with a flag flying “local school” above. The frame is decorated with a scene of agrarian life with two other scenes of horse-drawn school processions in the background. In the bottom frame, a school bus with wings flies students to a building labeled “local schools consolidated;” a billboard atop the school reads, “better buildings, equipment, and construction.” The editors of this journal framed regionalized schools as vehicles to the future, while local schools are portrayed as artifacts of “the old way.” The cartoon fails to mention that regionalized schools are a more efficient use of tax dollars, and the common curriculum means that society could monitor a uniform pace in education.

hundred years, American society has positioned “slow-learning pupils” as either a burden on social order, a burden on classroom order, or a burden on economic order; all as a means of explaining problems with society while shifting the blame to others who are less able to defend themselves.

A syndicated column printed in a 1947 edition of the *Daily Boston Globe* is perhaps the best illustration of this discursive contempt for individuals identified as ‘slow learners’. In the article, the author asks, “Should the brightest boys be sent to the front in war, the same as the slower and dull ones?” (Wiggam, 1947, Sep. 24, p. 15). The article’s author provided his answer:

This is a hard question to answer since parents love slow children as well as bright ones. But it is to the interest of the slow to preserve the bright from being killed because it is the best way to save themselves. The Army classification tests, directed by psychologist W.V. Bingham, were of immense service in enabling both the bright and the ‘slow’ to cooperate for each other’s benefit. My answer is, yes (ibid).

If individuals labeled as ‘slow learners’ are a burden on society – a threat to our homeland security – then students identified as ‘fast’ must be the saviors of a society in decline, and if children labeled ‘slow’ are any use to our society, at least they can sacrifice their lives to keep the ‘brightest’ alive – a dangerous message.

### **The ‘Gift’ of Time: The ‘Fast Learner’ Subject**

The creation of the ‘slow learner’ subject, and the power of the narrative that frames the subject as a threat to society requires that society recognize the meaning of the ideal body (Hughes, 2005, p. 82 citing Canguilhem, 1991, p. 240). As Allen (2005) states, “Impairment, like perversion (and disability), is not something missing, not a lack



or absence; it is something added, an unasked-for supplement contributed by disciplinary knowledge and power” (p. 94; see also Derrida, 1976). Thus, the concern over deviant bodies is not about their perceived lack of health, but rather social anxiety about a failing system of order. Likewise, the privilege awarded to the normal body requires that one identify the bodies that are “sub-normal,” and with this hierarchical organization, society can locate ideal bodies (Foucault 1977, *Discipline & Punish*; see also Mitchell & Snyder, 1997, Shildrick, 2005; Kristeva, 1982, p. 94).

*If all other children behaved and accomplished as much as the prodigy – the concept of prodigy would cease to exist...The concept of prodigy presupposes both the existence of slowness and an evaluative standard where ‘slowness’ becomes part of the measure of its meaningfulness (Apostle, 1969, p. 7).*

Thus, individuals identified as ‘fast learners’ hold great prestige in a society that races to educate its youth. Furthermore, just as less-privileged individuals are framed with characteristics put on other marginalized subjects, privileged subjects are identified with characteristics put on other valued members of society. One expects to see privileged ‘fast-learners’ characterized as taking an interest in “encyclopedias, dictionaries and acquiring of all sorts of information” (*NY Times*, 1936, Feb. 4, p. 23); however, some authors suggest, “The bright child is generally taller and stronger, has greater muscular control and in general is better looking than his classmates” (Lindsay, 1957, Jul. 22, p. A8). For some, individuals identified as ‘fast learners’ are God’s gift to human evolution.

Spragens’ (1969) praises individuals’ “ability to learn rapidly and easily” (p. 71). The author writes, “Another way in which gifted children can be identified is that they

require only a fraction of their total time to complete the prescribed school work” (ibid, p. 71-72). Spragens then lists other characteristics he believes “gifted children” embody:

good retention of what they learn; much curiosity as evidenced by the nature of their questions; rich vocabularies marked by originality of thought and phrasing; enjoyment of reading, particularly more advanced materials; interest in words and ideas; ability to reason things in logical fashion; ability to examine, classify and keep records; appreciation of many things of which average children are unaware; evidence of interest in man and his nature at an early age; maintenance of friendships with older children and adults; possession of a good sense of humor; a strong desire to excel (p. 71)

Similarly, the *Boston Globe* describes a three- or four-year-old child who is “very ready” for kindergarten as one who “seems to have ‘lived more’ than the unready. He is likely to have traveled, liked books and records, gained a wider range of social experience. He is more grown up as a result, even at the age of 3, 4, or 5” (*Daily Boston Globe*, 1959, Sep. 20, p. B2). Unlike ‘slow children’, ‘fast learners’ are portrayed as ‘mature’, ‘cultured’, and ‘socially attuned’.

This discursive connection between learning speed and societal value leads authors to make false conclusions about students they have never met. Wiggam (1936, Apr. 22), for example states, “It probably means the fast learners as a rule have the better minds” (p. 19). When describing the New York City school curriculum, an article printed in the *New York Times* states, “The aim...is to allow the fullest possible opportunity for the development of potential leaders” (*NY Times*, 1938, May 1, p. 48). Johnson (1956 Mar. 4) adds to this characterization stating that children identified as ‘fast learning’ are “more capable learners” (p. 12). Thompson (1950, Jun. 11) similarly frames students labeled ‘fast learners’ as the “leaders, scholars and research scientists” of the next generation (p. A22). Another newspaper columnist claims, “Their achievements should do much to make the pursuit of knowledge more popular” (Lindsay, 1958, Aug. 30, p. A8). However, just as society frames the ‘slow learner’ subject as a plague on society

because of their supposed sub-normal learning speed, society frames the 'fast learner' subject as a superior student for no more reason than the pace at which one completes tests. Regardless, society centers both subjects as objects of power for individuals to gaze upon and examine their own pace of education.

### **As Fast as you can**

'Experts' often frame the speed of learning as a distinguishing characteristic of academic pathology, and this measure resultantly appears as a perpetual concern of school officials. In 1892, the *Boston Daily Globe* reported on remarks offered by Harvard President Charles Eliot during a speech on "shortening and enriching of the grammar school course." Speaking in Brooklyn, New York, Eliot argued for reform in both school structure and curricula, but his privileging of 'fast-learning' is clear. Eliot suggests that the "regular program" should consist of eight grades, but for "the exceptionally quick" pupil, schools should permit "capable children to do two years' work in one" (*Boston Daily Globe*, 1892, Feb. 17, p. 8). Pupils identified as 'slow', according to Eliot, may require ten years to finish their grammar school curriculum, but as the *Boston Globe* states, "a greater educational injustice was to hold back capable children" (ibid). For Harvard's President, and the author of the article in the *Globe*, adjusting the curriculum to meet students' needs required attention, but the main concern is promoting the fastest-rate of learning possible.

In post-World War II America especially, newspapers routinely featured stories that illustrate the superior speed of privileged learners. For example, a 1957 article printed in the *Washington Post and Times Herald* featured a college sophomore who

could read 2000 words per minute (supposedly 1650 words per minute faster than the average college graduate). The young woman interviewed for the story states her plans to earn a Ph.D. by the age of 20 – a feat every American could dream of achieving (McLendon, 1957, Nov. 3, p. F12).

Some individuals were ‘naturally’ talented with their academic abilities, but for everyone else, ‘experts’ promised them that students could speed-up too (e.g., Lionel Institute, 1969, Apr. 20, p. B1). By 1967, the *Wall Street Journal* was advertising speed-reading courses at the Evelyn Wood Reading Dynamics Institute. According to the article, the Institutes namesake could read 3,300 words a minute, and she claims that some people can read more than 40,000 words a minute (that is *War and Peace* in 14 minutes!). According to some, if individuals cannot read at least 3,300 words per minute, there must be something wrong with them.

Evelyn Wood, had founded a chain of speed-reading schools in Washington D.C. in 1959, and though she did not claim they could teach anyone to read at those remarkable rates, the Institute did promise to triple a student’s reading rate for a fee of \$175 and eight-weeks of one’s life. According to the *Journal*, 45,000 people had taken the course in 1966 alone and enrollment at the 200 Evelyn Wood schools in 67 U.S. cities had doubled in the current year. With endorsements from Georgia Senator Herman Talmadge and Wisconsin Senator William Proxmire, the latter claimed he could now read Jack London’s *Call of the Wild* in three minutes; the prestige of speed gained him even more power (West, 1967, Sept. 27, p. 1).

The prestige of early graduation through ‘fast learning’ is a strong theme in the literature as well. As another example, the *Los Angeles Times*, in 1956 reported on a

program in the Santa Ana school district that would allow “the genius class opportunity to move ahead as fast as their abilities allow” and graduate two years ahead of their “average” peers (Johnson, 1956 Feb. 26, p. G1). Promoting the characterizations of ‘fast-learners’ discussed above, and hinting at a eugenics philosophy, Johnson rationalizes this plan by stating,

Educators recognize that those in this extra-bright class are likely to go into the professions, occupations that take extra years of school. They feel it a detriment to society as a whole that these have to delay marriage and perhaps have only small families because they had to spend so many years in school (ibid).

Another article acclaims a program designed to train engineers and scientists can “cut two years from the time now required” (*NY Times*, 1957, Aug. 18, p. 53). According to these articles, privileged learners should get a head-start on their professional training because of their value to society’s economy *and* gene pool.

Similarly, David Ives writes in a 1957 *Wall Street Journal* article, “One purpose of the bright kid programs now under way in a growing number of classrooms throughout the nation is to encourage exceptional youngsters to go further faster in their studies” (Ives, 1957 Jun. 6, p. 1; see also Olson, 1981, p. 96). Ives names “acceleration” as an apparent trend in secondary schools at that time; these programs allowed students to complete their work early and “progress faster in college” (ibid).

A 1963 article in the *Los Angeles Times* cites a study of 440,000 high school students in 1353 schools that claimed, “the top 5% can learn twice as much in the same time as the average students in the same grade” (Hutchins, 1963, Dec. 26, p. A6). In summarizing the conclusions made by John C. Flanagan, the study’s author, Hutchins criticizes the “lockstep of units and credits” for “wasting talent” (ibid; see also Johnson,

1956 Feb. 26). Students were not learning fast enough, and governing the pace of students identified as 'fast-learners' was treason.

This drive for ungoverned speed in education also creates fears that children labeled 'normal' or even 'slow' could taint 'accelerated' programs. One author in the *New York Times*, for example, bemoans the "watered down" advanced placement and honors programs at a local high school. Seemingly horrified at changes in the high school curriculum brought on by increased access to these privileged programs, the author states, "standards have been progressively scaled down to the performance level of the students" (Carlan, 1983, Jun. 26, p. LI21). For some, 'accelerated' programs are essential, and any attempt to change access to this curriculum is a threat to the education of the 'fastest' learners. For some, education is more about exclusivity than learning.

With concerns that students identified with 'normal' learning rates would taint the prestige of 'fast learning', Americans devised evermore public ways of demonstrating the differences between students labeled 'fast learners' and those left identified as average. Just as the Special Olympics became the public's opportunity to gaze at the abilities of those who are labeled 'slow', similar events are planned for demonstrating the 'fast-minds' or the nation's 'gifted-students'. In 1978 for example, the *New York Times* reported on an "Olympics of the Mind," an academic competition organized by the New Jersey State Department of Education and Glassboro State College. Illustrating a desire to distinguish 'gifted children' for 'normal children' and reinforcing the trope of students labeled 'fast' as a national resource, the article's author quotes an "enthusiastic" elementary school principal saying, "Recognition that these kids are unique is important to them. They are a resource and we just have to provide them with activities of this

nature” (Waggoner, 1978, May 27, p. 49). According to authors like Waggoner, ‘fast-learners’ are a national treasure, and they, and everyone else needs to know it. Perhaps you too could be a national asset if you only worked a little ‘faster’ in school.

### **Not so Fast**

The discourse attempts to delineate the characteristics that society should privilege and the characteristics that society should correct. In the race to educate, the pace of learning is the most powerful determination in this assignment of privilege. However, unlike the narrative of progress that society uses to explain events and people, individuals are not one-dimensional beings. Thus, one can see many examples of individuals framed with character traits that seemingly contradict the narrative set for their subjectivity. In the context of the ‘fast-learner’ subject, despite society framing these individuals as embodying a ‘gift’ for humankind, the narrative of this subject is spotted with characterizations that hint at a much broader truth about the subject. For example, a *Los Angeles Times* article from 1958 cites a doctor who suggests that “intellectual superiority” could be more harmful than good. The doctor argues that “intellectual superiority can be a hindrance to learning” and that ‘gifted students’ often exhibit poor muscular coordination (Turpin, 1958, Jul. 13, P. A17). Jacob Theobald, principal of P.S. 165 in Manhattan warns parents that a “bright youngster” who is “pampered” “is likely to be unsocial, selfish, and conceited” (*NY Times*, 1931, Apr. 23, p. 26; see also *Keene Sentinel*, 1881, Apr. 21, p. 1). Guy (1924) describes a “bright child” as “spoiled – impertinent, uppish, and genuinely mischievous” (p. 104). Buder (1954, Nov. 28) identifies a popular stereotype of ‘gifted learners’ as “eccentric and emotionally

unstable” (p. 76); Spragens (1969) states bluntly, “some gifted children are emotionally disturbed” (p. 74). In many cases the portrayal of ‘fast learners’ makes them seem just as, if not more, dangerous to society than ‘slow learners’.<sup>55</sup>

In many cases, authors portray the ‘fast learner’ subject as a lazy student. Mackenzie (1944, Jan. 23) states, “Sometimes they slide through grade school without half trying, only to fail in college because they never learned to work” (p. SM25). Buder (1954, Nov. 28) reminds readers that in some states, “at least half the gifted high school graduates fail to go to college” (p. 76). Spragens (1969) states that ‘fast learners’, “fall below their optimum achievement perhaps because of daydreaming, getting into mischief, or defying authority” (p. 73). In fact, Spragens goes on to list a host of reasons ‘fast-learners’ have difficulty in school; a list that sounds very similar to reasons given for why ‘slow learners’ struggle. For example, he lists:

poor previous preparation; too much pressure or too little encouragement at home; habits of idleness; poor study and reading methods; overconfidence; absorbing interest in some other subject which may lead to neglect of a less interesting subject; lack of interest in the subject; rebellion at what he considers ‘busy work’; lack of sufficient time to study; poor teaching; wrong choice of subjects; low group morale of the class; low standards of scholarship; home worries, or an impaired attitude toward learning (Spragens 1969, p.73)

After reading this list, it seems possible that there is little difference in the conditions that affect these students’ experiences in school – less the variable of time. However, just as the ‘fast’ and ‘erratic’ Hare failed to beat the Tortoise, society reminds all students

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<sup>55</sup> The reader should note that throughout the twentieth century, there was often a certain anxiety communicated concerning these students’ physical and mental health. One article in the *New York Times* comments on a family’s worry “about having a little ‘genius’ on their hands,” and gave advice about “rounding him out” (Mackenzie, C. 1944, Jan. 23, p. SM25). Remember, society’s advancement on the Great Chain of Being not only depended on ‘quick’ minds, but also ‘strong’ bodies, and articles that try to explain these differences in children’s abilities add to these anxieties (Lesko, 2001). Thus, Americans look for a society “where all the women are strong, all the men are good-looking and all the children are above average” (Boyd, Quinn, & Keillor, 1990, p. 174) – anyone with ‘below-average’ traits of any kind becomes suspect.



identified as 'fast learners' that they must be predictable in their trajectories and maintain a 'steady' course.

Some authors, however, even question the quality of speed. Angelo Patri (1923, Jan. 12), for example, reminds readers of the children who "rush off at the first word without waiting to hear what is said to them" only to return with disappointing results (p. 8). Patri argues that while "people who move faster" lose patience with 'slower' children and sometimes, "shake him or push him or hustle him toward their aim" their impatience is only detrimental to achieving the most valued ends; in the author's words, "The race is not always to the swift. This slow-moving child is not stupid. Indeed, he is very often a most intelligent child" (ibid). Intelligence is only a matter of relative perception and efficiency's second component is accuracy. 'Fast learning' is not valued unless it returns accurate results – many students that society privileges as 'fast learners' are no more accurate than the 'slowest' students in America's classrooms.

Patri's argument rests on the premise that purposeful thought takes more time than many people are willing to offer. While 'slower-learners' recall experiences, form associations, and create plans with precise steps, the preferred child is able to execute desirable tasks with high degree of accuracy – a skill that requires practice and sureness for the less-privileged subject. However, because the 'fast' transfer and demonstration of knowledge is privileged in American society, one subject is positioned as the embodiment of pathological dysfunction, while the other is celebrated and protected as a national treasure. In Patri's words, "the slower thinking, slower moving child is made to feel unfit beside the flashing, smashing, rapid-fire-child" when the latter may be more of a danger to society's 'progress' (ibid).

\* \* \*

Despite the many characterizations that are commonly put forward for individuals labeled 'fast' or 'slow', the pathology that is often associated with the latter subject is often distanced from their 'faster' peers. For example, the *New York Times* quotes Leta S. Hollingworth of Teachers College, Columbia University who describes the "bright child" as "less excitable, more stable, resists temptation better and is almost never found among delinquents" (*NY Times*, 1936, Feb. 4, p. 23). Similarly, Mackenzie (1944, Jan. 23) attempts to dispel the notion that "exceptionally gifted children" are neurotic and unstable. The author cites Dr. Harvey Zorbaugh, director of the Clinic for Social Adjustment of the Gifted at New York University, who, after examining *thirty* children with I.Q.'s of 180 or higher found no signs of "emotional instability associated with being bright" (p. SM25). One can only wonder why they built a "Clinic for Social Adjustment of the Gifted" if everything was okay.

Similarly, Lindsay (1957, Jul. 22) tries to distance students labeled as 'fast learners' from pathology by citing a 30-year study of "gifted children" conducted by Dr. Lewis M. Terman. Terman worked, "to disprove the popular idea that most prodigies and geniuses burn themselves out early or become psychotic" (p. A8). In what seems to be an attempt at further confirmation of these students' social value, the author states that many of the subjects in the study "have entered or are planning to enter public service. They tend to be successful financially and their record for voting is far above the average. Most have made satisfactory social adjustments" (ibid). Similarly, an article in the *Wall Street Journal* cites a Ford Foundation study which looked at 860 students who skipped their senior year of high school in 1951 and 1952. The article's author states, "Generally

speaking, the study says, these boys and girls did better academically than others who took their schooling at the conventional pace;" however the paragraph that follows this excerpt describes some of the social adjustment problems these 15 and 16 year old students had their first year of college (Ives, 1957 Jun. 6, p. 1). Individual's observations are affecting the outcomes that they see.

As if cued by this blasphemy against 'fast-learners', the 1957 *Washington Post* article about the young woman who could read 2000 words per minute made sure to articulate the 'well-rounded' nature of the Georgetown University sophomore. Despite her photographic memory, the author is clear that the student is also involved with the arts, participates in athletics, and has many friends (McLendon, 1957, Nov. 3, p. F12). Similarly, the *New York Times* printed an article on December 7, 1958 quoting a Professor of history at Long Island University. The article reads, "There is ample evidence...that students suffer no serious personal difficulties by their early entrance into college, and that they do better academically than their classmates who spend the extra year in high school" (*NY Times*, 1958, Dec. 7, p. 142). All those fears people had about students going too fast were apparently unneeded; that was what the narrative tried to argue.

In similar rhetorical fashion, Kellerman (1983, Dec. 2) tries to dismiss claims of deficits among "those who possess superior intelligence" by highlighting statistics that suggest a contrary character. The author surveys the stereotype stating, "At best, The Brain is portrayed as a wimp; at worst, he's a scheming fiend. After all, isn't genius close to insanity?" (p. D7). Then, Kellerman follows with his dismissal, "As a group, the intellectually gifted tend to be more psychologically stable than the rest of the population,

have happier marriages and derive more satisfaction from their relationships” (ibid). The author blames these “myths” for elevating “mediocrity to an ideal and that is responsible (in part) for the dismal state of our education system” (ibid)<sup>56</sup>. In these examples, children identified as ‘fast-learners’ are portrayed as both ‘gifted students’ and ‘gifted citizens’. Depending on one’s perspective, ‘fast learning’ was a sign of a ‘gift’ or it was a symptom of pathology; it all depended on what other attributes stood in the way of students maintaining a ‘fast’ and ‘steady’ trajectory in their education.

\* \* \*

While some authors work to distance privileged bodies from pathologies that may taint their image, many others attempt to explain these supposed deficits by blaming the ‘slow learner’ subject. Just as it was suggested that soldiers identified as ‘slow learners’ be used as cannon fodder for protecting ‘bright soldiers’ (Wiggam, 1947, Sep. 24, p. 15), less-privileged subjects are positioned as scapegoats for problems faced by ‘fast learning’ subjects in schools. In a 1917 edition of the *Oregonian*, for example, an article states, “forwardness can be accelerated when certain obstacles are taken out of the way” (*Oregonian*, 1917, Jun. 2, p. 15). For those who think the ‘fast-learner’ subject is lazy, one *New York Times* author cites an “educational expert” who excuses them saying “gifted children were likely to become smug and lazy when they found that comparatively little effort was required to maintain the standards of less-gifted pupils” (*NY Times*, 1931, Apr. 23, p. 26).<sup>57</sup> As another example, a 1941 *New York Times* article

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<sup>56</sup> Kellerman goes on to cite Greece for their “fascination with the genius” and their reverence for “his special gifts.” I’m not sure if Socrates was feeling the love when the Athenians sentenced him to death.

<sup>57</sup> J. Freeman Guy (1924) similarly issues a warning that if a student assessed with a high intelligence quotient had been, “placed in the fifth grade among pupils with a mental level much lower than his own, he probably would have been discouraged and have become – as many other have – a lazy loafer” (p. 107)

tries to address the perception that children labeled 'fast learners' are "conceited" and "self-centered" by suggesting that those traits disappear when these children are grouped homogeneously (*NY Times*, 1941, Sep. 17). According to many, the 'slow learner' subject is obviously the cause of other children's obnoxious behavior.

Similarly, a 1956 *Los Angeles Times* article celebrates a Santa Ana public school initiative for "very bright students" that gives attention to them "like the slow learner and the handicapped youngster have been getting in recent years;" the author celebrates this program for "shielding" these students from "being tagged a 'brain'" (Johnson, 1956, Feb. 26 p. G1). Buder's solution is "financial assistance" and "a more stimulating curriculum;" for some authors, society should spare no expense for the education of students labeled 'fast': "whatever the needs, these must be met if the nation and the individual are to make full use of this great potential" (Buder, 1954, Nov. 28, p. 76). If the 'slow learner' subject receives special treatment, then the 'fast-learner' subject requires the same – if students identified as 'slow learners' stand in the way of these privileged children, then they will have to find somewhere else to learn. Society maintained surveillance over anyone who violated the norm, even if the subject was superior to the norm in the characteristics that society valued. If an individual exhibited a characteristic of value, then society would either ignore the traits that one judged below average, or they would frame those traits into attributes of value. In any case, society knew which students are 'gifts' and which students are 'problems'.

## Not so Slow

Similar to how individuals labeled 'fast learners' do not conform to the narrative set for them, individuals labeled 'slow' often interrupt the discourse. During the late 1970s and early 1980s especially, many newspaper reports profiled individuals, most of whom had been institutionalized in previous regimes, who had 'normal qualities' and 'gifts'. The discourse that for most of the twentieth century had framed the 'slow learner' subject as diseased and 'defective', by the mid-1980s, also worked to promote a narrative that the subject was 'special'.<sup>58</sup> Despite the change in language and the apparent gains in civil liberties, one must note, however, that the increased visibility of the subject may do more to illustrate shifts in the technologies of power than it does to show any change in the 'slow learners' position in relations of power. Yet, these case studies problematize the characterizations of the 'slow learner' subject as a menace to society.<sup>59</sup>

*I'm a slow learner, I have trouble reading. But I can speak up. I can lead a meeting. I can see what's going on (Curry, 1981, Oct. 8, p. E12 quoting Charles Dieterle)*

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<sup>58</sup> Many American newspapers reflect a struggle over the status of students labeled as 'slow learners' in the late 1970s and early 1980s. As new treatments promised to make less-privileged learners 'predictable', one sees an increasing number of statements calling for the closing of state mental hospitals and government funded schools that previously kept the subject 'out of sight'. Reports circulated claiming that these institutions treated their residents poorly, lacked staff and funding, and misplaced 'patients' (e.g., *Pittsburgh Press*, 1975, Jun. 8, p. A9; Brown, 1980, Oct. 4, p. 1; Zeitlin, 1981, Jul. 13, p. 6; Associated Press, 1984, Jun. 12, p. 4; Associated Press, 1984, Mar. 5, p. C3). However, while those statements may have justified the relocation of treatment, authorities still had to justify why it was safe for previously isolated subjects to return to 'normal' society. Thus, the narrative of 'special' individuality gains power in society.

<sup>59</sup> As the media highlights the achievements of many individuals labeled 'slow', who interrupt the narrative of the 'slow learner' subject, the discourse continues to deny the subject language with which to speak of oneself. In 1978, for example, Ann Landers publishes a letter written by a man who identifies himself as a 'slow learner'. He writes, "We don't like the term 'mentally retarded' – we want the label changed to 'slow learner'... Retarded people would prefer to be thought of as just human beings – not 'special'" (Gorneiro, 1978, Dec. 20, p. E2). Struggling against the double bind that denies him language with which to speak of himself, Bob Gorneiro is forced to advocate for his identity by assuming a less stigmatizing *Note continued on next page.*

One individual who troubles this narrative is Charles Dieterle, candidate for Boulder, Colorado city council. Profiled in a 1981 *Los Angeles Times* article about that city's election, Charles Dieterle's "modest dream" was to win election as a councilmember, and Bill Curry explains how Dieterle "hustled" to obtain the twenty-five signatures he needed for certification of candidacy

*The teacher should know that pupils may be slow for other reasons than because they are stupid (Riessman, 1965. p.161)*

on the ballot. This candidate for city council, however, did not have the conventional resume for someone running for political office; for twenty of his thirty-one years, he lived in a state institution for the "retarded" and he had been working to get his name on the ballot for six years. In his words, "This year, I wanted to show that the retarded and the handicapped people can run for office" (Curry, 1981, Oct. 8, p. E12). Charles Dieterle was abandoned at birth, raised in a foster home for nine years, and institutionalized at the age of twelve with a measured intelligence quotient of 80. In the state institution, Dieterle was physically abused, drugged daily, had basketballs thrown at his head, and was made to sit on tacks; yet, he fought with his service providers and they finally sent him out to live on his own – just another threat to society. However, contrary to what the narrative would prescribe for this 'slow learning' subject, Dieterle is a proud citizen who holds a part-time job as a custodian. He votes, belongs to the Democratic Party, and works as a lobbyist for "the handicapped." He petitioned the Post Office to build a ramp for "handicapped" patrons, published letters urging the city to improve streets, won election as a Democratic precinct captain, and attended the 1980 Democratic National Convention. Charles Dieterle *is not* a delinquent, he is not mentally disturbed,

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label. He illustrates the difficulty in struggling for a voice in a society that denies one language with which to speak.

he goes above society norms regarding American patriotism, and he has done more to contribute to his society in his thirty-one years than many local politicians do in their lifetime of 'service'. However, society labeled Charles Dieterle 'slow' and that made all the difference for his status in life.

Running for office was just another step in Dieterle's struggle for a voice in the discourse that discriminates against people with non-privileged abilities, and he was aware of the aesthetic project that was necessary in order for him to gain power in society. Dieterle states, "You've got to be in the system (to change things). You got to learn to play their game. I'm doing what the game is" (Curry, 1981, Oct. 8, p E12).

However, on Election Day, Dieterle won 1,333 votes and finished fourteenth in the election for the Boulder City Council seat.

Interviewed by an Associated Press reporter,

*We reward speed. We think of the fast child as the smart child and the slow child as the dull child. I think this is a basically false idea. I think there are many weaknesses in speed and many strengths in slowness (Riessman, 1965, p. 160)*

the candidate states that he accomplished his goal of running for public office, even though he did not win the election (Associated Press, 1981, Nov. 6, p. A2). For most other candidates with a similar resume, their election would have been assumed; Charles Dieterle is a citizen with as much zeal for civil action as Thomas Jefferson, but unlike Jefferson, Dieterle was forced to struggle against labels that framed him as a second-class citizen and institutionalized him for most of his early life. Jefferson sits in the Pantheon of American demi-gods, and Dieterle sits trapped in a double bind that arrests him on the margins of society.

Americans whose first language is not Standard English also struggle against the double bind in the education race. And like the story of Charles Dieterle, one can find



many stories of individuals who interrupt the narrative that characterize the 'slow learner' subject as a threat to society. Enrique Hank Lopez (1980), for example, published a biographical portrait of a man named Fernando. Immigrating to the United States during the Great Depression, Fernando enrolled in a Colorado public school and education officials assigned him to the fourth grade because of his age. Teachers gave the nine-year-old student an intelligence test written in English, even though he could not speak a word of the privileged language. Scoring an I.Q. of zero, Fernando's teachers seated him on the "dummy side" of the room with other Mexican-Americans who they labeled with similar methods. Lopez writes,

But I soon learned that Fernando was no dummy. During a morning recess, we started talking in Spanish (a forbidden language inside the classroom)...though I listened with awe when he spoke about *la constitucion*, I couldn't understand most of the big words that he used...I was further astonished by his easy command of multiplication and long division (in Spanish, of course, so our teacher couldn't have known how intelligent he was), and he absolutely stunned me when he wrote and computed a lateral series of numbers and letters, which he called *ecuaciones*. When I reached the seventh grade, I finally realized that Fernando had been doing algebraic equations, which he had learned from his older brother (Lopez, 1980, Jan. 31, p. C5, edits and italics original)

Lopez remarks that despite Fernando having command of algebra in the fourth grade he remained on the "dummy side" of the class because he did not learn English. Fernando's answer to those who tried to help him learn the privileged language: "*Mejor en espanol*" (ibid).

Lopez reports that Fernando and his family were deported a year after they arrived in the United States, but coincidence allowed these childhood friends to meet as adults. They met in Mexico City at an academic conference; Fernando had become a professor at the Instituto Politecnico and he worked as a petroleum geologist for Pemex on a team that discovered a vast oilfield in his native country. Lopez ends his article, "In a moment of bittersweet remembrance, he was able to laugh about the IQ test that he had

flunked in the fourth grade. But at age 9 it had been no laughing matter” (Lopez, 1980, Jan. 31, p. C5). The United States had successfully stigmatized and deported a child who, as a man, brought billions of dollars to his native country, all because authorities would not listen to what he had to say. Society framed Fernando as a foreigner and a threat to the integrity of the privileged language, though the mind of this student identified as a ‘slow learner’ is as ‘fast’ as any privileged student in American schools.

In 1983, the Associated Press reported on a similar story, but one where the privileged language prevailed. In that year, Guadalupe Quintanilla received news she may never have expected when she was a child. President Ronald Reagan had appointed Quintanilla, a Democrat, to the National Institute of Justice Advisory Board, but the difference in party was not the focus of newspaper stories. The media acclaimed Quintanilla as a forty-five year old mother of three children, who had immigrated to the United States as a child, taught herself English, earned four degrees, and now garnered the respect of the nation’s highest officials – a true American story. However, the Associated Press also reported on the other half: Guadalupe Quintanilla learned English, not because she aspired to work with the President, but because she, with memories of herself having been labeled ‘slow’, saw her children struggling against the same discrimination that forced her to drop out of school in the fourth grade. She refused to sit idle while her children suffered (Associated Press, 1983, Jul. 5, p. 8).

Quintanilla overcame adversity and the media held her up as an example for others to see how hard work and tenacity could overcome the challenges of poverty in America, but that is not why I write about her here. Her achievements are remarkable, no doubt, but we must bring attention to the discourse that creates the obstacles that students

like Quintanilla and Fernando must fight against even today. English language learning remains a determinant factor for many children who struggle against discriminatory narratives in American schools, and while educators have worked to find the best methods for teaching English to immigrant students, we often race to teach a privileged literacy, all-the-while neglecting the 'gifts' that are silenced for lack of translation. Quintanilla is a national treasure, but how many other brilliant minds remain hidden behind characterizations of the 'slow learner' subject? If we listened to Charles Dieterle would he have become a great civic leader? How many 'gifts' have we institutionalized because we do not care to listen? If we listened to Fernando, would he have found solutions for America's energy problems? How many 'gifts' have we deported because we do not spend time to listen? If we listened to Quintanilla and her children, would she have done even more to make America a stronger nation? How many 'gifts' do we silence because we do not wait to hear them speak?

### Summary

In this chapter, I began with the question, "What is the slow learner?" My answer to *that* question is that a 'slow learner' is an object of power. Framed by a society anxious about the national security, economic security, and eugenic security, individuals labeled 'slow learners' are characterized as immature, foreign, backwards in time, and worse, as a means of explaining problems that challenge stability in an ever changing world. When officials centralize American schools at the beginning of the twentieth century, officials frame "slow-learning pupils" as the cause of mediocrity in a school system that requires 'fast-paced' education. Society, thus, uses the 'slow learner' subject

in the race to educate as a vehicle for social anxiety, positioning the subject as a threat and a problem requiring a 'fast' solution.

Conversely, students labeled 'fast' enjoy prestige in American society as 'gifted children', the solution to societal stagnation on the Great Chain of Being. The media turns the gaze towards these individuals and positions them as models for our actions, urging all of us to examine our own pace in education. However, although the discourse promotes a one-dimensional narrative for explaining these subjects, one can see many cases that interrupt their subjectivity. Throughout the twentieth century, students identified as 'fast learners' are characterized as mentally unstable, unpredictable, and brash, highlighting society's desire for subjects who are both 'fast' and 'steady' in their education. Similarly, one can see cases of individuals labeled 'slow learners' who show evidence of 'stable', 'patriotic', 'responsible' citizenship, but because these individuals hold status as 'slow learners' and society arrests them in a double bind that does not give them the language with which to speak of themselves, they remain marginalized. The binary thinking that divides 'fast learners' from 'slow learners' is a cold comparison, and it should have no place in American schools. However, because we ask "what are you?" instead of "*who* are you?" we forever search for ways of treating problems instead of forming relationships.

Regardless of the ethics involved, if society views the 'slow learner' subject as a threat to our security, then authorities need to convince the public that we must take measures to identify and treat the problem. In a society that rallies around calls for urgent action (we want to be efficient), this means declaring war - war on 'slow'. The

resources of a nation would go towards finding treatments for those who 'retarded' progress. America raced to combat 'slow learning'.<sup>60</sup>

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<sup>60</sup> In 1949, the *New York Times* reported on one such declaration. Quoting a spokesperson for the New York City Board of education, the paper reads, "We decided to make a frontal attack on the problem" (*NY Times*, 1949, Jan. 26, p. 27). For New York City, the attack consisted of setting up eighteen city schools with a new curriculum "suitable for use in the schools in the teaching of slow learners" (*ibid*). Similarly, in 1963 the House Committee on Appropriations held a hearing concerning the raising of funds "to combat mental retardation" – wars need money (House Committee on Appropriations, 1963, Dec. 5; House Committee on Education and Labor, 1969, Jul. 8-10; Rogers, 1969, Aug. 20, p. 22; Senate Committee on Labor and Public Welfare, 1973, Jun. 21).

WATCHING CHILDREN: A HISTORY OF AMERICA'S RACE TO EDUCATE KIDS  
AND THE CREATION OF THE 'SLOW-LEARNER' SUBJECT

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## Chapter V

### CAUSE FOR CONCERN: IDENTIFYING the 'SLOW LEARNER' SUBJECT

If a child has any doubt about what pace is 'right' in America's race to educate, it is not long before a psychologist, school official, medical doctor, or parent tells one the answer. In the race to educate, a student is privileged if one is labeled 'fast', targeted for treatment if one is labeled 'slow', and left to gaze upon the other if one is labeled 'normal'. However, the subject does not come to identify with these labels without the intervention of statistical and medical discourses that test, identify, and treat the

individual as a 'problem to be solved'.

In short, society supports the race to educate with discursive anxiety about the 'slow learner' subject and one's

*At one point the slow learner is spoken of; at another point the socially disadvantaged; at another point the culturally deprived; and at the very beginning the term the racially deprived child is used. The ambiguity in the terms used reflects a certain ambiguity in the subject. Many educators have used the term interchangeably. (Belok, 1969, p.113)*

effect on national, economic, and eugenic security; however, for this power to shape individuals' actions, people must know where they belong on the spectrum of learning speed, and they must know that something will be done about the 'problem'. This chapter thus traces the history of identification in schools and doctors' offices to show how various examinations are used to assign labels, identify less-privileged individuals, and frame the subject's body as a pathological entity needing treatment. The treatment, being 'faster' education.



## Testing Time: Framing the Norm in the Education Race

Nineteenth century schoolchildren knew that ‘slow’ was ‘bad;’ they just needed to look around their classroom to see how the teacher treated their peer. In the one-room schoolhouse, the pace of learning dictated where one sat in the room, and distinguished the ‘good’ boys and girls from the rest

(Zimmerman, 2009). When the common school movement gained favor in the United States, these secondary schools were organized so

*It is an illusion to think that any test can determine what is slowness. The so-called slow child may be the careful child, and ought to have the benefit of contact with the quicker child. The careful girl represents a very necessary element and the faster ones need just such a person around (Monitor Bureau, 1927, Mar. 16, p. 4 quoting Victor A. Olander, Secretary of the Illinois State Federation of Labor)*

that the ‘good’ boys and girls would receive the additional education requested, but the other students who were not successful in this model were encouraged to leave school, or were placed in other institutions. One’s status in most nineteenth century schools was determined by teachers’ subjective judgments.

The arbitrary nature of the dividing practices employed in schools appears when one looks at the locations in which officials placed marginalized students during the nineteenth century and early twentieth century. ‘Reformers’ like Dorothea Dix (1976/1843) exposed the living conditions of people identified as ‘idiots’ and ‘insane’ who had been placed with others labeled ‘paupers’ and ‘criminals’. Individuals labeled ‘idiots’ and ‘insane’ were counted in the national census for the first time in 1840, but at this time, there was no quantitative criterion for identifying such individuals (Carlson, 2005, p. 140). Subjects identified with such ‘ailments’ were those who were social outcasts, and did not ‘fit’ with their community – their behavior did not coordinate with

the reference frame of the larger society. There was no guise of objectivity in the selection of individuals for placement in state institutions.

Dix's work resulted in the creation of several 'schools' across mostly the Northern states for the special handling of individuals labeled 'feebleminded' (Carlson, 2005, p. 140). By 1888, 4,000 such residential institutions existed in the United States (Carlson, 2005, p. 140 citing Rosen, Clark, & Kivitz, 1975, p. xviii), and American society had successfully sequestered the 'slowest' members of society from public view. They accomplished this by identifying subjects largely based on physical differences or social expediency (i.e., parents who were unable to 'deal' with a child). This process was efficient at removing the most visible cases of social deviance from the community, but a 'problem' still remained. Caught in between the children who were successful in the common school and those with visible social deviance were a group of kids who were not physically abnormal, but who still failed to master the knowledge society privileged at the required pace. These kids traditionally dropped out of school and sought employment, but at the turn of the century with rapidly rising populations in American cities and calls for public education to take on a job-training role, many states passed child-labor laws and compulsory education laws that prevented these individuals from escaping the public ire.<sup>61</sup> Consequently, American public schools were flooded with a population of students who looked the same, talked the same, and acted the same as many of the students previously identified as 'normal', but they did not learn at the desired

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<sup>61</sup> In a 1964 article, one historian characterized these children, who had been excluded from public education in the nineteenth century and then forced to return, as those who were "less capable and less intelligent youth" (Johnson, 1964, p. 147). However, their deficit of abilities and intelligence, if any, was in their lack of knowledge in the time codes required for success in a privileged academic environment based on mechanical time and middle-class social norms.

pace. Thus, the search was on to find a criterion for differentiating the privileged from the not, and some 'experts' turned to statistical methods for classifying children.

In *Fundamentals of Educational Measurement*, Chester Arthur Gregory writes, "Before one can have an intelligent conception of efficiency, there must be some way to evaluate, to measure it. In fact, one cannot conceive of efficiency except in terms of quantity" (Gregory, 1922, p.4). Education officials concerned about efficiency in America's education turned to the work of Adolphe Quetelet (1796-1874), who conceptualized an answer to how society could measure the quantity of subjects' education. In 1835, Quetelet published *A Treatise on Man, and the Development of His Faculties*, in which he posited that one can use statistical methods to measure human characteristics, and that one could infer the composition of a population from an interpretation of the normal curve that resulted from collecting data.<sup>62</sup> He argued that by tracking individuals against the average at various points in the life cycle, one could study the 'development' of humans and aim at finding the physical and moral attributes that would make one statistically, and divinely, 'perfect' (Wong, 2008, p. 81). For those concerned about the status of 'man' on the Great Chain of Being, Quetelet's methods were perfect for targeting those individuals who put society 'at-risk' of slow 'progress'.<sup>63</sup>

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<sup>62</sup> In a discourse such as epidemiology, the findings from this type of analysis can provide interesting and potentially useful conclusions for managing social problems such as disease. However, Quetelet did not position his statistical interpretations entirely within such a benevolent framework. Instead of aiming to lower cancer rates, or searching for a cure for other debilitating diseases, Quetelet argued that these methods were ideal for finding the 'average man'.

<sup>63</sup> This narrative comes is apparent in Gregory's statement, "Progress in civilization has depended very largely on our ability to measure" (Gregory, 1922, p.4).

Society now also had a way of monitoring teacher efficiency in keeping students 'on-pace'.<sup>64</sup>

After society learned of Quetelet's work, subjective judgments about marginalized individuals gained the prestige of objectivity. Now those concerned could base their judgments against the statistical norm created from samples of thousands of subjects (or in most education research, more like samples of 25 people).<sup>65</sup> In the race to educate, society can identify a valued characteristic (e.g., learning speed), and classify all students along the norm.

The power of Quetelet's statistical methods helps Alfred Binet and Theodore Simon promote their intelligence tests as objective measures even though they are laden with subjective knowledge. Yet, a society desperate for confirmation that individuals are learning at 'the right pace' frames this subjective knowledge as the norm and uses these tests for identifying the 'normal child' and those who do not conform. For example, one intelligence test expects a 'normal' child to exhibit the following skills by age three:

"points to its mouth, nose and eyes;" "repeats correctly any easy sentence of six

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<sup>64</sup> Davis (1922) quotes Superintendent W. L. Connor of Republic, MI who states, "Teaching not teachers must be measured" (p. 139). Davis then continues, "The problem here is to devise a method by which results may be measured. Results are desirable changes in pupils; for example, more reading ability, more writing ability, better spelling ability, and the like. The greater such changes are, the greater has been the service of the school to the community, and the greater has been the service of the school's agent, the teacher...Other things being equal, the teacher who secures the greatest changes in pupils will be considered the best teacher. Other things, however, are not equal....It is then evident that the changes brought about as a result of teaching must be considered in the light of the ability to undergo change, and in relation to the capacity of the children to learn" (Davis, 1922, p. 139). This excerpt highlights the productive power of pleasure in the race to educate with 'productive' teachers being labeled as "best," and it also rationalizes dividing practices for those students identified as "unable to undergo change." Those are two dangerous narratives that gain power throughout the twentieth-century.

<sup>65</sup> Note that with his organization of the first international conference on statistics in 1853, his prestigious appointments in Europe, and his membership as the first foreigner of the American Statistical Association, Quetelet had a loud voice in the academic communities of both Europe and America, and his influence in education discourses is powerful to this day (Klein, 1997).

syllables;” “repeats any number containing two digits;” “describes pictures by naming familiar objects contained in them;” and “knows its own family name” (Schwegler, p. 8).<sup>66</sup> By age eight, among other things, the manual expects children to “repeats the days of the week in their order”; by age nine, “knows the date” and “repeats the names of the months of the year in order”; by age fifteen, “visualizes clock with hands reversed” (ibid, p. 9). If children and their parents want society to classify them as ‘normal’ then the child must master certain skills at the privileged pace; one who fails to learn at this rate is labeled a ‘slow child’.<sup>67</sup>

The discourse of universal time and linear progress shapes identifications in the race to educate by influencing ‘child development’ norms, however, knowledge of these time codes also plays on the assessment of children within the test itself. For example, in the test for three year olds, the examiner asks, “Where is your mouth?” “Touch your nose” “Close your eyes.” (ibid, p. 12). The guide book instructs the examiner that hesitation in one’s answer may be due to shyness, embarrassment, or failure to comprehend the question, but “the response should be immediate” and that while “some children are exceedingly slow and uncertain in their responses” the examiner was asked to “note the fact that it occurs” (ibid). A slow response in this discourse is a sign of pathology.<sup>68</sup>

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<sup>66</sup> Notice again the dehumanizing of the subject with the manual’s use of the pronoun “it” to describe the child.

<sup>67</sup> Albion U. Jenkins (1922) states, “The time has come when the efficiency of teaching and the progress o children in school subjects can be more clearly stated in terms of standardized tests than in any other way” (p. 25). By the beginning of the 1920s the *episteme* of the education race allowed ‘experts’ to declare that these ‘efficient’ tests are the most ‘efficient’ way to measure student ‘efficiency’. For many, any other form of assessment was just a ‘waste of time’.

<sup>68</sup> Looking at these standards, one may notice a great reliance on language skills – tough luck if the subject is not fluent in English, has a poor memory, or is not socialized into the discursive knowledge of timing mechanisms like the calendar and the clock.

Similarly, in a test for six year olds on “esthetic judgment,” the examiner asks subjects to select the “prettier” of two faces from a set of cards. Again, the test manual reads, “judgment normally should be rendered without delay” (p. 21).<sup>69</sup> In the “reversed clock hands visualized” test for age fifteen, the guidebook instructs, “no standardized time has been agreed upon for this test though the test would lend itself very appropriately to time standardization” (ibid, p. 38). In this manual from 1914, although the measurement of time plays little role in the assessment of examinees, knowledge of time is certainly a factor in determining an individual’s intelligence.

It was not long, however, before scholars promoted a relationship between testing speed and intelligence in academic literature. In a 1918 guide to *A Graduated Scale of Determining Mental Age*, Clare Brown Cornell brings time to the test. In test I of her series, children are given five seconds to examine a card of different objects before they are required to report what they saw without reference to the board (p. 10). In a similar test of the number of objects named in one minute, Cornell, “snap[s] the watch at the sound of the first word” (p. 20). The gaze of the clock had arrived in the measurement of normalcy.

*When Jeff was asked to read orally in context at the fourth level, he did so in a high voice, slowly, and at times word by word, with repetitions, pauses, and substitutions. Comprehension, however, was adequate....When Jeff had no time restrictions and could use pencil and paper, his performance improved significantly. In class he might take longer to read than others, and when placed within time restrictions, he might be at a disadvantage (Hannemann, 1990)*

In 1920 John Melville Norbert published his *Standard Method of Testing Juvenile Mentality by the Binet-Simon Scale and the Porteus Scale of Performance Test*, and the

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<sup>69</sup> The author reports that at five years of age, one-half of all “normal children” are unable to pass this test, but Goddard’s research found that by age 6 about 78 percent of children are able to make the distinction. I do not think that says anything about the time discourse, but it certainly says something about the socialization of beauty norms.

first item listed, even before pen, paper, and pencil (those were item #2), was “watch showing seconds, preferably a football timer, noiseless (to be kept out of view at all times)” (p. 40). Test IXe asks the examinee to “name all the months of the year in order,” the guidebook tells the examiner,

As soon as the subject begins, the examiner and assistant should look at their watches (unobtrusively) and should record the number of seconds taken by the subject to name the months...In order that the test be scored plus [thus allowing the subject to advance], the months should be named in order in fifteen seconds (p. 118).

If the subject takes more than 15 seconds but not more than 20 seconds, the guide suggests that the examiner may check for understanding with follow up questions asking the child to place a month in proper order relative to one suggested. Children are assessed on their knowledge, but also on their ability to recall knowledge ‘fast’.<sup>70</sup>

In the next test, the examiner directs subjects, “I am going to show you two drawings. After you have looked at them a short time, I shall cover them and ask you to draw them from memory. You must look at them very carefully for you will have only ten seconds to look at them and that is a very short time” (p. 119). While the subject has “as much time as he wants” to draw the figure from memory, the ten second benchmark cuts off those children with slower visual processing - I do wonder how Michelangelo or Monet would have performed on this test.

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<sup>70</sup> Jenkins (1922) discusses the impact of achievement tests on one school’s principal and teachers. Noting that the school had a predominant “Italian population in the most congested part of the city, Jenkins writes, “Upon analysis it was found that the problem in these classes was one of increasing both rate and comprehension in reading. Special effort was then put forward to correct the defects that had become apparent...The causes of slow rate such as over-emphasis on oral reading, belief that slow reading is good reading, and the failure of teachers to recognize the fact that rate of reading is important, were carefully discussed by teachers and principal” (p. 26). In the race to educate, slow reading led to school failure, and the speed at which one is able to process information is a privileged school in determining students’ academic programs.

In a similar test, the examinee has twenty seconds in which she or he must count down from twenty to one (p. 90). In this case, if one is to pass, she or he needs to count in the proper order in the required time without making more than one error. By 1920, society quantified 'fast' and 'slow', and any student who did not keep pace with the norm is labeled 'defective'.<sup>71</sup>

At the beginning of the twentieth century, this discursive link between speed and intelligence was not hidden from view and it resultantly received much critical attention. William C. Bagley and Walter M. Lippmann, among others, questioned the effect of time limits on the scores of pupils taking these tests (Ruch, 1924, p. 39). Lippmann in particular argues that intelligence ratings earned by soldiers are, "chiefly determined by the time limits used in giving the tests" (quoted in Ruch, 1924, p. 39). The army wants fast minds and their *Alpha* test 'weeds' out the men who cannot 'keep-up' – thus, fast becomes 'smart'.<sup>72</sup>

Supporting this discursive connection between speed and intelligence, however, are a number of studies published in the academic literature. For instance, in 1915 Thorndike found that the students who answered the most problems, *on average*, also

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<sup>71</sup> Harlan C. Hines (1922) describes two types of achievements tests becoming popular in the 1920s. One, "scale tests" are used to measure students' abilities to complete problems at grade-level difficulties. The second type of test, however, are "rate tests." In Hines' words, "A rate test is one composed of elements of uniform difficulty, or several cycles of uniform difficulty, and is used to determine the rate at which the work is done" (p. 37). Efficiency of education is a major concern in American schools, and achievement tests would monitor student 'progress' toward learning goals set for them by school authorities.

<sup>72</sup> Ruch (1924) notes, "*Scores in intelligence tests or educational tests possess meaning only in reference to the norms of performance established for the particular test...* The reason for time limits are chiefly practical ones concerned with economy of time. If the time limits of all tests could be experimentally established in such a way that from 90 to 95 percent of the subjects could complete all the terms within their abilities in the allotted time, the practical situation would appear to be met satisfactorily. It must be admitted that many of the existing tests do not meet this criterion" (p. 39-40, original italics). Many observers realize that the privilege given to 'fast-learners' is normative and has very little to do with any 'true' measurement of intelligence. Instead, 'speed' measures on standardized tests support the narrative of efficiency dominant in American society.



made the smallest number of errors.<sup>73</sup> The argument follows that if the fastest students answered with the highest percentage of correct answers then they must be the most intelligent in the group. Similarly, Sisk (1926) used data from different speed tests and the U.S. Army's own *Alpha* intelligence test, and reported that quick reaction to simple tasks correlates with quick reaction on more complex tasks; however, one's reaction time in one complex task did not necessarily correlate with his reaction time in a different complex task. Yet, Sisk also asserts that individuals' relative quickness in simple tasks carries from one simple task to another. Privileged subjects are able to take fast action on tasks chosen by privileged 'experts'; anyone not familiar with the knowledge being assessed is labeled 'slow'.

The 1920s saw several studies testing similar hypotheses. For example, Hunsicker (1925) concludes that there is a strong correlation between the speed that individuals complete the first two pages of a cumulative skills math test and their ability to complete harder problems later in the test.<sup>74</sup> However, Longstaff & Porter (1928), and McLeod (1929) both published results that raise questions as to the existence of any correlation between speed and accuracy when answering test questions. Furthermore, Bernstein (1924) argues that differences in students' rates of work are due to differences in interest, cognitive differences, physical defects, and differences in temperament, perseverance, or students' cognitive preference of accuracy over speed. In 1926, Dowd concludes that individual speed on one task does not necessarily correlate with the rate of

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<sup>73</sup> Thorndike studied college students completing a worksheet with 1000 addition problems giving them 100 seconds to complete the work.

<sup>74</sup> Hunsicker studied 163 students and concluded that the *average* 'fast' test-taker went farther on the test than the *average* 'slow' test-taker.

work on other tasks.<sup>75</sup> Similarly, F.N. Freeman (1923) found that the speed with which students finish their exams is not related to the score one receives.<sup>76</sup> Walter (1927) concludes that intelligence tests discriminate against 'slower' test-takers with a mental age deficit of about seven months.<sup>77</sup> For some students, that difference in test score would be enough to label them 'morons' and potentially justify their placement in a state institution. The narrative of 'fast learning' as 'intelligent learning' framed 'slow' test-takers as deficient even when a preponderance of evidence suggested otherwise.<sup>78</sup> Thus, by the end of the 1920s, it seems that for some, the use of speed in searching for the 'average man' was questionable practice, but the search for some link continued.

In the 1930s, the search went on to find some connection between speed and general intelligence. F.A. Freeman (1931) argues that three popular intelligence tests are primarily "power tests" that do not privilege speed; however, the researcher reported a small group of students who were "slow but accurate" with their work.<sup>79</sup> In a study by F.S. Freeman (1932) the researcher concluded that scores on the Ohio State Psychological test showed greater homogeneity when time limits were eliminated from the testing environment. Interestingly, many of the students who scored in the lowest deciles gained more points, *on average*, than those in the highest deciles when time limits

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<sup>75</sup> Dowd conducted a study of 165 sixth grade students who completed several timed-tests in various academic areas.

<sup>76</sup> F.N. Freeman studied 114 students taking standardized intelligence tests.

<sup>77</sup> In 1927, Walter studied 165 sixth and seventh grade students who were asked to take the Stanford Revision of the Binet-Simon Tests. The sample was divided into three different timing conditions.

<sup>78</sup> One may also consider additional studies that add evidence to this conclusion such as, in 1928, Klineberg sampled students aged 7 to 16 years who were classified as 'Indian', 'White', or 'Negro' and administered the Pinter-Patterson intelligence test. The author concludes from this work that the *average* advantage of 'White' children in taking the test came from the speed factors in the test, suggesting that the timing norms in intelligence tests were calibrated to privilege children knowledgeable in the 'White' temporal codes.

<sup>79</sup> F.A. Freeman's study sampled sixth grade, eighth grade, and eleventh grade students taking the National Intelligence Test, Otis Advanced Examination, and the Terman Group Test of Mental Ability respectively.

were removed. This leads one to question if these tests measured one's intelligence, or just one's speed.

Sutherland (1934) however, searched for a factor of speed independent of general intelligence and concludes that individuals' speed in problem solving correlates to measurements of their IQ and the number of steps one takes in solving the problem. In the same year, Tinker (1934) reports that when administered the Army *Alpha* test, groups in timed and untimed conditions showed no significant differences in their performances *on average*. For some, speed is valued, and it is a correlated characteristic of intelligence.

For Albert Wiggam (1936, Apr. 22), writing in the *Daily Boston Globe*, evidence of forgetfulness amongst individuals society identified as 'slow learners' was a sign of this correlation. Citing research by Walter S. Hunter, who published a "1000-page volume," Wiggam told readers, "quick learning is accompanied by good retention" and as a result, "It probably means that fast learners as a rule have the better minds" (p. 19). With discursive support from the popular media, this narrative of 'slow learning' equaling low intelligence gained power.

However, by mid-century, empirical scholars were still returning with conflicting findings concerning any correlation between speed and intelligence. Sampling high school students in a college preparatory track, Tate (1948) concludes that students' speed stayed consistent when compared, in relative standards, to their peer. Studying two groups of students taking the Scholastic Aptitude Test who were either put into a timed-test environment, or an untimed condition, Mollenkopf (1950) noticed that a small group of students did not achieve high scores as expected when tested in the time-restricted

environment. Perhaps these tests were just measuring thinking speed, not ‘overall intelligence’.<sup>80</sup>

Instead of eliminating time as a variable, however, several authors worked to include it as a measure of intelligence. For example, Furneaux (1952) suggests that probability functions of time (e.g., the probability that a solution recorded within the time allotted will be correct) should be included as variables in any measure of intelligence. Similarly, Gulliksen (1950) proposes several methods for calculating the reliability of timed-tests and suggests that a “number unattempted score” be included in one’s determination of intelligence. Test-taking speed may not correlate with intelligence, but some officials aimed to link the two values nonetheless.

By the 1970s, with the relationship of time and intelligence becoming hidden in the medical discourse of ‘learning disabilities’, several authors again-advocated for a connection between the two concepts of speed and intelligence. Burack (1967), studying college students taking multiple choice and short answer exams in an introductory psychology class, argues that when given enough time to finish, it was not likely that the students receiving the highest grades would turn in their papers first. However, Hendel (1971) argues that test timing increases *average* test scores.<sup>81</sup> Yet, a study of students taking the timed-LSAT test found that when officials reduced the time-pressure of the test, students’ scores increased, *on average*, regardless of socio-economic privilege (Evans & Reilly, 1972). Nevertheless, Spady (1974) and Chall (1977) both suggest that

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<sup>80</sup> Note that I am in not condoning the concept of “overall intelligence” here. However, the architects of these studies aimed to assess such a construct so I use their lexicon.

<sup>81</sup> Sampling “retarded adults,” high school students, and college students who completed the GATB test in either a timed or untimed condition, this author found that all three groups had significantly higher scores under the “speeded condition”.

rate of learning has potential for becoming the “new criterion for selecting those who will fill scarce professional positions” (Arlin, 1984, p. 76) – they must have missed the previous seventy-five years of research on this topic, or perhaps they just look to measure individuals speed.

With conflicting findings regarding the validity of standardized tests, one should not be surprised that corporations designing these tests defend test timing, and the practice of intelligence / achievement testing as a whole. For example, Evans & Reilly (1973) tested the effect of timing conditions on samples of wealthy European Americans and poor African Americans when taking the Admission Test for Graduate Study in Business. The authors conclude that the time allotted had little correlation with the outcomes for these three groups (see also Wild & Durso, 1979). Furthermore, Tomas Donlon (1980) published an annotated bibliography of the many studies on testing speed in an attempt to defend Educational Testing Service’s decision to maintain time limits on their high stakes assessments like the SAT and GRE.<sup>82</sup>

Yet, despite tumult in the academy about the place of time in assessing individual intelligence and academic achievement, some authors concerned about the threat of the ‘slow learner’ subject on the speed of education, frame learning speed assessments as a way to differentiate classes. Johnson and Henning (1979), for example, attack common-space learning groups because of the “heavy price” it took from students identified as ‘fast learners’. Critical of the mastery learning discourse that was emerging in education at that time, Mueller (1976) and Cox & Dunn (1979) advocate an “index of speed of mastery” so that ‘slow learners’ could still be identified. At its most visible discursive

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<sup>82</sup> As of 2012, ETS still posts this work on their website under suspicion that time limits on their tests unfairly privilege certain groups of people (Donlon, 1980).

moment, the *episteme* of the education race allows officials to announce that “speed” should determine students’ futures. One can see that intelligence tests and achievement tests at this point have less to do with assessing students’ general intelligence than with determining the speed at which they can demonstrate their knowledge.

However, just as some scholars felt emboldened to make visible the values held in the race to educate, the *episteme* shifted so the power of this discourse could retract into the shadows. One can see this shift beginning with Bloom’s (1976) articulation of an organizational system for addressing this connection between speed and intelligence. Bloom argues, “The differentiation between good and poor learners, or fast and slow learners, tends to be reduced to a point where it is difficult to measure in hours or minutes” (p. 191). In fact, Bloom puts a nail in the coffin of the terms ‘fast learner’ and ‘slow learner’ by suggesting that these classifications have “little practicable distinctions” (ibid). However, his answer for addressing these concerns about learning speed and groupings is for teachers to provide “favorable learning conditions” for students with *natural* differences in ability. Bloom’s statement in 1976, and others like it (e.g., Buss, 1976), is a harbinger for the medicalization of learning differences in American schools and the rise of in-house special education based on notions of natural learning differences (Arlin, 1984). Society would replace dividing practices justified by differences in learning speed with segregation based on identifications grounded in medical discourse but social anxiety about the pace of learning remained.<sup>83</sup> For one to gain privilege in

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<sup>83</sup> Even scholars who argue against the correlation of speed with intelligence, instead of challenging the foundation of this claim, create studies that show how individuals identified as ‘fast learners’ are ‘protected’ if their chosen teaching style is implemented. For example, Arlin and Westbury (1976) argue for a mastery-learning paradigm in schools by suggesting that self-paced learning creates more variance in learning rates than those found in teacher-paced classrooms. Similarly, Resnick (1977) criticizes Bloom’s *Note continued on next page.*

American society, one must demonstrate privileged knowledge at a 'normal' pace, or one risks identification as 'slow'.

### **Shifting Targets: Discursive Ambiguity in the Classification of Children**

An editorial cartoon in a 1934 *LA Times* article by Phil Skelton summarizes the arbitrary nature of classifications based on norms. In the cartoon a man stands expressing, "I'm average!" To his left is a slightly taller man who states, "Well-then I guess I'm above average!" and a slightly shorter man to his right quips, "If that's the case -I must be below!" By the 1930s, the discourse of universal time and linear progress had found its way into many aspects of American life, but some people found irony in the system of classifications that was gaining power in American society. So I now turn to challenge the standard interpretations employed in the race to educate by "mobilizing the vagueness" in society's statistical classification of the 'slow learner' (Garnar, 2006, p. 358 citing Foucault, 1978, *History of Sexuality, vol. I*).

### **(Un)Defining Quantitative Classifications**

The first place one looked to classify an individual's pace of education compared to the *average* was the normal curve of the intelligence tests. Using the normal curve, many officials employed the statistical identification of the 'slow learner' subject to classify 15 to 20 percent of the population with that label. Describing the IQ-based tracks

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model for education, but does so through a dichotomy in which the only choices are providing equal amounts of time with varying achievement, or providing varying amounts of time with equal achievement. These conceptions of education leave no room for equal privilege amongst students of varying pace. Under the gaze of the clock, there is no place for such a conception of education.

in the New York City curriculum, the *NY Times* reported that city school officials classified “15 to 20 per cent” of students as low academic ability (*NY Times*, 1938, May 1, p. 48; *NY Times*, 1938, Feb. 12, p. 17). In 1942, the *New York Times* reported that officials identified 20 percent of the elementary school population as “slow learners” (*NY Times*, 1942, Oct. 6, p. 17). Furthermore, in 1950, the same newspaper reported, “15 to 20 per cent of school pupils are ‘slow learners’” (Freeman, 1950, May 19 p. 30). Statistical identification of deviant subjects works well, for some.

*“Johnny can be in the fifth grade for arithmetic computation, the sixth for arithmetic reasoning, the seventh for spelling, the eighth for word meaning, the ninth for paragraph meaning, and the tenth for language - and yet officially be registered in the sixth grade”*

*(Sammis, 1967, Sep. 16, p. 11 Quoting John Goodlad, professor of education and director of the University of California at Los Angeles Elementary School).*

However, some authors viewed the identification of the ‘slow learner’ subject with differing lenses. In 1948, Moskowitz writes, “the slow learner occupies a position between the mentally handicapped and the normal individual” (p. 476) – an ambiguous region of identification. Consequently, there is much disagreement on which range of individuals society should label as ‘slow learners’. In promoting a program that promised to lift “the morale and learning of this group out of the depths,” Forman (1959) states, “about 5 out of every 100” students is labeled a ‘slow learner’ (p. 15). Similarly, Shepherd (1953, Feb. 9, p. 15) states, “About 4 to 5 percent of all children can’t learn fast enough for regular school work.” These statistics are below expectations for those who identified 15 to 20 percent of the population as ‘slow learners’. One report cites a superintendent of schools who classifies

*It does not take a child long to sense I.Q. – based distinctions, and live up – or down – to them (NY Times, 1960, Mar. 10, p. 26 quoting David Engler, author of How to Raise Your Child’s I.Q.)*



“from 2 to 3% of the total pupils in elementary schools” as “slow learners” (*LA Times*, 1958, Nov. 16, p. OC10). Hans O. Andersen in 1966 writes that one out of every four adults in America should receive the ‘slow learner’ label – 25% of the adult population (p. 200; see also *NY Times*, 1963, Oct. 29, p. 18). Yet, Holloway (1956) proposes that one discuss the ‘slow learner’ subject as “a child with a scholastic aptitude (I.Q.) score of between 50 and 80”(p. 129), or a little over 10 percent with a normal curve of standard deviation 16. According to these authors ‘slow learners’ constitute anywhere between 4 and 25 percent of the total population. Thus, some education officials admit that there is no accurate figure for identifying the number of ‘slow learner’ subjects in society (e.g., *Washington Post*, 1956, Sep. 7, p. 35). Yet, that does not prevent them from going ahead and doing it anyway.

In a supposed effort to clarify the quantitative ambiguity in the identification of ‘slow learners’ some authors try to subdivide the group subjected to this label. A 1967 article in the *LA Times* for example warns readers, “There must be careful distinction between the truly slow learner, the slow learner who just gives the impression of lagging, and the mentally retarded” (*LA Times*, 1967, Sept. 1, pg. D12). For this author, the ‘slow learner’ subject constitutes “the 15 to 18% of children in the school population whose

general intelligence is about 75 to

90% that of the average child’s”

(*ibid*). While the “pseudo slow

learner” just lacked self-

confidence and would eventually “bloom,” the “real slow learner” had a permanent defect and was a serious problem for education (*ibid*). The ‘slow learner’ label is reserved for

*The child stigmatized as a ‘dawdler’ sometimes only seems to be dawdling in contrast to a mother who naturally is a swifter worker (Ilg & Ames, 1954, Oct. 29, p. B4 quoting a letter written by a reader of their column)*

those who violate societal expectations regarding to the pace of learning – that is a sliding scale – and it does not matter how many individuals are identified as ‘slow learners’, just as long as society knows that they exist and that they are a threat to the pace of education.

### **(Un)Defining Qualitative Classifications**

With the several problems in using the quantitative definition of ‘slow learning’ as a tool for disciplinary examination in the wider society, ‘experts’ put forward additional qualitative descriptions of the subject for people to use in their search. Tuttle (1932) states,

In almost every classroom we find another smaller group of plodding pupils, with average intelligence, but scoring low in other specific abilities to read, to get meaning, to understand, to interpret, to make judgments, to find what they are looking for, to associate meaning, to recall experiences, etc. It is this particular group we wish to discuss (p. 6).

Promoting a Public Affairs Pamphlet by Millard Bienvenu, Sr. titled, “Helping the Slow Learner,” the *Boston Globe* published an article in which the author “differentiates between slow learners and the mentally retarded. He also points out that many children, not really slow learners, underachieve” (p. B\_7). Just in case students escaped quantitative identification, some authors want society to know that ‘problems’ still exist.

The quest to seek clarity prompted one researcher to ask, “What are the unique qualities and characteristics of the slow-learner?” (Harper, 1941, p. 223). Harper lists eight signaling qualities of this subject and emphasizes a “rigid” mentality in individuals identified as ‘slow learners’, and the ‘instability’ in the subjects’ actions and emotions. While one may be “fortunate enough to possess some particular talent of an artistic, social, or mechanical nature,” Harper is sure to remind us that the “lack of cultural

background” and “erratic temperament” will surely undermine any achievements (p. 224-225). Parents and other lay people can identify some of these characteristics in the children they see every day; however, Harper undermines this system by stating, “the slow learner has no qualities or characteristics not found in the so-termed normal or above-normal pupil” (p. 224).

*It is dangerous to try to categorize children at any age and it is particularly difficult to do so when children are still in elementary or even junior high school. Rates of scholastic development vary so much that children's capabilities and performances must be reviewed frequently and carefully (Washington Post, 1959, May 17, p. E4)*

To support the qualitative identification of the subject, some authors embrace the relative nature to identification. Abele (1951) works to silence the quantitative classifications of ‘slow’ altogether. The author writes, “There is no absolute level of ability below which a pupil must be called a slow learner, for example, an intelligence quotient of 90 or 75” (p. 420); the author instead suggests that education officials should form local norms from their own school populations – we can’t have a race to normalcy without someone identified as ‘slow’. No matter who is identified with such a label Abele is willing to describe the characteristics of the subject and list the “general differences between slow learners and average pupils”; such as,

The slow learner is deficient in the capacity to learn intellectual things – the kind of capacity that is measured by verbal intelligence tests...They tend to learn by comparatively simple mental processes....they prefer concrete and practical learning...They prefer short-time units with specific objectives...They have limited powers of self-criticism (ibid).

Abele does not recognize that these characteristics seem to appear in all people at some time, and it seems that any student in a school with this identification scheme would surely develop the power of self-criticism – she or he would just follow the model of

everyone else criticizing her or him. Following Abele's argument, we could formulate local norms at any learning environment – I wonder who is labeled 'slow' at M.I.T. and Harvard – motivation for everyone to race.

Similarly, Cyril Burt (1952) argues that the identification of 'backwardness' must be "somewhat arbitrary, based on practical convenience or convention, like the hour fixed for lighting up" (p. 37 quoted in Corbett, 1996, p. 19). The label of 'sub-average' thus changes definition to meet the needs of the 'average man' (see Apostle, 1969, p. 7).<sup>84</sup>

By 1989, Watson & Rangel argue, "Slow learners are those students who do not perform at a level low enough to qualify for special education, but who, for whatever reason, are not good enough students to maintain the pace of the average classroom" (p. 226). Classification of the 'slow learner' subject is about one's pace of education compared to the discursive norm, not about any lack of abilities. Thus, there is no agreement on the characteristics of this 'slow learner' subject, but the one criterion that seems certain is the pace of learning compared to an arbitrarily selected group of peers.

With the relative nature of the conscious attempts to define the qualitative characteristics of the 'slow learner', some comment that even this method serves little value for educators. Lammers (1967) notes, "This ['slow learner'] terminology...has become so nebulous in its meaning that it can be more of a hindrance than a help in current pedagogy" (p. 298). Lammers suggests that officials could classify those labeled

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<sup>84</sup> Karlin (1961) also attempts to offer conceptual clarity by recognizing the arbitrary nature of the quantitative identification of "mentally deficient children," but this author also communicates the role of 'growth' in the subject's identification. Instead of seeing the 'slow learner' as "deficient in the capacity to learn intellectual things" Karlin focuses on the pace of learning as a criterion for identification. The author states, "when we teach reading to slow learners we are dealing with a group of children who do not learn so rapidly as most normal and gifted children but who are capable of mastering many reading skills associated with growth in school" (p. 280). Again, we see the relative comparison of students as the measure for identification of 'learning problems' but here we also see the requisite of learning speed.

'slow' into two categories: 1) "the student is dull, bordering upon and including those learning levels that we associate with class in special education"; 2) "children who have a significant level of competence but who have a slow learning 'style'" (ibid).

Likewise, Swiss, Thom & Olsen (1976) try to relieve problems with identification by getting more specific with their definitions. These authors state,

Although the term slow learner can be used to refer to children of average ability who are experiencing specific developmental lags in perceptual-motor, language, and academic attainment, for the purposes of this article the term should be interpreted to mean slow in learning intellectual tasks (p. 732).

Swiss, Thom & Olsen make sure to mention that the 'slow learner' identification overlaps with classifications of 'mentally handicapped' signaling the pathology associated with such a label (ibid). It is this identification of the slow learner in relative reference frames, and the underlying assumption of pathology in the label that allows this discourse to position the 'slow learner' as the cause of societal ills. Therefore, it is under this regime of truth that individuals in American society search for solutions for this 'problem', the primary solution being a race to educate.

### **Assigning Labels: Examining Society in the Race to Educate**

In 1952, Cyril Burt suggested, "the definitely normal merge through the border-line cases into the definitely sub-normal, much as daylight merges through twilight into night" (p. 37 quoted in Corbett, 1996, p. 19). With concerns that the 'slow learner' subject is hard to distinguish from students identified as 'normal' (Featherstone, 1951, p. 327), descriptions of privileged students often come with some reference to the pace of learning (see Lesko, 2001 for more on how the pace of physical growth affect social

rankings). For example, when New York City opened an experimental school for “bright” and “dull-normal” students, educators employed intelligence tests to distinguish the two groups. Their reason: “It is impossible to distinguish a potential genius [sic] from an average citizen... You cannot tell by looking at a child if he is bright” (*NY Times*, 1936, Feb. 4, p. 23 quoting Professor Leta S. Hollingworth of Teachers College, Columbia University). In 1968, a *Los Angeles Times* article quotes Clifford Shryock, a state education consultant who states,

*Slow learning should not be penalized or looked down upon, and the teacher should be alert for slow, potentially gifted, children (Riessman, 1962, p. 86)*

The fields of education and sciences are coming up with studies that show retardation cuts across many areas. It is not limited to those with language problems or other characteristics of a different ethnic background (*LA Times*, 1968, Aug. 1, p. C2C)

Corbett (1996, p. 20) suggests this imagery places a definite value on normalcy and emphasizes the social danger represented by “souls on the borderline,” but these statements also suggest that ‘normal students’ are not immune to the pathologies of ‘slow learners’. Thus, as the meaning of ‘fast-learners’ as a national ‘gift’ and ‘slow learners’ as a threat to society became more powerful, the educator’s job became one of keeping children from falling into the defective position of the ‘slow-learner’. With the ‘slow learner’ subject hiding in the shadows of society, individuals looked to intelligence tests and achievement tests for ‘flushing’ out those who threatened societal ‘progress’. However, as this knowledge

*To place the suggestion of inferiority in the thought of a little child and to do this through an alleged ‘scientific’ system which shows more than 40 per cent error is a crime against childhood (Monitor Bureau, 1927, Mar. 16, p. 4 quoting Victor A. Olander, Secretary of the Illinois State Federation of Labor)*

gained power in the public sphere, whenever the society felt threatened, the search for these subjects become a national endeavor.

### **Searching for Abnormal Subjects**

In 1922, Samuel S. Brooks, District Superintendent of Schools in Winchester, New Hampshire listed the institutions that used standardized intelligence test to identify deviant individuals. He writes,

In the hands of practical men intelligence tests are proving themselves to be practical tools for practical purposes. During the war they were used to obtain leaders of men for the army; large industrial concerns are using them to pick young men and women to be trained for executive positions; great universities are using them in lieu of entrance examinations to select students; social welfare organizations are using them to discover feeble-minded individuals who menace society as potential or actual criminals; live teachers and educational administration are using them for various purposes" (Brooks, 1922, p. 217)

Officials use intelligence tests and achievements tests to identify subjects characterized with less-privileged traits, and then the prestige of statistical methods that comes with these assessments justifies marginalization of the subject on the basis of deficit.

Conversely, officials use these tests for identifying those who exhibit characteristics that society values. For example, Title I, Section 101 of the 1958 National Defense Education Act states, "We must increase our efforts to identify and educate more of the talent of our Nation" (P.S. 85-864, 1958, Sept. 2, p. 1581). In the discursive shadow of

*Students worry that there is too much emphasis on academic status symbols, upon academic success being the only kind of success... and they are concerned that competitiveness has forced them to grow up too fast, to conform too quickly, to become 'organized children' (Grant, 1964, Jun. 7, p. E2)*

Sputnik, this law was a reflection of a discourse that had been gaining power in American society for half a century. On August 28, 1958, one reporter stated, "One of the greatest

tasks facing American education is to identify our gifted children” (Forman, 1958 Aug. 28, p. 4). ‘Fast-learner’ subjects, like ‘slow learner’ subjects were objects of power, and identification of these subjects was top priority when the nation is in crisis.

Two years earlier, one author suggested that education officials had to identify “these more capable learners early in their school careers so that they may be given work suitable for their capacities” (Johnson 1956, Mar. 4, p. 12). Citing Dr. Jack Kough, vice president of Science Research Associates at the University of Chicago, the same *Boston Globe* reporter communicates the tragic

*I don't like being called gifted because it makes me feel like an object and not my own individual person. I don't think we should be 'called' anything. – girl, 12, Georgia (Delisle, 1987, p. 16)*

circumstance that “thousands of gifted youngsters throughout the United States – and their parents – are not even aware of their unusual abilities and potentials” – worse still, “Some are even considered slow learners” (Forman, 1958 Aug. 28, p. 4).

Sputnik may have inspired some people to voice their concerns about the pace of education in America, but anxiety about early and accurate identification of students is voiced decades before the Soviets launched their satellite. Citing a recommendation made by Elizabeth A. Irwin, director of experimental classes at Public School 41, in Manhattan, an article in the *New York Times* states,

Segregation of talented children at the earliest school age was most advantageous, so that the pupils might compete with children who are superior to them rather than ‘ride the crest of the wave’ above their mental inferiors (*NY Times*, 1931, Apr. 23, p. 26).

In 1944, the *Daily Boston Globe* published a story that articulates just what would happen if concerned parents and teachers were lax in their identification of children. Lyons (1944, Nov. 1) reports that Boston’ public schools misplaced more than 3000 children in classes for “the mentally defective” (p. 3). Citing a study by Helen B. Sullivan, associate



professor of education at Boston University, the author claims that children labeled with intelligence quotients as high as 90 were found in classes for children who would have been placed in institutions if not for lack of space. Conversely, the author claims that children labeled with intelligence quotients in the 50s were educated in classes with children identified as 'normal'. The cause of this 'misplacement', according to Lyons, was the schools' failure to conduct achievement and intelligence tests on the whole elementary school population. In this line of reasoning, Americans risked delaying the 'fast-learning' of privileged students if they contacted 'defective' bodies.<sup>85</sup>

When individuals raised concerned about the misplacement of their children in the Washington, D.C. public school system during the early 1960s, Superintendent Carl F. Hansen granted parents "veto power" over the placement of their children. However, when student enrollment in the District's junior high school and elementary school basic tracks started shrinking, authorities claimed, "It stems from more careful testing and screening on the part of school officials" (Grant, 1965, Oct. 17, p. A1). Similarly, a 1967 article in the *Los Angeles Times* warns parents, "If [slight impairments] are not discovered until children go to school they are often mistaken for much more serious conditions. Children who are really bright can thus be classified as retarded" (Getze, 1967, Nov. 24, p. B6). Similarly, in 1969, when stories surfaced that the Boston school district placed Deaf and non-English speaking children in classes with "mentally

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<sup>85</sup> In the early 1960s, authors like Frank Reissman of Columbia University questioned the conception of 'gifted intelligence' as a correlate of learning speed. Reissman gained national attention with his argument that "Slowness... is not necessarily a handicap, and trying to speed up the slow learner is a negative approach" (Eliasberg, 1963, Jul. 14, p. 156). Reissman attempts to reframe the 'slow learner' as a student who worked "steadily and hard," as one whose thinking could lead to "unusual and fruitful conclusions," and as one who embodies creative potential (ibid). However, statements made by Reissman, and authors like him, may have only prompted some authorities to redouble their efforts in identifying those with potential for fast learning and those without as early as possible.

retarded” students, the *Boston Globe* reported that a group of “parents, psychologists and community workers” petitioned the School Committee. The group’s resolution calls for, “a complete mental, physical and psychological evaluation of every child now in special classes and all those being considered for placement” (McCain, 1969, Sept 12, p. 40; see also *LA Times*, 1978, Jul. 25, p. OC6). To keep America on course, society requires all children be examined by ‘experts’.

Similarly, a letter written by a Los Angeles school director in the same year attacks that city’s decision to ban intelligence tests for children in elementary school grades. Norman Mirman, the letter’s author, acknowledges the test’s issue with labeling children as, “slow learners without taking into consideration their cultural and language difficulties,” but he decries the loss of an assessment that can identify, “the children who really are more capable.” Mirman privileges the intelligence test as an instrument that can identify subjects, “who have the potential for learning” (Mirman, 1969, Feb. 14, p. B8). Nothing could be worse than leaving a ‘gold nugget unturned’ and if there were blurry lines between ‘fast’ and ‘slow’, then concerned citizens had to do their part to identify those individuals who were ‘gifted’ and those who were ‘defective’ as early as possible.

To assist in their search for the ‘gifted child’, educators and policy-makers enlisted the help of parents as first responders to this potential catastrophe. One *New York Times* article from 1958 cites the chairman of the Department of History at Long Island University who calls for parents to act as “talent scouts” by reporting “the usual, the different, and the exceptional” behaviors of their children to school officials (*NY*

*Times*, 1958 Dec. 7, p. 142). Prestige awaited the parents who could produce the ‘fastest-learner’.

### **(Un)Identifying the ‘Slow Learner’ Subject**

Schools are one defense against the ‘slow learner’ subject effecting the pace of ‘progress’ in American education; however, parents are the first line of defense in identifying students with abnormal learning rates. Yet, a newspaper column by Myrtle Meyer Eldred illustrates how some members of society were confused about who they were looking for. In that article, a mother writes to Eldred with concerns about her “slow child.” The mother is

worried about the intelligence of her daughter, but the columnist had to remind the woman that she

*There is one main feature of this panoptic system, a feature that illustrates clearly how the special education system works. On the one hand, children are individualized within the statementing process. Children are, in effect, decontextualized and ahistorical; they are taken (metaphorically) from the context of their family, surrounded by a host of professionals and authorities, and positioned as an objectified subject from analysis in terms of assessment and examination (Morgan, 2005, p.335)*

did not provide advice on such matters despite publishing a leaflet titled, *Helping the Slow Child*. In Eldred’s words, “[We] call the child a ‘slow’ child when we mean that he dawdles and can’t get up steam enough to move rapidly until it becomes essential to move. This use of the word ‘slow’ does not imply any mental backwardness” (1942, Jan. 21, p. 21). Not only, in 1942, is the mother uncertain as to the relationship between physical speed and intelligence, but Eldred also begins to link ‘slow learning’ with the more stigmatizing classification of “mental backwardness.”

Though the statistical identification of intelligence made a clear distinction between ‘slow children’ and those identified with ‘mental retardation’, we see here that, conceptually, Eldred uses the two terms interchangeably. If Eldred did wish for this

conceptual clarity in her writings, it took her over a decade to communicate any distinction to her audience. Another case of mistaken identity caused by people asking the dehumanizing question, “What is the slow learner?”<sup>86</sup>

With conceptual confusion communicated through stories like this, an anxiety surrounds the prospect of missing the ‘slow learner’ subject. Thus, society values parents who help schools identify children labeled ‘slow learners’. In this effort to assist parents with identifying their own children, the discourse encourages parents to seek the advice of experts. For example, writing in the *Daily Boston Globe* advice column, one author urges a parent concerned about a child’s misbehavior to “take the little boy to a good psychologist and have his intelligence measured” (Teacher, 1939, Aug. 20, p. B45) – it portrayed measuring intelligence as a procedure similar to having his temperature taken.

Similarly, in the midst of World War II, newspaper media published officials’ calls for “diagnosis” of children. In a *New York Times* article, the author quotes the Executive Secretary of the New York State Committee on Mental Hygiene of the State

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<sup>86</sup> One can see similar evidence of this collective identification of all subjects on the left side of the normal curve in other places as well. For instance, in a 1953 article titled, “Social Rights Urged for ‘Slow’ Children,” the assistant superintendent of public instruction for Illinois reportedly made a plea for more opportunities for “mentally retarded children” without distinguishing what range of IQ he was discussing (*NY Times*, 1953, Oct. 16, p. 48). Similarly, a 1958 article titled, “Slow Children Aided” states, “The school will stress educating retarded children to their full capabilities and training teachers who plan to work with such children” (*NY Times*, 1958, Jan. 31, p. 19). One letter to the editor of the *Washington Post* in 1952 gives no heed to statistical identification of ‘slow learners’. The author states, “the public fails to realize that children who fail to progress in school and must remain in the same grade for another year, are also retarded children, with a mental capacity not great enough to cope with present standards of teaching” (Bennett, 1952, Mar. 31, p. 6). With a eugenic twang in his voice, the author concludes, “certainly they are retarded to a lesser degree than many of their neighbor’s children, or even brothers and sisters who remain at home and are never sent to school because no provisions are available for teaching them” (*ibid.*). Conversely, one Maryland county, in 1955, established a “special school for abnormally slow learners” (*Washington Post and Times Herald*, 1967, Mar. 7, p. 20). One *New York Times* crossword puzzle printed in 1967 avoided any quantitative conceptual work with its clue, “Slow learner, in old schools”; the answer: dunce (Farrar, 1967, Mar. 7, p. 39, clue 18 across). Whether one was discussing students identified with an IQ of 90 or those identified with an IQ of 50, the newspaper media seemed to, if at all, use a wide quantitative measurement for subjects with measured sub-average intelligence. Subsequently, the words ‘slow’, ‘retarded’, and ‘backwards’ are used interchangeably for much of the twentieth century and this legacy of language is still with use today, only the power in the meanings are, for the most part, hidden.

Charities Aid Association who thinks “it important that parents get a diagnosis from a specialist in the field” (Mackenzie, 1944, May 21, p. SM29; see also Geselt Institute 1955, Aug. 12, p. 37; Ilg & Ames, 1956, Sept. 28, p. 33). Quoting Clifford Shryock, state consultant for “programs for the mentally retarded” the *Los Angeles Times* reads, “increasing emphasis should be put on early childhood as the point where children ‘heading toward retardation can be saved’” (*LA Times*, 1968, Aug. 1, p. C2C). In 1958, the Education of Mentally Retarded Children Act called for government funds, “To encourage expansion of teaching in the education of mentally retarded children” (P.L. 85-926, p. 1777). The nation supported this treatment with “a dearth of facilities for the medical, psychological and social evaluation so necessary for the guidance and successful adjustment of these children at home and at school” (Lewis, 1954, Aug. 28, p. 8); the search for- and treatment of- ‘slow learners’ is a national priority in America’s education race.<sup>87</sup>

Yet, with social stigma attached to the ‘slow learner’ identity, authorities have to find ways of convincing parents to surrender their children. An article in the *Daily Boston Globe* captures the concern, “Measuring these varying rates, then holding some children back, could cause deep resentment and shame on the part of the parents” (*Daily Boston Globe*, 1959, Sep. 20, p. B2; see also Stone, 1970, Jul. 22, p. 4). Thus, the media

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<sup>87</sup> Note that a popular notion communicated in the media is one that early identification of children based on intelligence tests will ‘save’ children. As an example, a 1966 *Los Angeles Times* report explains how federal funds from Title III of the Elementary and Secondary Education Act would pay for tests hoping to “spot slow readers and slow learners at this early age” (*LA Times*, 1966 Jun. 5, p. CS9). The report states that the test results would enable teachers “to give special attention to deficient students” with the hopeful end result being “fewer dropouts and fewer youngsters in trouble at school” (ibid). Similarly, a *Los Angeles Times* report from 1975 speaks of a “low-cost screening program for children with learning problems” that would detect problems so they could be “remedied before harming the motivation of children in school” (*LA Times*, 1975, Nov. 14, p. WS6). The fee for the test was \$10 and potential subjects are assured that “if a problem is discovered, parents are referred to appropriate agencies or professionals for additional consultation” (ibid). Early identification, apparently, was not only good for society, but it was ‘good’ for the ‘slow learner’ as well.

works to convince parents that the label of 'slow learner' is nothing to fear. The contributor who wrote as Teacher in the *Daily Boston Globe* states, "Please do not feel that such an idea is a disgrace for you and your husband. Every one of us can have a slow child, our private beliefs to the contrary. Your first thought now must be to the child" (Teacher, 1939, Aug. 20, p. B45). Arguing that parents have a duty to identify their 'slow learners', Thurston (1964) states,

The parents of the slow learners must understand through education and counseling that their refusal to accept the facts about their children and take appropriate steps constitutes a selfish and unthinking act on their part. They must realize that they may be motivated by a desire to "save face" or to "keep up with the Joneses," or that their reaction represents a desire on their part to deny personal inferiority. They must come to know that it takes courage and genuine love to take such action in the best interests of the child, even though it may be distressing to them personally. (p. 297).

Yes, shame comes to those with "slow children," but even greater disgrace comes to those who do not put the best interest of their child first – at least the best interest according to a society concerned with 'progress'.

Thus, parents are encouraged to seek out support groups and recruit other parents who are in denial. One contributor to the *Washington Post* warns parents who search for others like them, "Be prepared for parents who will not admit the problem, and for teachers who dislike advising parents that a child might be a slow learner" (Mrs. W.J.A., 1962, Jul. 23, p. B6). Like traveling salespeople or preachers on a mission, vigilant parents were taught never to give up their search, never take 'no' for an answer. Conversely, the pastoral power of this conversion experience reinforces the narrative of the 'slow learner' subject as a threat to social 'progress'.

When concerns proliferate about the accuracy of parents' assessments (e.g., Eldred, 1948, Dec. 9, p. C6), authors appeal to parents' sense of curiosity about their children as justifications of why mothers and fathers should seek an 'expert' diagnosis.

For example, columnists Ilg & Ames (1955, Aug. 23) urge parents to consult a “reliable clinic” for a “careful differential diagnosis” because “such a diagnosis, even at very early age, can help the parent of a slow child to know just how serious his problem is” (p. B3). Similarly, a 1957 letter included in the *Daily Boston Globe*’s reader advice column urges parents to bring their children for a “complete physical examination.” The author writes,

You will emerge with an even greater understanding of your child and a complete picture of her abilities and limitations. It might prove that she is eligible not so much for a special class as a specialized school (Sunapee 1957 Jun 22, p. 10)

Reminded that “it is the doctor’s job to investigate, not reassure her that time will take care of the problem” (Getze, 1967, Nov. 24, p. B6), parents apparently were to appreciate this chance to understand their child’s deficits. When doctors did tell concerned parents that they should ‘wait and see’, authors sometimes urged readers to seek a second opinion. One contributor to the *Boston Globe* advice column in 1971 gives just such advice:

If, for any reason, you are unsatisfied with his ‘wait and see’ attitude, why not take her for a ‘well-baby’ checkup at one of our fine Boston teaching hospitals (Paperdoll 1971, Dec. 10, p. 38)

With ‘proof’ from the right expert, anxious parents could now “plan for the future care and education or training” of their children (Ilg & Ames, 1955, Aug. 23, p. B3; also Sunapee 1957, Jun. 22, p. 10). Parents could help America make ‘progress’.

For those parents who did not bring their children to doctors for screenings, teachers were encouraged to send homework so that they, parents, and the students themselves could be reminded of the individual’s deficits. One *Boston Globe* article explains, “With homework, the slow learner is revealed to the instructor and can then receive the extra help he may need” (Brooks, 1972, Dec. 12, p. B\_38). A 1929 *Christian*

*Science Monitor* article praises a teaching strategy that has children keep a “progress book” of all the stories they have read during the year. The author states,

This record gave children an intelligent interest in their progress. It taught them how well they could do, how lazy they sometimes were, and suggested that our results are, to some extent at least, in our own hands. They liked to compare their different weeks and think for themselves when they ‘tried’ for when they did not ‘try’ (*Christian Science Monitor*, 1929 Dec. 28, p. 10)

Students were to engage in self-examination, and their progress was only relative to that of their peers.

One sees this support for communicating students’ rank within the norm when D.C. area school districts considered redesigning their report cards in 1954. Reporting recommendations made by Associate School Superintendent Dr. Carl F. Hansen, the *Washington Post* communicates his criticism that an individualized report card, “encourages mediocrity and is geared to the needs of the slow learner rather than the average or above-average child” (1954, Mar. 2, p. 21). According to Hansen, the old report card was inadequate because, “it cushions the child and parent against the disappointments of failure” (e.g., Campbell, 1935, Jun. 30, p. X7). Believing that the new report card “ought to show the child’s achievement in relation to class standards,” the Associate School Superintendent argues for a return to the letter rating scale (i.e., A,B,C,D). If students and their parents want to avoid liability as social pariah, it is their responsibility to do everything possible to speed up – and if they fail, it was *not* the responsibility of the school district to “cushion the disappointment.” Report cards bring pleasure to parents who successfully comply with social expectations; the power of the race to educate requires them.



For those with whom report cards are unsuccessful in promoting this power, officials use parent-teacher conferences for communicating the deficit. Holloway (1956) argues, “frequent parent conferences are necessary” because “the slow learner and his parents must accept the fact that the child is handicapped as far as scholastic achievement is concerned” (p. 133). If parents do not submit to the power of identification found in medical offices, teachers are the next line of defense. If parents remain in denial, society positions students’ scores on an intelligence test as the ‘truth’ about a student’s academic abilities. It is difficult to dismiss this knowledge in a discourse that privileges ‘science’.

Thus, when society could not trust parents and teachers to identify ‘abnormal learners’ fast enough, schools accelerated efforts to identify students with the standardized measures we have discussed at length in this chapter. A report in a 1916 edition of *The State* reads, “It is important to know as early as possible whether a child is normal, is backward, is a moron, is feeble minded or is an imbecile or idiot” (*State*, 1916, Aug. 8, p. 4). The Columbia newspaper takes issue with the Binet-Simon intelligence test for its inability to detect, “children who develop at a normal rate up to a certain age and then stop” and “children who develop slowly up to a certain age and then stop” (ibid). To remedy this hole in the screen, the author suggests that ‘experts’ should join intelligence tests with psycho educational examination, family history, personal history, and “subjective characteristics” (ibid). For many however, regular screening through achievement tests provided the answer to monitoring student ‘progress’.

One newspaper in 1921 praised achievement tests and their “promotion quotients” for being able to “reveal the slow pupils for whom a modified course of study with large emphasis upon manual work and only the minimum essentials in each subject are

provided” (Oregonian. 1921, Oct. 6, p. 12). When Montgomery County school system faced the problem of integrating 18,000 “school children who have learning disabilities associated with mental retardation and emotional and physical problems,” the *Washington Post* reported that the county school board relied on “stepped up preschool screening to ferret out slow learners” (Yaeger, 1975, Mar. 24, p. c2). This report echoes the calls for screenings voiced sixty years before, and only with the broadest measures of a child’s abilities could experts catch all who needed an intervention. Furthermore, yearly testing allowed schools to monitor students’ education and take actions for dividing children identified as ‘slow learners’ if needed. In the race to educate, the ‘slow learner’ subject is *vermin*, and the best way of dealing with this ‘problem’ is to catch them quick and catch them with a broad net of assessments.

### **Body of Evidence: Identifying the Pathology of ‘Slow Learning’**

In 1932, the *Christian Science Monitor* published an article listing the causes of “low ability” in school. The list includes, “irregular attendance at school, material too difficult in the first grade, and hence discouragement, immaturity, the English language not being spoken in the home and defect in growth of one form or another” (Tuttle, 1932, Mar. 1, pg. 6). In 1937, Block struggled to determine the cause of the recent influx of students identified as ‘slow learners’ citing possible causes as recent immigration, poor economic conditions, or physical and emotional handicaps (Jun. 6, p. 48). While most authors in the twentieth

*A pupil may be slow because he is extremely careful, meticulous or cautious. He may be slow because he refuses to generalize easily...In fact, there is no reason to assume that there are not a great many slow, gifted children (Riessman, 1965, p.161)*

century recognize multiple causes of ‘slow learning’, the lists of causes do not necessarily agree, and often times they contain ambiguous measures (e.g., immaturity). For instance, in 1933, E.O. Lewis articulated the two categories he thinks capture the different causes of “mental retardation.” According to Lewis, “retardation” stems from organic processes, or they originate from interaction of genetic and environmental factors (McIntosh, 2002, p. 66). In either case, the narrative places the roots of ‘slow learning’ in the body, and the productive force of biopower allows individuals to transform their bodies to “attain a certain state of perfection, happiness, purity, supernatural power” in the education race (Foucault, 1977, p. 138, *Discipline and Punish*). In short, by targeting the body, the discourse that races us in our education secures its place in our subjectivities. Under the belief that ‘slow learning’ is ‘bad’, one must address the causes of this ‘defect’ before one is labeled as an impediment to ‘progress’.

*There is too great an assumption among parents that some one thing they may do will miraculously cure specific misbehavior. They can only feel satisfaction in a situation about which they can say, “I did so and so and he was a changed child.” This is possible only if the one thing which caused the misbehavior was accurately noted and removed (Eldred, 1935, Oct. 19, p. A5)*

### The Senses

The power of America’s race to educate first plays on the parts of the body that are most public, most visible. However, by the end of the twentieth century, the biopower of this discourse hid in parts of the body that lay shrouded from public view – the minds of less-privileged learners. Thus, when the narrative of the ‘slow learner’ subject as a defective link on the Great Chain of Being first gains prominence in

*We can do anything we want to if we stick to it long enough. – Helen Keller (in Jain, 2008, p. 2)*

American society, the search for pathology begins with the senses – the parts of the body individuals could not shield from the public gaze.

According to many (e.g., Eldred 1943, Mar. 19; Mackenzie, 1941, Jul. 6), physical defects are the obvious cause of ‘slow-learning’, and the early examination of hearing is one way to catch the ‘slow learner’ subject before she or he enters the mainstream school. In 1933, the *Los Angeles Times* reported on an article published by the American Neurological Society which found, “a kind of deafness in children that explains why some of them are slow in learning to talk or seem below normal in intelligence” (*LA Times*, 1933, May 11,

*There are and always will be thousands of princes. There is only one Beethoven! – Ludwig van Beethoven (in Sollers, 2010, p. 84)*

p. 2). However, while this author states that this defect could slow students’ progress in school, there is an attempt to ease anxiety with the statement that evidence of this deafness would dismiss “fears in parents that their child is mentally subnormal” (ibid). With knowledge of the ‘causes’ of a child’s hearing loss, parents can take corrective actions so that the subject remains identified as ‘normal’.

In her weekly column voicing the concerns of parents, Myrtle Meyer Eldred (1935, Mar. 16, p. 16) also tries to prompt parents to have their child’s hearing checked by emphasizing the distinction between deafness and ‘mental abilities’. In a similar argument, Ilg and Ames (1953) describe the ‘symptoms’ one may see in a deaf student:

He seldom paid any attention when he was called...He seldom ‘talked’ to any of his playmates, but seemed engrossed in his own activities. He was ‘stubborn,’ and his mother found it extremely difficult to get him to comply with any of her commands (1953, Oct. 5, p. B5)

Hearing was the problem in this case, and children who could not hear would get ‘special treatment’ and be saved the stigma of the ‘slow learner’ label (see also Senate Committee

on Education and Labor, 1906, Mar. 16). Parents who identify this pathology early are rewarded with the feeling that they have contributed to social 'progress', those who 'miss' the 'symptoms' are labeled neglectful parents.

\* \* \*

If 'experts' decide that hearing is not the cause of 'slow-learning', then perhaps they will find the 'problem' is the child's eye sight (see Senate Committee on Education and Labor, 1902, Feb. 20). Quoting the president of the D.C. Optometric Association, a *Washington Post* article from 1956 reads, "a lazy child or a slow child or a child who just can't read may never have learned to see" (*Washington Post and Times Herald*, 1956, May 9, p. 3). Robert A. Kraskin, the optometrist quoted in the article, suggests that officials should provide vision screenings for the lower third of grade school classes. If one was to believe the advice given in a 1960 *Los Angeles Times* report, the decision to bring a child to the optometrist at the time she or he begins to read can impact the "entire school career of a child" (*LA Times*, 1960, Aug. 24, p. 16). Citing an announcement made by the Los Angeles County Optometric Association, the article states, "Many so-called slow learners are not lacking in intelligence but are suffering from a vision defect that is hampering their learning abilities" (ibid). Implying a connection between poor eyesight and poor reading ability, the article reminds parents that 90% of the first grade students who fail to advance to the next grade, do so because of poor reading (ibid see also Carper, 1965, Dec. 10, p. B1). According to many 'experts', if one is to avoid falling behind, an early eye screening is required.

According to the narrative, the need for vision testing is past due for those students who have already fallen behind. To encourage vigilance, newspapers celebrate

teachers who take action to address holes in the dragnet. Society honors those who serve the discourse. In 1966, the *Washington Post* reported on the efforts of Clotilda Barnett, a teacher of a class of thirty-five “slow” second graders, nineteen of which were “afflicted with visual handicaps” (*Washington Post*, 1966, Apr. 16, p. A1). Citing how eight of her fifteen returning students had “trouble with their eyes” and “evidence that at least one [student] would escape from the slow track if given medical treatment,” Barnett took action to schedule children to see a city clinic. Thwarted on her first attempt due to overscheduling at the clinic, the *Washington Post*, three days later reported the actions of Alfred H. Bell, a businessperson who donated payment for the treatments Barnett had asked for her students (*Washington Post*, 1966, Apr. 19, p. B1). Perhaps skeptical of the miraculous effect the glasses and vision therapy would have on the students’ achievement, the paper reported that Bell requested a “real program” that would “discover what effect bad eyesight has on supposedly slow-learning children” (ibid). A benevolent public was willing to support the cause, but only if it was a proven fix.

### **Nutrition**

Another locus of concern for the race to educate is a child’s nutrition. If hearing and vision screenings did not detect a cause of sub-normal performance in school, then perhaps a child’s weight is the cause. For some, malnutrition is the cause of ‘slow learning’; for example, as part of a summary of popular superstitions, an 1880 article in the *Wheeling Register* suggests, “Beggar’s bread should be given to children who are slow learning to speak” (*Wheeling Register*, 1880, Jan. 6, p. 3). Similarly, newspaper reports in 1948 publicized researchers studying amino acid deficiencies as the cause of

“mental retardation” (*Washington Post*, 1948, Feb. 29, p. M12; *Washington Post*, 1948, Oct. 6, p. 15) – children identified as ‘slow’ apparently were not receiving enough grain in their diet.

Malnutrition was a concern for some, but others looked to the other end of the diet spectrum and identified too much weight as a cause of slow learning. Myrtle Meyer Eldred (1928, Aug. 3) tells her readers, “It is fairly obvious that the fat baby will probably walk much later than the thin, wiry child” (p. A6). The subject who is able to move about and “run into experiences” will “develop more rapidly mentally,” however, in Eldred’s opinion the “fat” child will be “bounded by the walls of the room in which he sits and he will make little effort to talk about these dull and unchanging walls” (*ibid*). A 1949 article published in the *Washington Post* attempts to reverse the cause-effect relationship between fat and ‘slow learning’; Ida Jean Kain writes, “The slow child tends to get fatter and fatter on little more food than the other children eat” (Kain, 1949, Jul. 16, p. B5). Regardless of the cause-effect relationship, these statements are clear that parents concerned about their child’s delayed walking and talking need to examine the size of their babies.

Attention to babies’ size meant that parents had to give more thought to what they fed their children. A baby too big would be stranded on the floor while thinner children ran to experience the world; a baby too thin was unprepared for the physical exertion needed to gain that ‘average’ experience. Just like Goldilocks, “average children” needed the correct balance of everything. Thus, a baby’s diet is often the topic for newspaper advice columnists writing for anxious parents concerned about their children’s growth. In 1942, responding to one mother’s question about spurring physical growth by

supplementing a baby's diet with vitamin D, Myrtle Meyer Eldred urges the parent to seek an expert's advice on what nutritional changes are needed. After reinforcing the discursive link between slow physical growth and sub-normal intelligence, Eldred instructs readers to "keep the child under the guidance of a good pediatrician [sic] so as to keep the environment and feeding the best possible one for development (Eldred, 1942, Dec. 9, p. 23). The right nutrition would keep children from 'slowing' the progress of society, and parents would receive praise if they brought their children to 'experts' for diagnosis.

By the late 1960s, 'experts' had another explanation for those 'slow-children' who they still could not explain - poisoning. On September 1, 1969 the *New York Times* reported one threat that endangered millions of American children, a threat that was found in homes across America - lead. The *Times* reported that in 1968 as many as 225,000 American children - most of them under the age of five - had been poisoned by this heavy metal that "destroys nerve cells and may result in irreparable brain damage and death" (*NY Times*, 1969, Sep. 1, p. 19). A *Boston Globe* article published a month later summarized the possible effect of lead on students' learning. The article reads, "That may not be a dull, disinterested or retarded child sitting there in the classroom seemingly unable to grasp what's going on. The youngster may be suffering from lead poisoning" (*Boston Globe*, 1969, Oct. 13, p. 59). Lead can be measured, lead can be tested, and poisoning can explain why so many students failed at school.

With such a solid scientific explanation for 'slow-learning', observers could now explain why kids from poor neighborhoods were less successful in school than children from more affluent areas of a city. According to a *New York Times* report, "Children



living in slum neighborhoods develop lead poisoning by eating chips of paint bearing heavy amounts of lead” (*NY Times*, 1969, Sep. 1, p. 19). Citing a survey by the Department of Health, Education and Welfare and the Scientists Committee [sic] for Public Information, the article explains how health officials had been aware of lead poisoning since at least the late 1940s. However, instead of charging authorities with allowing unhealthy housing conditions to continue unchecked, the media centers the gaze on children – if only those poor kids would stop eating the toxic walls. Society escaped explaining ‘slow learning’ amongst children living in poverty as a symptom of poverty or inadequate living conditions, instead the burden is placed on the subject who is put forward so that everyone can avoid falling into the same plight.

For those children who are not affected by lead poisoning, commentators continue searching for a nutritional explanation of students labeled as ‘slow learners’. In 1974, for example, the *Los Angeles Times* brought attention to “hyper kinesis or hyperactivity” – a ‘problem’ reportedly affecting 5 million American children, which caused them to be “superaggressive” [sic], temperamental, disruptive, and “very slow learners” (*LA Times*, 1974, Dec. 30, p. B11). The cure, according to Dr. Ben F. Feingold, director of the New Laboratory of Medical Entomology at the Kaiser Research Institute in San Francisco (selling his book on the topic for \$7.95) was “simply make sure, that the child receives no drink, food or snacks which contain chemical additives or artificial coloring” (ibid). For parents who ‘cared’, their task was to differentiate their children from others by providing a diet with no synthetic additives – with stores full of manufactured food marketed directly to children, parents who were successful at this feat would gain unquestionable status as contributors to America’s progress. For some the productive pleasure of this

power is just too tempting to resist. For those children who are not able to dine on organic foods and free-range oysters, society framed their choices as the cause for the problems facing America. An anxious public has to blame someone for lack of ‘progress’, and who better to blame than those who are ‘slow’ in assimilating to White middle-class norms – that is what the narrative says, at least.

### **Parenting**

If children are not identified with physical ‘defectives’, and whether or not there are signs of poor nutrition, the gaze of power centers on the home as the locus of pathology. One can see a focus on parenting in articles dealing with any topic in education, and when searching for the causes of ‘slow learning’, parents again found themselves as targets of power.

The discourse is clear with its correlation of ‘fast learning’ and loving parents. Myrtle Meyer Eldred, for example, explains that a “normal baby” learning to talk needs “ordinary home situations” and “loving parents eager to applaud” (1935, Mar. 16, p. 16). One who wishes to contribute to

*No, I'm not gifted...I just think that my brain has been trained better than most. – Boy, 12, Connecticut (Delisle, 1987, p.7)*

social ‘progress’ will parent according to White middle-class norms, and anything less is suspect to contributing to pathology amongst children. Thus, if one wishes to explain ‘slow learning’ using this reasoning, the cause is easy to find – ‘broken homes’ and ‘unloving parents’.

A *Los Angeles Times* article, for example, reads, “Many case histories of poor learners show that lack of parental interest and encouragement of their children is a major

contributing factor leading toward poor scholarship” (Turpin, 1963, Dec. 8, p. N15; see also Mackenzie, 1941, Jul. 6, p. SM15; Senate Committee on Labor and Public Welfare, 1966, Apr. 27). Similarly, an author in the *New York Times* criticizes the apparent decreasing standards in education and identifies the causes as, “television and the breakup of families” (Carlan, 1983, Jun. 26, p. LI21). According to these authors, poor learning is caused by disinterested parents and broken families, and if parents want to accelerate the learning of their children, they need to take an active role in their development (see also Meow Chat, 1972, Jan. 19, p. 27).

Consequently, one may see frequent calls for active parenting in America’s race to educate. For Eldred (1940, Jan. 1, p. 29) a cause of students’ dawdling to school is late bedtimes, and according to this ‘expert’ ‘good’ parents will enforce an early bed hour and an early rise time, just as Ben Franklin suggested. For syndicated columnists Ilg and Ames (1956, Jan. 25) one bulwark against retardation is the father’s interaction with the child. The authors state, “Much of the responsibility for teaching the child is, of course, the mother’s; but there are many tasks, such as simple outdoor work, in which the father can instruct and help the child” (p. 12). Children who help their families earn money by dropping out of school are delinquent, but according to the discourse, girls and boys who participate in outdoor activity with their supervising fathers are helping society ‘move forward’ – close supervision is the key.

If parents want children labeled ‘fast learning’, they also had to prepare them for school. One *Associated Press* article reads, “you should do everything in your power to prepare him so that he looks forward with anticipation to the experience. A child who

comes to school eager to learn has a tremendous head start” (Butler, 1972, p. 2; see also Eldred, 1937, Jan. 1, p. 35).

For children who came to school unready to learn, society just had to gaze into the home to find reasons for this failure. A scholarly article printed in 1951 cites a report on Life Adjustment Education for Youth published by U.S. Commissioner of Education, John W. Studebaker turns the gaze on homes. Summarizing the report, Huebener defines the ‘slow learner’ subject as, “the pupil who has a low I.Q., comes from an uncultured home, belongs to a low-income family, is emotionally unstable and shows no interest in traditional school subjects” (Huebener, 1951, p. 437). An article from 1962 explains, “Many of these slow learners come from homes with weak cultural background, and the school must develop any background the student has” (Baxley, 1962, p. 486). For those authors, the home is the cause of ‘slow learning’ and society must find ways to enrich the lives of those children who are culturally impoverished (i.e., not socialized into the privileged culture) (see also Carper, 1965, Dec. 10, p. B1). Concerned members of society adjust to current norms so that they are not identified as ‘deviants’.

For many, the search for the causes of “weak cultural background” led to a circular logic in which poverty became the cause and effect of ‘slow learning’. Citing a study conducted by Irene C. Hypps, one *Washington Post* article begins,

Children who enter first grade on the wrong foot because their homes are poor or unstable need help right away from schools and community agencies if they are to be saved from a landslide of trouble (*Washington Post*, 1962, Jun. 17, p. A7)

The author argues that “poor or unstable” homes cause school failure; thus, society is justified in identifying these students as the targets of power (see also *NY Times*, 1960, Mar. 10, p. 26). Yet, one must ask if society identified these children because they are

not prepared for school, or because the school is not prepared for them. Regardless, the parents are held responsible for aligning their culture with the school curriculum and according to the dominant discourse; those who do not conform send their children to first grade “on the wrong foot.” With the gaze of power targeting families with less-privileged children, the drive to conform is hard to resist.

### Learning Disability

The power in America's race to educate hides in homes of less-privileged individuals; however, locating there only affects a segment of the population. For affluent members of society who do not venture into the homes of their poor neighbors, the biopower of this discourse targets the bodies of children who society would otherwise privilege, if not for their ‘subnormal’ pace in education. Thus, when students come from privileged families living in privileged communities and all of the sensory screenings give ‘normal’ results, the gaze turns to the internal biology of the body.

*My daughter, just 17, is completing her course in a beauty academy. We have found an excellent tutor for her reading and writing, and although these will always be a problem, the future looks very bright. She has developed a great deal in her adolescent years and has not been considered legally retarded for over six years. We have discovered a reading block, its cause unknown... We feel we have been truly blessed. This little girl has taught us patience and understanding” (Stargazer's Daughter, 1965, Jun. 24, p. 34)*

Something had to explain why otherwise privileged individuals still off the pace of those identified as the fastest learners, and science was going to provide the answer. In 1962, the *Boston Globe* announced news that may have given hope to some parents; a headline states, “Johnny’s thyroid gland may not let him read” (Nelson, 1962, Nov. 1, p. 11). Citing Dr. Paul Starr, “noted authority on the thyroid gland,” the *Globe* reports, “One effect of [hypothyroidism] is delayed growth and maturation. In severe cases,

physical and mental development are arrested, and the child is known as a cretin” (ibid). According to the doctor, underproductive thyroids can result in a child being “physically and mentally sluggish, and a slow learner when he goes to school” (ibid).

While this news may have shocked some parents, the link between “glandular disturbance” and ‘slow learning’ was not new to the discourse. In 1949, Ida Jean Kain argued, “It is important to realize that even if the glandular deficiency is very slight, it can still lead to considerable overweight” (Kain, 1949, Jul. 16, p. B5). While supporting the link between ‘slow learning’ and fat on the one hand, Kain dismisses mothers’ attempts to “curb the fat child’s appetite,” because “she is too busy to fix special foods” (Kain, 1949, Jul. 16, p. B5). Thus, for Kain, “a glandular disturbance” presents the best explanation for a child’s overweight and her or his subsequent ‘slow learning’. If parents just brought their children to an expert, *they* would solve the ‘problem’.

For many parents, however, hypothyroidism could not explain their child’s failure to keep pace in school. Yet, while lack of any empirical evidence may have forced some to question this identification for their children, for many others, the allusive nature of this problem only meant one possible conclusion – disease. In 1941, a *New York Times* columnist reinforces such a discursive link. Citing “Dr. Liss,” a psychiatrist and consultant in mental hygiene to the Progressive Education Association, the article reads, “there’s no such thing as a ‘lazy’ or a ‘dumb’ child. Some children are mentally slow, some bright, some only so-so. But he believes that a child who within its capacities isn’t hitting on all cylinders, mentally, emotionally and physically, is a sick child” (MacKenzie, 1941, Jul. 6, p. SM15). If society privileged a child in all other aspects, but

one still was unable to progress with the norm, then the child was “ill” – ‘slow’ was ‘sick’.

If ‘slow learning’ is a disease, then it is society’s task to find a vaccine for the epidemic. An anxious society cannot accept a ‘diseased’ body contaminating the gene pool of those looking to ‘advance’ on the Great Chain of Being; society cannot accept a ‘diseased’ body threatening the security of the nation. In this line of reasoning, Glen Shepherd (1953, Feb. 9) positions ‘slow learning’ as a virus and argues for a concerted effort to eradicate the problem. The author writes,

Millions are spent for polio study and treatment and for children with various heart diseases. But several groups of children with handicapping disorders are too often forgotten. They are the boys and girls who have reading difficulties, or hearing disabilities, or are mentally retarded (Shepherd, 1953, Feb. 9, p. 15)

If Salk was able to eradicate Polio, why was it so hard to cure ‘slow learning’?

Shepherd’s answer was visibility:

Many people act as if this problem, affecting tens of thousands of United States families, will disappear if they ignore it. Mental retardation is too often unspeakable today, just as tuberculosis, syphilis and cancer were unmentionable diseases a few decades ago. Families feel blighted, burdened, and ashamed. This is ridiculous and unrealistic. You have no more excuse for being shamed of a slow child than for being proud of an exceptionally bright one. Both are happenstances, accidents of nature. Parents are not the cause (ibid).

According to this narrative ‘slow learning’ is a ‘natural’ pathology, it is ‘real’, and society must do something to treat those afflicted with the ‘problem. While some authors point the finger at parents, and blame them for the deficits embodied in their children, as seen here, others try to distance parents from any responsibility – it just depends on which members of society sit in the audience.

However, to cement this discourse into the minds of American citizens, the biopower of this narrative had to locate in a part of the body where it could escape

empirical detection. An expert can check one's eyes, monitor food intake, or biopsy the thyroid for dysfunction, so the most powerful narrative required an organ shrouded in mystery, a part of the body that still remained 'unknown' to empirical science – the brain.

A pathology of 'learning disability' centered the pathology for 'abnormal' learning rates in the brain, and for some, a diagnosis of this 'ailment' is the cure for some of the worst learning problems children exhibit in school. One mother wrote to thank Abigail Van Buren for directing her to the Association for Children with Learning Disabilities after the mother contacted Abby concerned about her son who was "having difficulty keeping up with his class because he couldn't read...was also a discipline problem" and risked failing the fourth grade. According to the mother, the child who was once considered "slightly retarded" was now a high school senior "who qualifies for college" (Van Buren, 1983, Nov. 28, p. OC\_A4). In reply, Abby responds that a child "could be brighter than average but afflicted with a learning disability that is treatable if detected early" (ibid). In the race to educate, the early detection of pathology is required if one wished to learn at the 'fastest' rate, and society accepts any reason for initiating treatment. For some 'experts', "Just because these children develop with more difficulty, they need more and earlier help" (*Washington Post*, 1971, Jun. 7, p. B6). Experts can treat even the most mysterious ailments, and parents have to find a doctor to diagnose their child as fast as possible.

For those individuals who still fail to adhere to norms once the experts administer the most novel diagnosis and treatments, society assumes the child embodies a chronic pathology. For those who society cannot treat, experts take on a different course of treatment – extra supervision (e.g. *LA Times*, 1982, Jun. 17, p. SG12). For most people,



the panopticon is successful at instilling self-regulating behaviors; however, for those who avoid its power, closer supervision is required, and perhaps total segregation away from the bodies that remain docile in their cells. Thus in the race to educate, the 'slow learner' subject can occupy positions in two related narratives of pathology. Either the subject is framed as a "handicap to pupils" (e.g., *NY Times*, 1953, May 9, p. 21) – society frames this subject as an impediment of 'normal' progress needing to be removed - or the subject is framed as a "handicapped pupil" (e.g., Johnson, 1965, Jan. 13, p. A10; *LA Times*, 1979, Jul 12, p. F9; Barbaro, 1982, Apr. 11, p. SM70) – society frames this subject as a target for interventions to speed one's learning. In either case, by the end of the century, the subject occupies both positions simultaneously, and no matter how hard one might try to escape these subjectivities, the double bind of power locks individuals into this narrative and an anxious society gazes on wondering how they contribute to social 'progress'. Our answer to these concerns, race in our education.

### Summary

A history of the disciplinary technologies in the race to educate helps us understand how we came to identify the 'slow learner' subject as a 'problem to be solved'. With the establishment of norms, the discourse frames 'slow learning' as a pathology. Supported with the prestige of science and statistical methodology, intelligence tests and achievement tests have come to enforce these norms through the employment of logic where 'slow' means 'defective', yet, 'slow learning' is determined through normed tests that discriminate against already marginalized examinees. The norms created in this discourse are furthermore, shifting targets based on fluctuating definitions of 'normal' and 'slow'. Regardless, with embedded anxiety about the threat

of the 'slow learner' subject, members of society employ the gaze in our search for individuals who might threaten the pace of education. The panoptic search for individuals identified as both 'fast' and 'slow' targets through governmental structures such as the school system, but the power also pervades medical institutions and the home. Finally, this history shows how the discourse employs disciplinary technology of self-examination by which members of society search for defective bodies that might threaten 'progress'. The examination of the body starts with the senses and other visible factories that may influence 'growth', however, power soon hides and now this discourse flows through the most hidden part of the body – the brain.

Chapter IV and chapter V frame the 'slow learner' as an object of power in America's race to educate; in other words, these two chapters portray the subject as an effect of power relations that is portrayed as a cause of social problems. Chapter VI continues this theme, showing how society frames the 'slow learner' subject as a cause of social problems and how education officials use the threat of 'slow learning' to justify practices that race students in their education at the same time perpetuating the subject's status on the margins of society.

## Chapter VI

### SOLVING 'PROBLEMS': HOW AMERICA TREATS the 'SLOW LEARNER' SUBJECT

#### Signs of Oppression

On Saturday, October 14, 1961, the board of selectmen in Duxbury, Massachusetts met to discuss the concerns of some angry citizens. Citing the danger fast traffic presents to children, who often play hop-scotch, roller skating, bicycling, “or even tricycling” on the paved streets, parents in that town had requested “Go Slow – Children” signs for their neighborhoods. However, instead of empathizing with the concerns of the parents and their children at play, the selectmen turned the debate around on those requesting the signs. The board stated, “it is hardly good judgment for parents to permit [children to play in the streets] and rely on ‘Go Slow – Children’ signs” (*Boston Globe*, 1961, Oct. 15, pg. 48). The children and their parents were the problem, not the fast traffic.

The debate concerning children and neighborhood speed limits was not new. When concerns arose in 1924 concerning the many fatalities that occurred on Boston’s unregulated streets, the city police announced more patrols at intersections, urged motorists to “go slow,” and offered this simple advice to pedestrians: “Always be careful” (Dinneen, 1924, p. A13). When it came to protecting the rights of children versus automobiles, the choice was often clear. On April 8, 1953, the State Highways Department of Virginia defended their decision to force the Ravenwood Citizens

Association in Fairfax County to take down their unofficial street signs that read ‘Slow – Children Playing’. The Department justified their ruling by reasoning that the signs provided a false sense of security for those playing in the streets, and that these signs were not necessary because it was illegal for children to play in the streets anyway (*Washington Post*, 1953, Apr. 9, pg. 10). By April 25, Ravenwood residents had reported that nine of the safety signs had been removed by state employees, despite one resident citing three child fatalities in Washington, D.C. on one day alone (*Washington Post*, 1953, Apr. 25, pg. 1). In a similar incident, the *Boston Globe* reported the death of a three-year-old boy who was struck and killed by a truck on his street.

By 1973, the street had a “Drive Slow Children” sign, but the residents had been asking for a ban on truck for years, according to one town representative. In this case, a city construction project won precedence over children, and the dead body of little Michael O’Bryan was the ‘collateral damage’ (Pilati, 1973, Aug. 24, pg. 3). Interestingly, by 1981, some came to outwardly mock these signs that tried to protect bodies in the streets. One writer commented on the ‘Slow Children’ signs: “What a stigma to live alongside if you were a child, so recognized by local authorities” (Seidenbaum, 1981, Oct. 11, p. L18). This may have summed it all; to be slow was an illness, a stigma.

The ‘slow children’ street sign debate is an analogy for illustrating how society frames the ‘slow child’ subject as a cause of social problems. Just as society places blame for street accidents on children at play, society frames the ‘slow learner’ subject as the cause of societal problems they do not control. Characterized as immature, emotionally unstable, delinquent, insane, foreign, and a threat to society, this subject is the scapegoat for explaining social anxieties. In this chapter, we explore how education

officials use the threat of ‘slow learning’ to justify practices that race students in their education. Furthermore, by employing disciplinary technologies, education officials perpetuate the subject’s status on the margins of society and they use a circular logic that secures the discourse. Just as society ‘solves’ dangerous streets by changing the behaviors of children, Americans ‘solve’ an uncertain future by ‘fixing’ children labeled as ‘slow learners’ – that search is what motivates the race to educate our kids.

### **Philosophies of Treatment: Struggle in Determining the ‘Nature’ of ‘Slow Learning’**

In America’s race to educate, the narrative of the ‘slow learner’ subject as a threat to society is powerful despite the many cases that interrupt this narrative. Likewise, the narrative of the ‘slow learner’ as a problem to be solved is powerful despite the stories that problematize this narrative. However,

even with solidifying agreement on who threatened American ‘progress’, a history of education in this country shows how there is

*He is one of those ‘no progress for six months and then suddenly overnight he makes up the lost time’ boys (Ilg & Ames, 1956, Sep. 17, p. C8).*

no such agreement on the best way to solve this ‘problem’. If ‘slow-learning’ is the “the pall of mediocrity,” and if the ‘slow learner’ subject delays America’s march towards progress, then society has to decide what actions to take for removing this ‘speed-bump’. Yet, to say that there is little agreement on this matter would be an understatement.

For some, ‘slow learning’ is terminal and the best treatment is containment – often quarantine – from the rest of society (a strong dividing practice). Others agree on the prognosis, but view inclusion within ‘normal’ society as the best treatment (a strong gaze). Still some frame ‘slow learning’ as preventable, and position the solution with

parents (particularly mothers) responsible for early care of the child (a strong examination). For others, 'slow learning' is curable, and the proper treatment includes measures for bringing the subject 'up to speed' (a strong examination). For most of the twentieth-century, these narratives (and their variations) have been simultaneously present in the American discourse, but each has held varying amounts of power throughout the century. In 1950, for example, a student labeled 'slow' could have been placed in a state residential institution, sent to public school for education in segregated classrooms, sent to public school for education in a common-space classroom, or one may have been labeled 'normal' and diagnosed with some physical illness. These examples do not even factor in race, ethnicities, language fluencies, gender, socio-economics, or location of residence, but all having an effect on how one's community treated the subject when it was time for school. In short, a student could have found herself or himself in any one of the dozens of positions available for the treatment of the 'slow learner' subject; however, regardless of the treatment, each one aims to ease society's anxiety about 'progress', and each one reinforces the race to educate.

### **'Slow Learning' as a Terminal Pathology**

For many, the 'slow learner' is a subject with 'natural deficits' (e.g., Smith, 1951, p. 154; Johnson, 1958, p. 73; Stahlecker, 1962, p. 78). With this logic, biology is the cause of 'sub-normal' learning speed and the best society can do to keep American moving forward is keep those defective children from contaminating the students identified as 'fast learners'. Rooted in eugenics philosophy, authors who communicate

this narrative often favor segregation as the best method for dealing with these

'problems'. For example, a 1917

article printed in the *Oregonian*

has a section titled "Nature's

Favorites" in which the author

*Sheila Scott, who has broken more than 100 records as an airplane pilot, finally passed her automobile [sic] driving test here [Hendron, England] after 12 years of instruction and practice. "It was my fourth test," she admitted. "It's hard to drive an au-automobile [sic] after you're accustomed to using your feet to steer a plane (Boston Globe, 1971, Nov. 11, p. 38)*

argues that children's relative abilities will "remain the same" regardless of context or

teaching methods. In an argument for a segregated junior high model, the article's author

writes that "children with marked ability" are strong in all school subjects regardless of

content, and "slow children" are only hurt when they work with 'normal students'

(*Oregonian*, 1917 Jun. 2, p. 15).<sup>88</sup>

In this narrative of 'slow learning' as a natural 'deficit', even when authors recognize other factors that may "interfere with a child's ability to learn," a notion of an unchanging nature in the student's abilities often comes through. One *New York Times* columnist, for example, recognizes that "physical factors or emotional conflicts" may affect students' performances in school, but he returns to state,

If these factors are eliminated and learning is slow because of low I.Q. it doesn't mean simply that the learning rate is slower and that, in the end, the child will get far as brighter children. If he is mentally under par he won't, because he just can't" (Mackenzie, 1944, May 21, p. SM29)

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<sup>88</sup> Brooks (1922) argues "Intelligence tests are needed to help refute a common fallacy which is almost unbelievably widespread in the educational world as well as outside it – the fallacy that under proper conditions and with proper instruction every child barring the obviously feeble-minded is about equally capable of making satisfactory progress in any study... efficiency means partly the elimination of wasted effort, should we not, in the name of efficiency, eliminate the waste of time and energy expended in the hopeless task of trying to fit all children in the same mold?" (Brooks, 1922, p.219-220). This argument promotes a narrative that one's learning at a differing pace signals a pathology of one's inability to learn. In this line of reasoning, one's inability to learn justifies one's segregation from the privileged student population.

Similarly, Featherstone (1951) refutes any argument that ‘slow learners’ may catch-up to ‘brighter children’ by reinforcing this premise of ‘slow learners’ natural life-long deficits. The author states,

Time is a factor in learning, to be sure....But time alone will not suffice. One can ‘teach’ slow learners quadratics from now till the end of time, but they will not learn quadratics. Why? Apparently because quadratics is beyond the powers of the slow learner to abstract and symbolize his experience (p. 324).

Articles that discuss “inborn tempos” of children support this notion of individuals having inherent speeds for moving and learning as well. In a 1931 edition of her syndicated column, Myrtle Meyer Eldred writes, “You realize that she always moves slowly” (1931, May 22, p. A7).<sup>89</sup> Similarly, In a 1953 article, Ilg & Ames write, “the slow-moving child tends to continue to

be slow-moving throughout life. The quick-moving person continues to move quickly” (Gesell Institute, 1953,

*“When she was 17, a teacher of the mentally retarded told her mother that Line never would learn to read and write. Today, after years of diligent studying and tireless coaching from her mother, she is doing seventh grade work” (Townsend, 1981, Dec. 6, p. G2)*

Feb. 20, p. 15).<sup>90</sup> If one follows the narrative supported by these authors, there seems no reason to treat the ‘slow learning’ subject in any other way than to keep one out of the way of those who “move society forward.”

<sup>89</sup> In 1940, Eldred reiterates, “We may do a child a grave injustice to demand that he be swift as we or some other children are” (Jan. 1, p. 29). In the late 1940s, Eldred published another article under the same premise, “Some children are slow-moving some swift as arrows. No amount of home training will make the first like the second, or vice versa...Parents should recognize that a child is a personality, that he has his own timing, and that this cannot be forcibly changed” (1947, Jul. 1, p. B7).

<sup>90</sup> After describing their study of *eight* students’ performing *three* different tasks, the authors conclude, “the quick child is just naturally speedy in whatever he does. And the slow child just naturally slow” (ibid). In a 1952 article published by the Gesell Institute in the *Washington Post*, Ilg & Ames write, “Careful research shows that there are the quick, do-it-now people and the characteristically slower moving ones who often like to put things off” (1952, Jul. 4, p. 18). According to these statements, a child’s character was inherent; nothing could be done to ‘speed-up’ the ‘slow child’ – a conclusion reached by observing eight children (see also Marke, 1949, May 4, p. B7; Bevans, 1954, Jan. 24, p. J32).



Thus, throughout the twentieth century, Americans searched for ways of dealing with students identified as ‘slow learners’ without putting much effort into ‘speeding-up’ the subject’s ability to learn. This presumption of a natural state of being comes to serve as justification for a certain pedagogy in schools. Education officials use this characterization of the ‘slow learner’ subject to justify career tracks in junior high schools (Oregonian, 1917 Jun. 2, p. 15), but also to rationalize the quarantine of these students in places far from society, and even to explain the need for sterilization projects for individuals identified with low intelligence quotients.<sup>91</sup>

This rationalization for how to treat the ‘slow learner’ subject is communicated in a 1961 report describing how one student-teacher responded when a supervisor confronted her about a “dull and poorly planned lesson.” The student-teacher reportedly says, “There’s no use preparing anything for these kids or trying to interest them because they can’t learn anyway...my co-operating teacher says it’s a waste of time” (Dawson, 1961, p. 464). In this narrative, the ‘slow learner’ subject is seen as a “special problem, needing a special solution,” and students are told to “accept the fact, do your best and

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<sup>91</sup> Thirty-three states had active laws permitting the forcible sterilization of individuals with congenital differences including subjects labeled ‘physically disabled’, ‘insane’, ‘idiotic’, ‘imbecile’, ‘feeble-minded’, and ‘epileptic’ at some time between the years 1920 and 1980 (Shildrick, 2005, p. 765). According to Reinhold (1980, Feb. 24, p. A2) more than four thousand children, women, and men diagnosed with ‘mental retardation’ were sterilized in Virginia before the practice was discontinued in 1972 – nationwide, Anne Teicher, a lawyer for the Committee for Abortion Rights and Against Sterilization Abuses, estimated some 65,000 people were treated in this way.

Perhaps believing that ‘slow learners’ represent a genetic danger to the survival of the fittest Americans, many powerful voices supported a policy of eugenics. In the word of the Virginia Supreme Court, the policy of sterilization was enacted to “raise the intelligence of the people of the state” (Reinhold, 1980, Feb. 24, p. A2). In 1927, the U.S. Supreme Court upheld a Virginia law (8-1) that authorized the sterilization of any person “afflicted with any hereditary form of mental illness or retardation.” Justice Oliver Wendell Holmes, Jr. reinforced society’s concerns about the subject in his majority opinion, “It is better for all the world, if instead of waiting to execute degenerate offspring for crime, or to let them starve for their imbecility, society can prevent those who are manifestly unfit from continuing their kind” (in Shildrick, 2005, p.765).

don't be misled by drivel on how to get A grades" (Turmell, 1965, Jan. 17, p. 48). The message is clear, students identified as 'slow learners' have a place in society, and they should not challenge their status.

For those who try to participate in 'normalized' society, the gaze of society shines a spotlight on those who fail. For instance, a 1968 Associated Press article titled "Slow Learner" reports on a man's 29<sup>th</sup> failed attempt to pass the driver's test (Associated Press, 1968, Mar. 17, p. C4). For individuals who acknowledge their position as 'slow learners' in society, governments provided institutions so these people could avoid interfering with the progress of society (Franklin, 1994), but if these individuals were going to attempt to interrupt the narrative society had set for them, their failures were going to be publicized for all.

### **'Slow-Learning' as a Treatable Pathology**

As much as some people wanted to keep the 'slow learner' subject out of view, the discourse increasingly called for public examination. In the early decades of compulsory schooling in the United States (mid-nineteenth century), there was not much concern given to the 'problem' of the 'slow learner'. As one scholar writes, "In most cases the child who couldn't learn as fast as his classmates merely plodded along, retained in a grade now and then, until he was old enough to leave school" (Dutton, 1964, p. 266). In an economy that required its workers to have little formal education, there is not much concern about certain individuals keeping society from 'progressing'.

*I think quite often, the parent's expectations of immediate change is aroused by the testimonials parents write for each other's help. Excellent and helpful as these are, they give the impression that change is always immediate and noticeable instead of subtle and gradual (Eldred, 1935, Oct. 19, p. A5)*

However, as the discourse of Industrial efficiency gained strength, Americans started to view the nation's strength rooted in technological 'progress', and it was then that concern for the 'slow learner' subject grew to national importance.

Society could remove the subject from places where one might interfere with the 'progress' of 'fast learners', but America became a place where "social and economic pressures are forcing more and more slow learners to stay in school" (Dutton, 1964, p. 266). In other words, Americans found themselves in a bind: for individuals who removed themselves from school, many feared the cost of institutionalized care, unemployment insurance, substance abuse programs, criminal prosecutions, and/or imprisonment would follow; for individuals who stayed in school, the cost was delayed 'progress' for those students who officials framed as the means to move society forward. In either case, many Americans saw the cost of dealing with this 'problem' as too great for a society that needed to defend itself from foreign attack. Thus, many Americans searched for ways of addressing this problem without having to change schools or establish specialized institutions for the purpose – many Americans looked to treat the 'slow learner' subject in school (e.g., Washington Post, 1956, Sep. 7, p. 35).

For many theorists at the turn of the twentieth century (e.g., Hall, 1882; Sequin, 1910) education was the best method for moving society 'forward', and schools were the obvious location for treating 'slow learners'. Having devoted his professional life to the study of 'idiocy', Edouard Sequin, for example, advocates classification of educational outcasts and institutionalization as a method for 'curing' their condition (see Carlson,

2005, p. 138).<sup>92</sup> Similarly, drawing from his work as a psychologist at England's first school psychological service, Cyril Burt (1952) searched for "the commonest and the most influential causes of educational backwardness" (p. 36 quoted in Corbett, 1996, p. 19). Thus, a narrative of redemption gains power and many come to believe that individuals identified as 'slow learners' have unlocked potential.

Some experts argue that even people labeled as the 'slowest learners' can make "productive citizens" if only they had the proper educational supports (*Washington Post*, 1952, May 11, p. M15). As Dawson (1961) states, "Every slow learner is capable of more than he is now doing, and it is a tragic social waste that teachers so readily give up on these pupils" (p. 465). In a similar call for more attention on this 'problem' Everitte et al. (1962) warn readers that the "neglect of the slow learners has been a festering sore in the progress of education" (p. 8). According to these authors, students identified as 'slow learners' who are not treated "may sink to the bottom and there remain until they flunk out or drop out of school" (ibid). Many believe that if America is to 'progress', then society cannot have students holding us back by dropping-out of school.

As if they were addressing society's concerns about the 'slow learner' subject as a threat to society, Everitte et al. (1962) suggest that they can "become voting citizens of America" and have "some measure of wisdom and discrimination in meeting the various problems which they will face in their adult lives" (ibid). According to some, students identified as 'slow learners' just needs to find the right amount of 'force' to place them

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<sup>92</sup> Publishing *Idiocy: And its Treatment by the Physiological Method* in 1866, Sequin argues that his physiological method of education can cure individuals who had been identified as having sub-average intelligence. Just as a person could gain or lose weight to fall under the norm, Sequin believed therapy could adjust individuals so they too were normal. For Sequin, it is the job of educators to unlock 'idiots' from their "imperfect envelope" (p. 65).

on the ‘correct’ trajectory towards the ‘future’ (see also House Committee on Education and Labor, 1960, Jan. 27, 28).<sup>93</sup>

The opinions of experts publishing in academic journals may convince some that these ‘problems’ can be fixed, but other members of society are more persuaded by populist commentaries on the subject. Syndicated columnist Myrtle Meyer Eldred attempts to calm anxious parents who fear their child identified as a ‘slow learner’ is permanently dysfunctional. ‘Slow’ behavior, according to Eldred in a 1943 article, is a ‘phase of growth’, just like other ‘stages’ of childhood.<sup>94</sup> Similarly, a 1957 advice column published in the *Washington Post* works to calm parents anxious about their child’s ‘slow’ development. The author states, “A child’s behavior in his first months or even his first years does not give a true and clear indication of what his later accomplishments will be” (Gesell Institute, 1957, Mar. 5, p. B4). For many concerned members of society, if being ‘slow’ is a stage of development, or if there is a possibility that a child identified as ‘slow’ can grow out of their dysfunction, then society has to ensure that these children make progress. Thus, school is the place where a child’s trajectory is monitored, and school is the location at which America’s anxious race for ‘progress’ is felt so strongly (see also House Committee on Appropriations, 1963, Dec. 5).

Regardless of an expert’s view of ‘slow-learning’ as a terminal or a treatable condition, many felt individualized education provided the best means for ensuring that

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<sup>93</sup> See also House Committee on Education and Labor, 1961, Aug. 22, 23; House Committee on Education and Labor, 1962, Mar. 13 et al.; Senate Committee on Labor and Public Welfare, 1966, Apr. 27

<sup>94</sup> Myrtle Meyer Eldred is a weather beacon in this discourse. While she communicates a narrative of a ‘slow child’ as one who has one’s “own timing...that cannot be forcibly changed” (1947, Jul. 1, p. B7), she also reassures parents that, “Dawdling is not an indication of a permanent character trait” (1943, Jun. 1, p. B4). As the discourse ebbs and flows in strength so does Eldred’s recommendations or perhaps the reverse is true.

individuals identified as ‘slow learners’ made some ‘progress’. According to one *Boston Globe* report,

Curriculum must have substance and purpose, and above all it must meet the needs of all children equally. To meet the needs of the slow child, the talented, the extrovert, the late bloomer, the day dreamer, the handicapped, will mean programs to meet each of these diverse talents (Boston Globe, 1966, May 16, p. 43).

If society wished their children to ‘keep pace’ with an ever-expanding range of knowledge, schools would have to find methods for ensuring all students learned the required content in the allotted time – schools had to race to educate children.

### **Tracking Progress: Dividing Society in American Schools**

#### **Speyer Experiment**

The debate about the best school structure for treating the ‘slow learner’ subject has been a hot topic in the media for most of the past one-hundred years. In 1924, J. Freeman Guy suggests two “solutions” for dealing with the “wide discrepancies in ability” measured by intelligence tests and achievement tests. Guy writes that one structure is “arranging or dividing all the pupils in algebra into homogeneous groups as is done in a number of other schools” (p. 103). Another structure is “attempting to adapt the instruction to the individual needs of the children” (ibid). In 1933, William Chandler Bagley outlined the debate concerning segregating schools based on students’ perceived learning speeds. Bagley cites, on one hand, Dr. Abraham Flexner, who argues for separate schools for ‘gifted pupils’; on the other hand, Bagley cites Dr. William J. O’Shea, Superintendent of Schools, who argues for a ‘special education’ for “slow-progress pupils” (Bagley, 1933, Mar. 26, p. XX5). O’Shea and scholars like Hollis L.

Caswell of the George Peabody College for Teachers in Nashville, Tennessee and Raleigh Schorling of the University of Michigan argue that instruction of “specially organized groups of slower pupils” is a vital step toward the “elimination of all retardation in the elementary school” (Barnard, 1933, May 7, p. E8). For these experts, the best treatment for ‘slow learning’ is segregation of students, a narrative that remains dominant across America today. To ensure society raced in our education with maximum efficiency, school officials would divide our children.

In February of 1936, ‘experts’ got their chance to test their theories regarding the segregation of students based on perceived learning speed. In that year, the New York City Board of Education opened a special elementary school for “bright and ‘dull normal’ boys and girls” (*NY Times*, 1936, Feb. 4, p. 23). At the Speyer School (located at 514 West 126<sup>th</sup> Street), the City engaged in a five year collaborative experiment with Teachers College, Columbia University to test “progressive teaching methods in the crucible of practical experience” (ibid). Educating 225 hand-selected seven to nine-year-old students educators would have their chance to develop curriculum and methods for the “exceptional child” in a “scientific way” (Tompkins, 1936, Feb. 2, p. N7).

Students at the Speyer School were organized into classes of twenty-five pupils based on their intelligence quotients - 175 pupils were classified as “dull normal” with intelligence quotients between 75 and 90 and the remainder of the students scored I.Q.s greater than 130 (Tompkins, 1936, Feb. 2, p. N7). For some, the selection of these two groups of students for Speyer would “provide a more balanced, feet-on-the-ground sort of experiment (Fine, B. 1941, Feb. 2, p. D7), but bringing

Because of the treatment he receives in the school system, the slow learner then may become the poor learner (Riessman, 1962, p.64)
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students labeled 'fast' and 'slow' together at Speyer was rather intended to create maximum contrast.

For many observers, the early results delivered evidence of the superiority of 'fast learners'. A year after its opening, reporters announced that "Bright children at the Speyer Experimental School...need only half a day to accomplish the regular elementary school work" (Houghes, 1937, Mar. 28, p. 38). Instead of skipping students identified as 'fast learners' through the grades, the Speyer curriculum engaged the students in "making exciting excursions into the evolution of common things, such as clothes and transportation" (ibid). According to one supervising scholar, these afternoon enrichments allowed the 'fast learner' subject to "enter high school at the normal age and be ready to fit into the life there socially and emotionally as well as mentally" (ibid). High schools were to be the place where students would be reminded what 'normal' looked like, and what it meant to have 'gifts'.

Speyer also offered hope to those concerned with the plight of the 'slow learner' subject. Reinforced with headlines reading, "Slow pupils made normal at Speyer," reporters touted the experimental curriculum as the cure for 'slow learning' (Tompkins, 1936, Oct. 11, p. N4).<sup>95</sup> For students labeled 'slow learners' the purpose of the school was to engage them in a curriculum, "best fitted for children who do not seem to be able to make the best of the educational opportunities in traditional schools" (ibid). According to Professor Featherstone, the cornerstone of that curriculum was the proper choice of reading material based on students' "mental age" (ibid). At Speyer, students identified as

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<sup>95</sup> At the center of this curriculum cure were scientific teaching methods. According to one report, teaching with scientific methods for just five months "produced normal pupils out of a former group of slow learners" (ibid).



'fast learners' were enriched to help them "fit-in" with 'normal' children of their age, students identified as 'slow learners' were educated to fit in with children two or three years younger than they were. A divided society ensured no one on the margins would challenge the dominant discourse.

The difference in curricula for learners identified as either 'fast' or 'slow' is all too clear in Speyer's English department. With the teachers' stated focus on giving "special attention in regard to the teaching of English," the irony of the curriculum set for students labeled 'slow' is hard to miss. In an article examining the English curriculum at the school, one *New York Times* reporter cites a teacher, who advised,

little or no writing, no principles of grammar, oral English restricted almost entirely to conversation and informal discussion; training in listening, and extensive reading for pleasure (Block, 1937, Jun. 6, p. 48)

Replacing lessons in active communication were methods that encourage a 'faster' pace to information consumption and training in marketable skills. While privileged learners directed the curriculum, traveled to exotic locations, and worked on solving problems relevant to their interests (Hughes, 1937, Mar. 28, p. 38), students labeled 'slow' took trips to banks, post offices, and the electric company office to learn about coal mining, manufacturing, "and how to read meters and compute bills (*NY Times*, 1938, May 13, p. 21). While privileged learners read texts related to their topics of interest, less-privileged learners had their lessons supplemented with movies. According to one report, films were a teaching method that "fired their imagination, released them from the ordinary business of everyday living, and provided them with a variety of rich experiences which a textbook or a library book written for a child with greater reading ability could not possibly give" (*NY Times*, 1938, Feb. 12, p. 17). Did teachers at Speyer honestly think

that children who struggled with reading were going to improve their abilities by watching films? Or, was this method touted because, “While viewing the pictures, the children forgot they were in the classroom?” Passive learners consumed the information their teachers fed them, and reinforced these practices with continued admiration for a school day that did not challenge them to think. The structure at Speyer succeeded in turning children labeled as ‘slow learners’ into docile bodies.<sup>96</sup>

While ‘gifted-students’ at Speyer experienced a supposedly idyllic education in a setting that resembled one of Dewey’s *schools of tomorrow* (see Dewey & Dewey, 1915), one cannot overemphasize the discriminatory effect this education structure had on children labeled ‘slow’; however, this system was soon exposed. Less than a year after the closing of Speyer in the spring of 1941, the *New York Times* reported on the recommendations the school’s supervisors made to the Board of Education. In their report, assistant superintendent Dr. Benjamin B. Greenberg with Teachers College Professors William E. Featherstone, Herbert B. Bruner, and Miriam C. Pritchard recommend the, “discontinuance of the practice of the New York City School system of segregating slow children in special classes” (*NY Times*, 1941, Sep. 17, p. 25). Attacking a system that had been practiced in the New York City school system since the 1920s, the committee states that the segregation of students into “bright, normal, and dull” groups “has resulted in much heartache and not infrequent tears on the part of both child and parent” (ibid). Even in Speyer’s system designed to avoid the “taint of segregation”

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<sup>96</sup> When thinking of this school, I cannot avoid a Platonic image of a place wherein privileged students spend sunny afternoons parading about New York City exploring the borders of their world, while other students having returned from career training sit half-comatose staring at their own shadows cast on a flickering screen. Students trapped in this environment must find the tactics for breaking out of the hypnosis of power, but unfortunately most do not have the language with which to speak resistance.

(Fine, 1941, Feb. 2, p. D7), students who mingled in “assembly periods, at the gymnasium, in the library or about the inadequate school grounds” still learned of their designation and met the expectations. The committee argued that children identified as ‘slow’ could learn in a common-space with students identified as ‘normal’ when “proper stimulus” was present. Furthermore, the report suggests that schools, “make special provision for these pupils in regular classes by concentrating responsibility for their welfare in the hands of home room teaches, and by modifying courses of study to meet their needs” (ibid). According to the Speyer ‘experts’, students identified as ‘slow learners’ should be grouped with children identified as ‘normal’ in the hope that the latter will have some positive effect on the former. Likewise, schools should not teach a program based on acceleration of ‘fast learning’ but they should teach an enrichment program “built around special projects” (*NY Times*, 1941, Sep. 17, p. 25). Full segregation was too visible, and the emotional effect of the power was too traumatic for many to ‘buy-in’ to the system. Thus, power would have to hide within classroom, and students (and their parents) would find pleasure with constant checks on their ‘progress’. The curriculum would still differ, but all students would be visible to the gaze of their peers.

In 1942, the Speyer committee’s concerns about the psycho-social effects of segregating students had enough power to affect New York City Board of Education policy. In the fall of 1942 the *New York Times* reported on a new program in City schools that would “attempt to prevent anti-social behavior brought about by continuous failure and discouragement” (*NY Times*, 1942, Oct. 6, p. 17). For the twenty-percent of elementary students identified as ‘slow learners’, classes would be organized with about

twenty-five pupils per teacher according to age rather than grade. The new plan also called for a system in which “no child would be left back because he failed to meet standards set for pupils of normal progress” (ibid). Students who did not master the curriculum at the right time would gaze upon those who had.

Additionally, the policy set by the New York Board of Education, in response to the Speyer committee recommendations, calls for teachers to gaze into the homes of their students. One article states that teachers, “will be expected to become familiar with the home life of the pupils through conferences and cooperation with parents” (*NY Times*, 1942, Oct. 6, p. 17). Despite differing reasons, the Speyer School experiment helped officials justify a practice in which ‘slow learner’ and ‘fast-learner’ subjects would never be far from students labeled ‘normal’, and ‘experts’ would closely monitor all students. By the end of the 1940s, the Board of Education announced additional training for teachers on methods for instructing students identified as ‘slow learners’ and the creation of “a course of study especially suited to such students” (*NY Times*, 1949 Jan. 26, p. 27). Elementary schools across America would integrate students of differing learning speeds into common-space classrooms but not all people were convinced that this was the right policy.

While statements about students’ social-emotional health may have prompted some education authorities to reshape their school structures, other statements concerning the impact of segregation on students’ academic outcomes may have inspired some to go in a different direction. In their summary of the Speyer experiment, the *New York Times* reports, “during the five-year experiment ‘slow’ children carried on work far beyond their expected capacities” (1941, Sep. 17, p. 25). The report concludes that the segregated

system is desirable from the standpoint of teaching reading, writing, and arithmetic, especially for students with IQs of 130 or more (ibid). Segregated schools may have detrimental effects on less-privileged students' self-esteem, but for some, this system 'sped-up' learning, and perhaps it was worth that price if they could convince society that it was the right treatment.

### **Special Schools**

In their final report, the Speyer School Committee broadcast the message that segregating students in elementary schools was bad for the mental health of students identified as 'slow learners' (NY Times, 1941, Sep. 17, p. 25). With their 'scientific methods', the Committee had shown that the grouping of students based on perceived learning speed had negative social consequences that out-weighed the benefits of a segregated system in which students identified as 'fast learners' could 'progress' at an ungoverned pace. However, for many Americans, the conclusions reached at the end of the five-year experiment had little import, and the conclusions were certainly limited in scope. Additionally, the power of the race to educate employed dividing practices that split learning communities.

In the years before the U.S. Supreme Court's 1954 *Brown v. Board of Education* decision, *de jure* segregation was enforced through Court ruling such as the 1896 *Plessy v. Ferguson* and other state supreme court opinions such as that held in Wisconsin's 1919 *Beattie v. Board of Education*. These rulings set precedents for policies that allowed schools to discriminate against people who officials perceived as embodying physical or intellectual 'defects' and they supplied credibility to dividing practices that sacrificed the learning of some for the perceived benefit of a privileged few.

While early twentieth-century segregation policies blocked many students from receiving a formal education altogether, many parents who could afford it sent their children to specialized institutions for treating children identified as ‘slow’. The race to educate promotes a feeling of pleasure in the exclusivity of private institutional care, and with the narrative that the ‘slow learner’ subject is ‘learning disability’, society is able to frame the subject as needing a ‘special education’.

Many families with children identified as ‘slow learners’ see private schools as the best place to seek ‘treatment’ for the pathology that ‘afflicts’ their children. This idea is reinforced by some experts who urge parents to “put the slow child in a special school,” a setting that would provide “educational and personality development” (*NY Times*, 1933, Jul. 30, p. 89; see also Geselt Institute 1955, Aug. 12, p. 37). In the *Daily Boston Globe* advice column, one contributor urged readers to research “guidance clinics” or “child welfare schools” that could help their children. The author writes, “I have seen children who appeared dull, lonely, and unhappy be transferred into sparkling, happy little ‘angels’” (*The Other Mome*, 1957, Jun. 19, p. 21). Special schools could perform ‘miracles’ for children who needed a ‘cure’, and parents were ensured that treatment would keep their child ‘on target’.<sup>97</sup>

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<sup>97</sup> Trusted parochial institutions supported this trend by opening schools designed especially for students identified as ‘abnormal’. In 1957, for example, a *Washington Post* article cited Sister Joseph Mary, director of the Holy Spirit School who points out “the lack of facilities for helping the slow-learning but educable children in the Catholic school system” (*Washington Post*, 1957, Apr. 18, p. D3). Citing “a trend toward the use of separate classes and schools for the rapid, medium and slow learners,” the National Catholic Education Association announced the opening of a school for ‘slow learners’ in St. Louis, Missouri that year (*Washington Post*, 1957, Apr. 26, p. C23). An institution that isolated ‘slow children’ away from ‘normal students’ was perhaps the best solution to this ‘problem’ – perhaps an education guided by faith could help these troublesome cherubs.

In an age before the internet, newspapers and catalogs assisted parents in their search for facilities catering to children identified as ‘slow’. One such catalog published in 1972, contained a 625 page directory of *facilities for the learning-disabled and handicapped* (Ellingson & Cass, 1972).<sup>98</sup> Advertised as a “valuable tool for anyone interested in special facilities for the disabled or handicapped learner,” this book includes information on “diagnostic, remedial, therapeutic, and developmental programs” for children labeled with,

aphasia, articulation defects, behavior disorders, blind, borderline, cerebral palsy, cleft palate, cultural deprivation, deaf and partially deaf, delayed speech, dyscalculia, dysgraphia, dyslexia, dysphasia, educable, generalized learning disability, health problems, institutional, major affective disorders, multiple handicapped, neurosis, paranoid states, personality disorders, psychoses, schizophrenia, slow learner, specific learning disability, stuttering, trainable, voice disorders (Ellingson & Cass, 1972)

If parents thought their children had a problem, they could find an institution that promised to treat the ‘defect’.

Advertisements for these institutions reassured parents that their child would be treated as an “individual of worth and dignity” (*LA Times*, 1976, Aug. 22, p. OC\_A6). In institutions where children labeled ‘slow learners’ were humanized with “respect, consideration and discipline” these children “shall be afforded the opportunity to reach his full potential” – at least that’s what parents were told (ibid).

For many students, this “opportunity” to become ‘normal’ began with a test. Oxford Academy in Pleasantville, New Jersey advertised tests that enabled them to “1) discover causes of difficulties; 2) devise individualized program to fit each student; 3) make up quickly lost time” (*NY Times*, 1947, Sep. 28, p. SM62). With the proper tests and constant surveillance, any student identified as a ‘slow learner’ could speed up.

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<sup>98</sup> The catalog sold as hardcover or paperback for \$15.00 or \$6.95 respectively

According to this narrative, parents who sent their children to private institutions removed the threat they posed to 'normal' society and they also moved society 'forward' by providing education that promised to 'normalize' the student.

In addition to a focus on curriculum and professional care, many residential schools stressed the importance of a proper diet and recreational outdoor activity as a cure for 'slow learning'. The Kolburn School in Norwalk, Connecticut advertised "training of slow children" that includes "social and behavior adjustment, excellent care and diet" (*NY Times*, 1947, Sep. 28, p. SM62). For some parents, the premise of outdoor activity as a cure justified them keeping their children at a year-round facility. Many institutions set in rural environments offered year-round schooling that provided "handicraft and therapeutic training" (*LA Times*, 1948, Mar. 28, p. C7; see also *NY Times*, 1950, Feb. 26, p. SM27). Bailey Hall in Westchester County, New York, for example, offered an adjusted program of education with "individual care, healthful outdoor activities with emphasis on happiness" (*NY Times*, 1947, Sep. 28, p. SM62). In one advertisement, Bailey Hall assured parents that "Friendly guidance at Baily Hall this summer may be the best medicine for your son;" the medicine offered at Baily was "individual attention....[and] good food in restful, congenial atmosphere" (*NY Times*, 1950, Apr. 26, p. 16). At Kolburn, along with "diagnostic and remedial techniques....[and] superior guidance, patience, supervision," students who attended the summer session would supposedly find "recreational activities, swimming, camp-craft, sports and academic achievement providing a feeling of success" (*NY Times*, 1962, Apr. 1, p. 231). A diagnostic test, "remedial training," close supervision, good food, and fresh air would cure any student identified as a 'slow learner' and allow her or him to return to



her or his 'normal' home. At the very least, these institutions removed the subject from 'normal' society, and eased Americans' anxiety about the threat they posed to the 'fast learning' of privileged students.

This form of educational segregation was not exclusive to the wealthiest members of society, however. For those who wanted specialized facilities for their child but could not afford sending their kid to private institutions, many public schools attempted to fill the demand. Public schools too, could help protect the rights of privileged learners. In 1953, the *Los Angeles Times* quoted Dr. Alexander J. Stoddard: "There is a need to provide specialized instruction for pupils whose learning rate is materially slower than average." Arguing for the establishment of special schools for "slow learners and unruly pupils," the Superintendent of Schools states, "The relatively small but hampering proportion of serious learning or behavior cases should be in the hands of teachers specially trained in methods of teaching such pupils" (*LA Times*, 1953, Nov. 3, p. 2). If school districts had specialized teachers, they could be trained to isolate and pacify the "rowdy children," while privileged students were educated.

If parents were not convinced of the benefits of specialized education for their children, they were reminded of the tragedy awaiting their child if she or he was undiagnosed and sent to a 'normal' public school. Writing in an advice column, one contributor to the *Daily Boston Globe* urged a concerned parent to take her daughter out of school. Miss Blue Hat (1957, Jun. 13) writes, "How do you think she must feel going every day, knowing that she cannot keep up with the other children?...They have arts and crafts and it is really amazing the beautiful work that some of these slow children can do" (p. 28). In another case, the *Los Angeles Times* profiled an eleven-year-old student

named Christie and describes the “despair” the student suffered while “wasting” years in a class for “slow learners” at a public school (*LA Times*, 1978, Jul, 25, p. OC6). Now that the girl had been diagnosed with “a reading disorder called dyslexia,” she would be sent to a “special school for children with this problem” (ibid). The author comments that the damage to the girl will take long to heal; “For years Christie thought of herself as a failure. A bright child eager to achieve, she was greatly disturbed by her lack of success at school. She became shy, withdrawn and hesitant to express herself” (ibid).<sup>99</sup> If ‘slow learning’ can be treated, many commentators believe students with this ‘disorder’ should be sent to special facilities as soon as possible so they can be cured – the consequences of inaction placed everyone in jeopardy.

Children identified as ‘fast-learners’ were also targeted for institutionalization. In 1956, the *Washington Post* reported on a teacher’s visit to Cleveland, where “gifted children” were put in a separate school so they would not be “lost in the classroom shuffle” (*Washington Post*, 1956, Sep. 7, p. 35). The teacher praised these schools for allowing children to “move ahead with different textbooks and a more demanding curricula” (ibid). In 1957, stating, “There never has been a greater need for development of talented youth,” the National Catholic Education Association announced the opening of two schools in St. Louis for “bright pupils” in addition to the one they were opening for ‘slow learners’. The program at the two St. Louis high schools that would “offer

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<sup>99</sup> Note here that neither author comments on the effect of segregating the child away from her peers who remain in the school for children identified as ‘normal’. I agree with both of them about the negative emotional impact of leaving a child in a learning environment not suited to her or his needs, however, removal to a distant facility does not necessarily prevent the emotional trauma of separation from friends and familiar environments. I put forward these two readings as arguments for why school must suspend judgment of students and provide education that first asks, “who are you?” Perhaps there is another solution here that school officials did not see because they cared about the race to educate rather than caring for the child.

‘major learning’ programs for some 400 students with high intelligence quotients” (Currivan, 1957, Apr. 25, p. 23). Having separate schools would ensure that, “the talented pupils are not anchored by the average pupils” (*Washington Post*, 1957, Apr. 26, p. C23). In Chicago, the American Federation of Teachers argued for a system of separate schools to “speed up the training of leaders for an age of electronics, nuclear science and automation” (*NY Times*, 1957, Aug. 18, p. 53). In 1981, Olson reported the “fast-paced” learning of 222 “gifted 11- to 14-year-olds” who had been privileged to receive schooling at a three-week summer program sponsored by Johns Hopkins University. She writes, “Some students completed algebra I and II in three weeks. Others completed the whole high school math curriculum from algebra through beginning calculus” (Olson, 1981, p. 96). If America was going to make progress, ‘slow learners’ had to stay out of the way. The race to educate has convinced Americans that segregation based on perceived learning speed is a justifiable action, but how different is this policy from one that separates children based on perceived skin colors?

Many Americans feel that students labeled ‘fast’ need their space, but discursive power requires a visible subject. Dividing practices that segregate learners into separate schools do not allow the gaze to gain full power, thus society, slowly worked towards policies that brought ‘abnormal’ learners back into contact with children labeled normal. If all students have contact with each other, visibility will promote self-examination, and all students race in their education to meet the norm. In the 1970s, several Court rulings and legislative changes moved many students from isolation in special schools to public

schools where students identified as 'normal' receive their education (Zettel, 1977).<sup>100</sup> However, not all members of society were happy that their children were now visible to power. Deborah Sue Yaeger, for instance, reports on parents who blasted school board policies that integrated their previously segregated students. Citing one father, Yaeger writes "integrating handicapped children into regular classrooms was the 'popular opposite' of the structured environment that these children require" (1975, Mar. 24, p. c2). Perhaps 'polar opposite' was the intended idiom, but regardless, by the fourth quarter of the twentieth-century, governmental power had pushed parents and their marginalized children into the spotlight of the public gaze.

### **Fast Track**

In 1944, the *Daily Boston Globe* published an article that may have delivered some parents' worst nightmares. Citing a study conducted by Helen B. Sullivan, the article reads, "Because no special classes have been formed at the junior high level, 700 children whose lower grade records would have them eligible for special classes are housed in the regular classes"

*Why the accelerated classes and why the work so highly accelerated? Second graders are doing algebra; first graders spelling and reading after only 4-6 weeks of school. Granted, a child is entitled to learn and achieve at his own speed, but why not in the same classroom? Isn't this a form of segregation and snobbery? Cannot the bright, average, and slow child benefit and be motivated by one another? They must get along with ALL types later on in life. (Irish Indian, 1965, Dec. 24, p. 10)*

(Lyons, 1944, Nov. 1, p. 6). This school was exposing "gifted students" to children labeled 'slow', and some felt that presented a threat to everyone's 'progress'. The power

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<sup>100</sup> See *Pennsylvania Association for Retarded Children v. Commonwealth of Pennsylvania* and *Mills v. Board of Education*, in addition to laws such as the Education for All Handicapped Children's Act of 1975 (PL 94-142)

in the race to educate had to make the 'slow learner' subject visible, but for many, the question remained as to how visible the subject had to be.

For syndicated columnist Albert Wiggam, segregated classrooms are a necessity if society wishes to remain in the modern age. Wiggam writes, "The notion that the slow and fast child should have the same tasks is

barbaric. It wastes the time and energy of children and teachers and also the money of taxpayers" (Wiggam, 1942, Apr. 21, p. 17). In a 1946 article, Wiggam reiterates the need to have segregated student groups when he states,

*The idea of promoting one group more rapidly than another is un-American. It gives advantage to the rapid child... The depressing effect on the children left behind by being classed as 'average' and 'slow' is marked. There is the injustice. Promotions should be made on merit and not on mental tests" (Anxious Parent, 1924, Sept. 12, p. 6)*

"Children who have the mental ability to make the ordinary grades are allowed to do so. Slow learners are put into 'ungraded' classes" (Wiggam, 1946, Aug. 28, p. 22). For concerned members of society such as Albert Wiggam, if school officials moved the 'slow learner' subject into public schools, then a system of segregation within the school had to be established to students identified as 'slow learners' would be encouraged to speed up and students identified as 'fast learners' would be allowed to charge ahead. The race to educate has no room to worry about the emotional impact of a segregated school system.

The system of segregation established in the Washington, D.C. school district by Assistant School Superintendent Carl F. Hansen is similar to those set up in schools across the country (see Wilkin 1959, Jan. 19, p. 2). Hansen analogized his high school model to a four-lane highway (very much *en vogue* in 1956), where four tracks were "adapted to accommodate students learning at different rates of speed" (Hillenbrand,

1956, Mar. 21, p. 1). School officials would test students for their intelligence quotient (often in the spring), and then set them on a track the following school year. The track was supposed to structure education so that each student entered a learning environment that was least restrictive to her or his progress.<sup>101</sup> According to Hansen, “our primary objective is to take into account differences in achievement levels and abilities of the youngsters coming into high school now, in an effort to cut the curriculum to fit their needs” (ibid). As stated, the tracking system would help schools provide individualized education for all students; however, the system was rigged to ensure that students at each level of privilege were governed with the least restriction needed to maintain the pace society expected from them.

Yet, even Hansen could not hide the way society’s race to educate influenced school policy. Employing a mixed-metaphor, the Assistant Superintendent used imagery of 19<sup>th</sup> century industrial efficiency (i.e., railroad tracks) to ensure that students were kept in line and were kept predictable in their assigned trajectories. However, authorities needed a system in which “the faster traffic can take other lanes, moving out and around the slower traffic;” thus, Hansen employs imagery of the four-lane highway in his analogy. While Hansen touted the tracking system’s ability to “provide inducement for further preparation on the part of slow learners who otherwise tend to drop out” (i.e.,

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<sup>101</sup> The most privileged level of the high school would be the “honors track”; these classes were “designed to encourage ‘gifted’ college-preparatory students to progress as rapidly as possible” with the most emphasis on “academic programs” (Hillenbrand, 1956, Mar. 21, p. 1). The second level was the “regular track,” “For the student of average ability who is going on to college.” The “regular track” was designed as a college-preparatory curriculum for students who did not distinguish themselves with the intelligence tests. The third level was the “general track,” “for the student of average or better ability who does not plan to go to college” (ibid). These students would still take some academic courses, but they would have vocational training as well. The fourth level was the “basic track” designed with “simple, remedial instruction for the slow student.” (ibid). This track required students to take “a large number of elective courses” and gave credit for students’ out-of-school “work experience” (ibid)

keeping these kids 'on-track'), the real benefits came to "brighter pupils" who could now "learn at their rate without being slowed up by slower pupils" (Hillenbrand, 1956, Mar. 21, p. 1). A highway was too chaotic for most drivers in this education race – they needed guidance to stay on track – but for America's "gifted-learners" the open road of learning allowed full acceleration without the traffic jams. Individualized education for marginalized students means attending schools structured so students identified as 'fast-learners' can 'progress' at the fastest rate possible; this means students labeled 'slow' sometime must move to the shoulder so no traffic jams block 'progress'.

In his appeal, Carl F. Hansen recognizes the many problems that come with the tracking system. More classes meant the district would have to hire more teachers, and individualized courses meant more teacher training for those who would take on the classes for 'abnormal' students. However, school officials also knew that parents would be weary of systems that locked children into a track; what if officials mislabeled children? Hansen dismissed this worry by stating that "adjustment will have to be made for inevitable early mistakes in placement of pupils;" and he reinforced the notion that parents had to play their part in ensuring progress for all children. Hansen said, "parents must be realistic about allowing their children to participate in the group which will benefit them most" (Hillenbrand, 1956, Mar. 21, p. 1). For Hansen, parents should be glad their children were classified and sorted.

When concerns about misclassification of students proliferated after five years of "adjustments," Hansen assured the community that officials would assign "academically retarded children" to "classes that are best for them" (Bowie, 1961, Jun 10, p. C1). The Superintendent promised that students who were able to do regular work would be

assigned to “general classes” and when they needed “remedial work” they would be put in the “basic classes” - parents had to listen to the ‘experts’ and abandon any unreasonable dreams they had for their children. For many, the school system made those dreams unreasonable by making students’ track designations as part of the child’s permanent record; the label was a tattoo the subject could not expunge. In America’s race to educate, all children are expected to learn ‘faster’, but certain student are privileged with the best equipment while others are left in the ‘breakdown lane’.

To justify segregating ‘fast learners’ into special tracks the argument often appealed to citizens’ concerns about the nation’s trajectory and appeals to the human rights of ‘gifted students’. For some, the sight of “dull and bright children” working together in the same classroom was a “tragedy,” and many worked to undermine any arguments to the contrary (Wiggam, 1937, Oct. 4, p. 15). In a time when a discourse for democratizing education was gaining power, syndicated columnist Dr. Albert E. Wiggam defended tracking with the premise of individualized education as a human right. To the question of “should mentally superior children be given superior chances in life?” Wiggam answered “No.” In his opinion, “they should be given work in school and at home and in business and industry that exercises all their mental powers, just as we try to give average and slow children” (ibid). With characterizations of the ‘fast learner’ subject as the future leaders of America, Wiggam and other ‘experts’ reminded readers of their “utmost importance in a democracy” (*NY Times* 1938, May 1p. 48). When some authors carried this argument and suggested that “gifted children” were being “neglected” in America; “perhaps the most neglected,” something needed to be done (Buder, 1954,



Nov. 28, p. 76). Equal rights in school, for some, meant differentiating curricula for students who scored differing I.Q.'s.

For many members of society concerned about America's 'future', common-space classroom education is an impediment to society's 'progress', and the newspapers made sure that Americans knew that tracking was the best way to ensure the fastest pace. An article in the *New York Times* printed in 1931 cites "recommendations made by educational experts" who argue for "segregation of gifted children in school so that they may develop their talents to better advantage" (*NY Times*, 1931, Apr. 23, p. 26). In 1933 Bagley writes, "The quick learners will not have to mark time while the slow learners struggle to catch up" (Mar. 26, p. XX5).

As the Cold War heated up, some observers identified the urgency of segregating students in America's fight against the "pall of mediocrity" (Thompson, 1950, Jun. 11, p. A22; Ives, 1957, Jun. 6, p. 1; Lindsay, 1957, Jul. 22, p. A8). In 1951, a *New York Times* article echoed an 'expert's' call for schools "to pay greater attention to the needs of their gifted pupils and to avoid putting them in educational straitjackets" (*NY Times*, 1951, Apr. 21, p. 19, citing Dr. Merle R. Sumption, executive officer for field services at the University of Illinois). A 1958 *Washington Post* article quotes Calvin E. Gross who tells attendees to the annual meeting of the American Council on Education that "students must be challenged to do the best work they can and permitted to move along as rapidly as possible;" for the Pittsburgh School Superintendent this meant "grouping according to ability" (Knoll, 1958, Oct. 31, p. B5). A 1958 *Associated Press* article cites Dr. Howard T. Fehr of Columbia University who criticizes the American schools for "teaching space age mathematics with horse and buggy methods" (*AP*, 1958, Feb. 16, p. A7). Fehr

lambasted the science curriculum because “some concepts of mathematics being taught today originated in the 17<sup>th</sup> and 18<sup>th</sup> centuries. They are no longer valid, he said, and should be discarded”<sup>102</sup> (ibid). Fehr’s histrionics is followed by his call for “special and separate courses for the superior, average, and below average students” (ibid). For Fehr, a mathematics curriculum from the 18<sup>th</sup> century may have been good enough for students identified as ‘slow learners’, but students labeled ‘fast’ need math from the future.<sup>103</sup>

Dismissing one line of criticism that attacked tracking as “undemocratic,” one author takes the offensive by positioning common-space class instruction as the cause of America losing the first leg of the space

race. Writing in the *Los Angeles Times*,

one author chides “progressive

educationists whose concern is stronger

for the average student and the ‘slow learner’ than for those of demonstrated talent and

ability” (*LA Times*, 1958, Jun. 8, p. B4). The author continues,

a bright student – a superior student – frequently offers fertile ground for development and that development has been too often neglected through those who accept and promote the cult of the common man....it would seem almost axiomatic that we should

*Ability grouping prevents pupils from learning from each other. Bright kids can spur slower ones. “We tend to make some pupils stupid by our ability grouping practices,” add Professor Clark. “When we limit a child’s environment, we give him less of a chance to develop his potential” (Pollack 1965, Jan. 3, p. B4)*

<sup>102</sup> Though I have spent great length problematizing Newton’s and Galileo’s contributions to the discourse of time, the reader should remember that the equations these two philosophers originated during the 17<sup>th</sup> century helped land two humans on the moon in 1969. Furthermore, while I do argue that our science curriculum must incorporate more concepts from sub-atomic particle theories, I reject this notion that the work of Newton and Galileo should be discarded from the curriculum. We must find a way to engage students in a broader understanding of our universe without rejecting trusted theories, but we must do it without remaining subject to the power of structures like the tracking system that limit students’ abilities to grow and change.

<sup>103</sup> For public schools coping to desegregate in the world created by *Brown v. Board of Education*, and with the discourse modifying to promote inclusion of students that had previously been banned from schools, the closest many could come to individualized education at specialized institutions, or the system of *de jure* segregation that had previously divided students, was career tracks (see Jordan, 2005, p.132; Zittel, 1977). One may frame the narrative of protecting civil rights for students labeled ‘fast’ as one that works to justify continued segregation in a society struggling to deal with racial integration. The same is true for the narrative that frames tracking as a means of securing America from attack; both narratives keep racial minorities (often identified as ‘slow learners’) from participating in education with privileged children.

spare no effort to take full advantage of the capacities shown by potential uncommon men – or women (ibid).

In 1961, Ilg & Ames defended segregation by suggesting that ‘slow’ students deserve special attention and “the rest of the pupils...deserve a chance to study undisturbed by the severely typical child’s special disciplinary problems and other difficulties” (Oct. 20, p. 20). If nothing else, Ilg & Ames argue, “the teacher deserves a chance to teach, uninterrupted by pupils’ special personality problems” (ibid). With the fervor of nationalism, and a hint of eugenics philosophy, many people argue that the only way for America to progress is to keep students labeled either ‘slow’ or ‘fast’ apart – with support from government officials, it is hard to speak against this narrative (see House Committee on Education and Labor, 1969, Jul. 15). However, these policies segregate students and discriminate against less-privileged members of society; in many schools, the ‘fast-track’ to the ‘future’ held a sign that said, “For white middle-class males only.”

### **Slow Track**

Advocating specialized education for the nation’s ‘fastest’ learners may have been an easy sell, but making an argument for the segregation of students labeled ‘slow’ requires a more nuanced approach. Experiments like the one conducted at the Speyer School in New York City showed that segregating students had ill effects on many learners, and other authorities published opinions that “special classes” are used, “as a dumping ground for children who are remedial cases, underprivileged, neglected or who present any

*They are given very little of the three R's or spelling during the week. Instead they are given a little sewing, woodwork or weaving pot holders. The teacher then cuts the aprons out instead of letting the child learn to do it.... These boys and girls are ashamed themselves to tell anyone what class they are in. Is this good for their morals? (H.M.R. 1958, Feb. 21, p. 22)*

problem at all” (Lyons, 1944, Nov. 1, p. 6). In an age when Americans gave voice to those who questioned the assumption of “separate but equal,” advocates for segregated classrooms had to appeal to something other than a sense of genetic superiority (see Davis, 1968, Mar. 15, p. 3). Thus, the argument for tracking students labeled ‘slow’ often rests on appeals to a narrative of ‘slow learning’ as a terminal pathology, appeals that tracking will protect the child, or appeals that tracking will speed up learning. In any case, tracking is framed as a method for treating the ‘slow learner problem’ and in America’s race to educate, society searched for any treatment that showed promise to work.

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In 1941, Florence S. Harper published an article that challenged many of the prevailing characterizations of the ‘slow learner’. The author writes,

These individuals are found throughout the entire business, industrial, social order in some capacity. Some of them are establishing homes, rearing families, holding positions in PTA, helping elect school boards, discussing school procedures and policies (Harper, 1941, p. 223)

For employment, the author describes the subjects as helping to deliver merchandise, sell a pair of shoes, total the sales accounts, and make change, among other responsibilities - “one of these may have succeeded in establishing a small business of his own” (ibid). Harper states, “Some are delightful, attractive and charming in their service, others are sullen, morose, indifferent, inaccurate and careless” (ibid). Individuals labeled ‘slow learners’ seem to fill a spectrum of human experience and emotions.

However, despite this multifaceted portrayal of the subject, Harper makes clear that one cannot find individuals identified as ‘slow learners’ in every position. According to the author, ‘slow learners’ do not hold,

positions of great executive responsibility, nor in positions requiring vision and foresight, exceptional organizing ability, technical skill, great resourcefulness, fine precision, marked ingenuity, untiring enthusiasm and energy devoted to a single cause or purpose (ibid)

Harper suggests that this characterization of the subject with capped abilities, “will suffice to bring to mind the place in the world of today in which these people function,” and consequently, she suggests that this characterization serves as the context for creating “the type of education and training they need” (ibid). Thus, no matter what abilities the identified ‘slow learner’ is capable of exhibiting, schools are responsible for training the subject for the abilities society expects to see.

This characterization of the ‘slow learner’ as a subject with static, and limited, abilities is used as justification for establishing specialized tracks for their education. Many authors encourage Americans to set their expectations low and structure their educational programs to match. Yoakam (1943) writes, “We refuse to face this fact and persist in believing that we can increase the achievement of the slow learner and thus make him equal to the fast learner” (p. 102). For this author, schools were to ensure “continuous progress according to ability,” but the narrative persists that one should never expect ‘slow learners’ to achieve the same results as ‘gifted children’. Writing in

1944, Mackenzie states, “If a youngster isn’t going to shine in a profession or a job calling for

*Most tragically, however, this was a defeated class-individually and collectively. They knew perfectly well that they were 7-14 and all that this implied. The children were extremely self-conscious and easily embarrassed (Keyes, 1965, p. 81).*

abstract thinking – and he isn’t unless he has the mental equipment to get at least through high school – the goal to set is one possible for him to reach. Usually this child is good at doing things with his hands” (Mackenzie, 1944, May 21, p. SM29). Quoting Katharine G. Ecob, Executive Secretary of the New York State Committee on Mental Hygiene of

the State Charities Aid Association, Mackenzie adds, “They can’t make the child bright, but they can help him to make a good adjustment according to whatever capacity he has.”

David Taylor Marke (1949, May 4) reinforces this notion writing in the *Washington Post*, “No amount of help or prodding will make a slow child a genius. Recognizing his real

*When they learn that it is possible to fail many times but succeed finally, and it is possible to turn every failure into a step forward – then I’ll feel that they will go into the world well educated (Downer, 1957, Mar. 31, p. D17)*

capacity, we can protect his happiness and self-respect by not nagging him” (p. B7).

Gladys Bevans writing in the *Los Angeles Times* comments, “higher education or a professional life is not possible for every boy or girl, no matter how ambitious the parents” (Bevans, 1954, Jan. 24, p. J32). Mackenzie (1944, Jan. 23) frames the tracking system as a method for training students for their scripted roles in life. Writing in the *New York Times* the author states,

If youngsters put on a play there are jobs for builders as well as for actors; the child with talent for writing may do the script, another, whose bent is designing, may work on costumes, and so on. In this way each youngster is doing something he is good at, getting recognition for it, and all are working together (p. SM25)

For Ilg & Ames (1964, Sep. 10), there is no need to deny the *truth* about students’ abilities. In one column they state, “Let’s all try to get over the false notion of equality which makes many of us unwilling to admit that some children are brighter than others. Not necessarily better but certainly brighter” (p. 46). If a child is destined to work in a factory, why suffer her or him to think differently? (Robey & Cody, 1966, p. 42; Senate Committee on Labor and Public Welfare, 1969, Nov. 10, 11; Barber, 1968, Nov. 7, p. SG7; Slee, 1998, p.444). The problem though, is that education officials are making the decision *for* the child; based on flimsy data, officials measure the child’s abilities with standardized tests and then cement one’s future by prescribing a course of education that

ensures the child will reach the target chosen *for* her or him. Perhaps equality amongst our students is a false notion, and perhaps some students are not destined for college, but let them make that decision; our job should be to open as many doors for them as we can so the choices are there if they want them.

For many, there is no “simple cure for learning disabilities,” but educators, doctors, and parents are still responsible for “dealing with the problem” (Andelman, 1975, May 11, p. E21). Thus, for many, the education of students identified as ‘slow learners’ necessitated training the subject to “fit into society.” Abele (1951) writes,

The two objectives of the teacher are: 1) to develop in the slow learner those skills which will enable him to adjust in society without being noticeably different from his fellows. 2) To develop in the slow learner desirable standards and habits of behavior, so that he may become socially acceptable (p. 423).

This education required a separate setting, according to some experts, because the ‘slow learning child’ “doesn’t see things as other children do” (Ilg & Ames 1963, Jul. 19, p. 18). In syndicated columnists Ilg & Ames’ words, “He must have his own special classes. He dosen’t [sic] belong, at first, in a regular classroom because he dosen’t [sic] learn as the normal child does” (ibid). For authors like Kay W. Hardesty (1966), it was necessary for educators to determine whether the subject was “the slow learner (or educable)” or the “trainable,” because “goals, general characteristics, and teaching materials and methods vary for the two groups” (Hardesty, 1966, p. 24). For some, there was no hope of helping the student identified as a ‘slow learner’ catch-up to ‘normal’ Americans; the best solution was teaching the student to fold into society without distracting people identified as ‘normal’.

At the very least, the tracking system promised to keep students identified as ‘slow learners’ off the streets. Academic journals supported the idea that keeping ‘slow

learners' in "special classes" with study halls is good for academic outcomes. Reid (1958), for example, published a study that found students placed in "special class training" had "increased school tenure" compared to a control group of matched subjects. The study has a sample of only seventeen students, but that methodological detail does not stand in the way of readers who generalize the findings to the broader population. For those who believe students have static levels of intelligence, the best way to keep America moving forward is to keep those children out of the way.

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Dehumanizing the 'slow learner' subject and framing the student as one who needs 'special education' is one narrative that supports dividing practices in the race to educate, but another narrative is one that frames education as a caring endeavor for children 'at risk' to themselves and to society. Thus, if students were to receive an individualized education, many argue that logistical demands, and the demands of fairness required that students would have to be physically segregated (see Cox, 1952, p. 472; *LA Times*, 1957, Jun. 30, p. H8; *LA Times*, 1958, Nov. 16, p. OC10; *Boston Globe*, 1967, Jun. 11, p. 38).

According to Washington D.C.'s Carl F. Hansen, the four-track system would eliminate the need for mass demotion of "slow students." The Assistant School Superintendent states, "you cannot demote a large number of students without running into an impossible situation" (Hillenbrand, 1956, Mar. 21, p. 1). Additionally, if students labeled 'slow' needed individualized education focused on job training, special curricula would have to be written for their abilities, and special facilities would have to be



constructed for their programs (see Yoakam, 1943; Whipple, 1953). Some school districts did just that.<sup>104</sup>

In several cases, officials justified segregating students identified as ‘slow learners’ with statements as to the benefits the system would have for the self-esteem of the children. An 1881 article in the *Keene Sentinel* of Keene, New Hampshire summarizes what may happen if teachers directly compared a “dull or lagging pupil” with a student “who stood higher in his class” (*Keene Sentinel*, 1881, Apr. 21, p. 1). According to the author, this action would make one child bitter and angry and the other “intolerably vain” (*ibid*). In 1898, a Topeka, Kansas newspaper warned readers, “a slow child, or one with peculiarities of any kind who needs care and special attention, will drag along a miserable existence at school and then will be forced to begin life entirely unprepared” (*Lucifer the light-bearer*, 1898, Oct. 15, p. 330). The author mocks education philosophers who do not recognize the difficulty of studying, “in the midst of a mob of restless, nervous young beings who are being repressed beyond endurance” (*ibid*). Additionally, the author expresses the irony of expecting children to study books, “that are riddles to them in a riot of nervous uneasiness” (*ibid*). Similarly, many educators come to defend the segregation of students with justifications based in students’ reading abilities. Lucille Faulkrod (1953, Apr. 27), for example, defends the segregation of students stating, “The slower children have no need to feel discouraged because they can actually enjoy reading. Nor do these children feel inferior, but consider themselves an

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<sup>104</sup> In 1958, the *Los Angeles Times* announced the construction of two classrooms at Raymond Temple School that had been equipped with \$45,000 worth of tools used for “learning carpentry, sewing, and other crafts” (*LA Times*, 1958, May 25, p. H12). These classrooms were designed to meet the ‘special needs’ of students identified as ‘slow learners’.

important part of the class” (p. 18). Common-space classes, according to some, did nothing but frustrate those who already struggled with learning their lessons, and the tracking model allowed each student to learn at the pace expected by society.

Similarly, some authors view common-space classes as unwarranted psychological warfare on children who struggle to ‘keep up’. For example, Bagley (1933, Mar. 26) defends segregated grouping of students identified as ‘slow learners’ by stating, “nor will [they] be depressed and discouraged by constant reminders of their inferiority” (p. XX5). Citing A.R. Mangus, Freeman (1950, May 19) states, “The insistence of school on teaching the ‘slow learner’ subjects in which he cannot succeed often damages his self-confidence, leads to his rejection by teachers and classmates and makes him vulnerable to neurotic or delinquent behavior” (p. 30).<sup>105</sup> According to Mangus, schools had a duty to offer ‘slow learning children’ guidance toward “social, emotional, intellectual, moral and economic maturity” and that meant an individualized education (ibid). One author in the *Washington Post* asked, “Where can they go to school where they won’t become ashamed of their deficiencies, rather than proud of their abilities?” (Shepard, 1953, Feb. 9, p. 15). According to this author, “just letting the kids stumble through regular school classes paced too fast for them cripples them personality wise; that blights the fruit that their own mechanical aptitudes could have flowered into had they been properly nurtured” (ibid; see also Holloway, 1956, p. 131). The ‘slow learner’ subject is a flower of potential, and for some, common-space classroom instruction prevented society from reaping the fruit that these students could offer.

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<sup>105</sup> A.R. Mangus is professor of rural sociology at Ohio State University and he gave this address at the annual convention of the American Association of Mental Deficiency.

Similarly, an author for the *Los Angeles Times* attempts to shift attention away from arguments for tracking based on the benefits for “bright youngsters” and works to communicate “the case for ability grouping on its merits for slow learners” (Beck, 1963, Mar. 31, p. A48). Citing Dr. Jack Abramowitz, supervisor of social studies at schools in Farmingdale, New York, Beck states,

Regardless of grouping, everyone knows who the brightest and slowest learners are. In a regular class, the pupil of limited ability is frequently humiliated and embarrassed, frustrated and discouraged, as he tries to keep up with classmates of average or above-average skill, using texts he cannot apprehend (ibid)

Readers who believed these statements were probably not surprised to hear one reporter quote a teacher of the “primary special class” in Whitman’s Dyer Elementary School describe her class as “the happiest and most content you’ve ever seen” (Forman, 1959, Feb. 4, p. 15). The reporter states that the teachers in charge of these special classes for “trainable students” “find their pupils enjoying school perhaps more than any other group” (ibid; see also H.M.R. 1958, Feb. 21, p. 22). Many believe that segregated students are happy students, and in the race to educate, power is secured by the pleasure felt by those who struggle within the discourse.

Protecting the self-esteem of children was Carl F. Hansen’s stated priority when he proposed tracking Washington D.C.’s elementary and junior high school classes in 1959. The School Superintendent cites “psychological reasons” and states that grouping students by ability will “avoid labeling children either as retarded or gifted” (*Washington Post*, 1959, May 16, p. 53). In Hansen’s opinion, tracking for younger students would ensure a system that “labeled the curriculum, not the child” (ibid). I think he forgot that he would have to label each child to notify them of which classes to attend; kids are not as gullible as some officials believe them to be.

The plan for the elementary and junior high schools was a three track system – “basic-remedial, honors, and a normal program;” according to the *Washington Post*, “slow learners” would be taken out of their previously designated classes and “enrolled in the basic track from kindergarden [sic] onward” (ibid). Everitt et al. (1962) quote one student who they feel illustrates the effectiveness of the segregated system. The student, who had “found ease and personal fulfillment working in a slow-learning group” remarks, “I was going to quit school when I became sixteen, but for once I’m passing my subjects and feel as though I’m learning something. I don’t intend to quit now” (p. 8). Many argue that students should be proud to enter a class especially designed for individuals who learn at similar paces. According to Ilg & Ames (1964, Sep. 10), “It is not a disgrace for a boy or girl to be in a special or different class. It is often the greatest educational privilege that you can offer him” (p. 46). According to some, a segregated school was good for students’ self-esteem and good for keeping adolescent kids off the streets – all students were supposed to be proud of their place in maintaining that order. The pleasure found in individualized instruction for children labeled ‘slow learners’ allows privileged students to race in their education. In the race to educate, children are taken from their homes, put on tracks, and processed at institutions designed to keep these ‘defective’ bodies from interfering with the progress of privileged subjects; children or parents who disrupt this process will be exposed as enemies of society<sup>106</sup>. Policy makers such as Carl F. Hansen may have “aimed to ban labels for pupils” but they surely forgot the lessons from Speyer – if they had ever learned them at all.

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<sup>106</sup> My provocative imagery here is intentional, and I apologize if it offends the reader – it should.

In the race to educate American children, framing segregated classes as a means for bringing individuals identified as ‘slow learners’ up to speed with the rest of ‘normal’ society is perhaps the most powerful narrative that supports this dividing practice. Many believe that if officials can accelerate the learning of students identified as ‘fast learners’, then we can also accelerate the learning of individuals labeled ‘slow’. In the race to educate, every body counts, and one’s delay can jeopardize the entire society.

With this line of reasoning at the turn of the twentieth-century, New York City followed Atlanta and Detroit in individualizing education with the establishment of vocational training and ungraded classes for

students who did not progress at the ‘normal’ rate. In justifying these segregated classes, one school administrator in the City told the Board of Education that the establishment of

*If it is necessary for us to work at a pace other than our own – especially a faster pace – we will make more mistakes and feel mentally disturbed and unhappy (Ilg & Ames, 1954, Oct. 29, p. B4 quoting a letter written by a reader of their column)*

ungraded classes with special teachers would allow ‘slow students’ “to make their grades more rapidly” (Franklin, 1994, p. 29 citing Laura Smith, 1916). Many Americans communicate the message that segregated classes are a means of “educational rehabilitation” for students identified as ‘slow learners’, and with intervention these students can eventually reenter classes for pupils with “normal maturity levels” (Washington Post, 1956, Sep. 7, p. 35).

In 1946, syndicated columnist C. Mackenzie wrote about one such program. Citing a study written by Bernardine G. Schmidt of the Special Education Clinics at Indiana State Teachers College, Terre Haute, Mackenzie reports that a “three-year program in a special center” was able to ‘accelerate’ the learning capabilities of children

who had been classified as “feeble-minded.” Mackenzie writes that the program viewed the students as people and created curricula around their “learning needs.” Of the 254 boys aged twelve to fourteen enrolled in the study, the author reports that the special center, “jacked their capacities up to a point where upward of 27 per cent later finished high school, nearly as many were working and going to night school, and 83.4 per cent had regular jobs” (Mackenzie, 1946, Feb. 17, p. 100). The center was credited with raising the students mean I.Q. score 40.7 points during the three-year program, and perhaps most important to some, it allowed these students to position themselves in, “a role of social assets” rather than that of “incompetence and dependence” that would have been expected from them otherwise (ibid). Schmidt found a program that delivered just what society was searching for, ‘faster learning’ and social conformity.

A 1957 article examining the four-track system implemented in the Washington D.C. school system by Superintendent Carl F. Hansen reports similar results. Bess Furman (1957, Feb. 24) reports that “spot tests” administered to students enrolled in the tracking system showed that students identified as ‘slow learners’ “are really learning rather fast” (p. 43). Furman adds that, “many in the slow-learning category of this city’s new ‘four-track’ system learned so fast last semester that one high school principal concluded that they had not been classified correctly” (ibid). For some, tracking is the vehicle that allows all students to speed-up in the race to educate.

However, not all ‘experts’ agree on the cause/effect relationship between tracking and achievement on achievement tests. According to Charles Bish, “principal of the largely Negro McKinley High School,” the tracking system had more effect on motivation than anything else. Dr. Bish states, “Since no system of teaching yet devised

could cause pupils to make such very, very rapid progress...these students obviously scored far below their real potential in the earlier tests" (Furman, 1957, Feb. 24, p. 43). When asked why they had not scored well on the first tests, students replied that they "didn't take the first test seriously," that they "didn't know it would count as much as it did," that they were not "used to taking such tests," and "*the time limit was very disturbing*" (ibid, my italics). Regardless of the cause, for many, the effect was clear – the tracking system 'moved' students 'forward' in their education trajectories. Yet, for many children put into these classes, the promise of 'rehabilitation' was an illusion, and they found themselves in 'adjustment' classes designed as depots for "misfits in the school program" (Franklin, 1994, p. 29). These children would receive individualized education, but for thousands of students there was little hope, or desire, to become 'normal'.

Regardless, of students' desires, parents and citizens continued to fight for education conditions that would 'speed up' learning. With the 1975 Education for All Handicapped Children's Act (PL 94-142) requiring a free appropriate public education for all students, the early 1980s and 1990s saw a flow of lawsuits surrounding the issue of "least restrictive environment." Cases such as Ohio's *Roncker v. Walters* (1983), Texas' *Daniel R.R. v. State Board of Education* (1989), Georgia's *Greer v. Rome City School District* (1991), New Jersey's *Oberti v. Borough of Clementon School District* (1993), and California's *Sacramento City Unified School District v. R. Holland* (1994) each worked to shape the 1975 law and its 1990 successor (i.e., Individuals with Disabilities Act) to streamline the fastest education structures possible. The tracking system may have enshrined the race to educate more effectively than previous institutional placement,

but the gaze of power and self-examination still was not as powerful as it could be. To fully engage Americans' desire to race in their education, society had to devise a panoptic school structure, an education in which students at all levels of perceived learning speed are taught in a common-space classroom. Furthermore, the race to educate requires a powerful, but hidden gaze, to ensure a steady trajectory towards learning goals, and each member of the class must know the norms set by society and meet those expectations to earn privilege in society. The power of the race to educate is found in common-space classrooms across America.

### **Common-Space Classrooms**

Tracking policies have never won universal acceptance in American schools; while many school authorities view segregated classrooms as the best treatment for students labeled 'slow learners', a seemingly equal number argue that differing students should be educated in the same space as their 'normal' peers. To justify this different school structure, some authors argue that a segregated system brings attention away from the norm, and as a result, the majority of students' performance suffers (see *NY Times*, 1941, Sep. 17, p. 25; Southworth, 1966, p. 324). Thus, as many schools moved to segregate students into 'tracks' based on IQ scores, other school officials enacted policies of 'inclusion', 'normalization', 'mainstreaming', 'heterogeneous grouping', or 'integration' to motivate all students into a 'faster' pace of learning. However, while classrooms organized under this structure are often portrayed as a just answer to segregated 'tracks', I will argue here that they are just another mechanism for speeding the pace of education and controlling the knowledge and behaviors of those students who



refuse to conform. Thus, the discourse on common-space classrooms reflects a narrative in which one may see justifications based on democratic principles and civil rights issues, but one can also see school policies that attempt to assimilate abnormal students through the use of disciplinary mechanisms.<sup>107</sup>

Concern for normalizing the student population is a dominant concern in the narrative of common-space classrooms. In 1933, for example, William C. Bagley expressed concern about the tracking system's role in shaping American citizens. According to Bagley, the 'tracking system' intensifies 'slow learning' and creates "unnecessary ignorance" amongst the student population; this "unnecessary ignorance" threatens the very fabric of democracy (Bagley, 1933, Mar. 26, p. XX5; see also Wolfensberger, 1983). Slade (1980, May 6) reports that students labeled 'slow', regardless of the reason, tend to perform worse on tests, and are more likely to have teachers with lower opinions of their abilities.<sup>108</sup> Thus, the narrative that promotes common-space instruction frames this structures as one that increases the subject's value in society. Furthermore, this narrative promotes a notion that common-space instruction

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<sup>107</sup> The very language used to describe common-space classrooms suggests a meaning rooted in colonization. For example, terms such as 'normalization', 'mainstreaming', and 'integration' reflect a preference for a particular classroom power structure that aims to assimilate abnormal students. The term 'mainstreaming' even reflects a temporal discourse in which the main goal of education is to push all children 'forward' toward a predetermined goal. Similarly, the term inclusion maintains the power structure that positions the abnormal student as 'other' in a classroom of privileged peers – a child 'included' in the classroom is a guest, not a sovereign member of a community. Finally, the term 'heterogeneous grouping' is no more accurate in describing the common-space classroom than it is in describing a tracked-classroom. From the Greek words *héteros*, meaning other, or different, and *genea*, meaning generation, or race, students in tracked classrooms may be classified as different in many ways, including their individual I.Q. scores just as students in common space classrooms may be classified as *homogeneous* because we are all human after all. Thus, I will use the term common space classroom to reflect an organization in which individualized students are educated in a common room at a common time by a common instructor, but not necessarily under the assumption that the proximity of differing students will translate into a common curriculum, or a common knowledge.

<sup>108</sup> Slade cites a study by Gene V. Glass, professor of education at the University of Colorado at Boulder, who analyzed the results of fifty independent studies.

enables individuals identified as ‘slow learners’ to live in “normative housing within the valued community, and with (not just near to) valued people.” Plus, according to the narrative, students educated with ‘normal peers’ gain opportunities to, “work in the same facilities as ordinary people,” and worship, relax, and shop in accordance with ‘normal’ values (Wolfensberger and Thomas, 1983, p. 27 quoted in McIntosh, 2002, p. 68-69; see also Mahan, 1965, p. 81; Johnson, 1964, p. 148). In this narrative, if school officials treat children identified as ‘slow learners’ as they treat children labeled ‘normal’, then the subjects will mature into “normal adults” – a novel idea, for some.

However, the process of ‘normalization’, in most cases, has more to do with the assimilation of differing students than with the acceptance of individual difference.<sup>109</sup> Furthermore, this narrative is often guised with allusions to educators’ respect for difference in common-space classrooms that is not necessarily present. Quoting John Goodlad, professor of education and director of the University of California at Los Angeles Elementary School, Constance S. Sammis writes, “Children are different, much more different than we have up to now recognized. We have been shamefully remiss in taking these differences into account in our planning and teaching” (Sammis, 1967, Sep. 16, p. 11). ‘Experts’ like Goodlad call for individualized education based on students’ needs; individualized education in a common-space classroom would give the child the material suited to her or his learning experiences – micro-tracking. Recognition of difference for Goodlad means the ability to differentiate treatments for students, not the ability to welcome students as they enter our classrooms. Goodlad’s recognition of

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<sup>109</sup> Citing Willard C. Olson, dean of education at Michigan University, a 1952 *Washington Post* article summarizes this notion in communicating the ‘expert’s’ belief that “retarded children...can become ‘productive citizens’ if they are given a chance to develop at the proper pace” (*Washington Post*, 1952, May 11, p. M15).

difference requires teachers to track individual students' learning progress – officials and peers would watch the students' every move.

For some, common-space classrooms offer authorities an opportunity to regulate students' behavior while preparing them for their anticipated place in society. Experts like Dr. Harvey Zorbaugh, director of the Clinic for Social Adjustment of the Gifted at New York University used the media to argue for a policy of individualized curricula that works towards social harmony. In one *New York Times* article a columnist quotes him as saying,

If we had school within which instruction was individualized, and activity was socialized, and consequently, within which each child was accepted for the contribution he could make, then the children of wide differences in ability, including gifted children, could live and work together (Mackenzie, 1944, Jan. 23, p. SM25).

A 'life adjustment' education trains students for their adult lives (see Holloway, 1956, p. 133 for justification of inclusion in the junior high model). Introduced by Dr. Charles A. Prosser, U.S. Education Commission appointee to the Life Adjustment Education Commission, as a "well-rounded education for [the] forgotten 60 per cent," this curriculum aims to "prepare our youngsters realistically for everyday living, meeting, for the first time, their *total* needs – personal, scholastic, social and vocational" (Pollack, 1949, Aug. 14, p. G4, original italics). As it is described by Dr. J. Dan Hull, of the U.S. Office of Education, "Life Adjustment is neither just college preparatory nor just vocational education, but combines the best features of both" (ibid). Children at these schools receive family-life training, consumer education, good work habits, lessons on creative use of leisure time (i.e., "learning that recreation means more than just going places and spending money"), citizenship training, instruction in social relations, how to get a job, choose a career, live with parents, and "above all, in knowing and

understanding one's self" (ibid). According to Pollack, high schools that had embarked on Life Adjustment curricula had "dramatically slashed their drop-out rate and in many cases cut juvenile delinquency" (ibid). Surely, this curriculum promises to solve some of the social problems associated with 'slow learners' but would it allow 'normal students' to progress fast enough?

Despite concerns that the pace of education would slow down for all students, common-space classrooms with individualized curricula establish norms, and employ disciplinary mechanisms so strong that many commentators note how they act as an antidote to the threat of 'slow learning'. To encourage a fast, uniform pace of learning, some schools decided to drop age-based groupings altogether and design classrooms in which students monitor their own pace of learning. Announcing a plan to merge the first three years of elementary school in New York City for the 1935 school year, Harold Campbell outlines a plans to reduce class sizes, construct lessons with "more attention to the community and its development," and change the grading system to rate, "pupils satisfactory or unsatisfactory 'in view of individual ability'" (Campbell, 1935, Jun. 30, p. X7).<sup>110</sup> According to this 'expert', ungraded reports allow teachers to place success "within reach of every child" - and who needs grades when each child could judge her or his learning pace next to students older and younger than herself or himself (see also Olsen, 1965, p. 82). Additionally, a trained teacher would keep a student,

constantly aware of his own improvement encouraging and stimulating him to further efforts. Never in an idle moment does she allow him to hear himself labeled as slow or to feel himself to be a slower member of the social group (Tuttle, 1932, Mar. 1, p. 6).

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<sup>110</sup> Campbell explains, "This and other departures from the traditional will be made in a further effort to eliminate retardation" (Campbell, 1935, Jun. 30, p. X7).

Students would engage in self-examination in comparison to the fastest-members of their class; the slowest rate one was able to learn was ‘normal’.<sup>111</sup>

Common-space classrooms focus a public gaze on students identified as ‘slow learners’, motivating some to increase their learning pace. Yet, this structure also allows students identified as ‘fast learners’ to ‘move-ahead’ without interference – “the slow ones would not slow the group” (Southworth, 1966, p. 327). A report published in 1963 titled, “Schools for the Sixties” illustrates how school officials premise individualized education as a means for unbridling the pace of learning for children identified as ‘fast learners’. Reviewing the National Education Association report in the *Boston Globe*, Benjamin Fine states that it calls for

a drastic revision of the public school system which would eliminate the traditional grades and permit children to advance at their own pace....the lock step in education that now chains many students to a particular grade would be broken (Fine, 1963, p. A\_62).

Fine hypothesizes that, “In a nongraded setup...the slow learners may continue to do first-grade work for two years, while the faster ones might complete three years in one” (ibid). An article in the *Washington Post* echoes this excitement at finding a system that allows students identified as ‘fast learners’ to keep ‘progress’. Hodenfield writes,

The youngsters are grouped according to ability and work at their own best pace. In the nongraded primary, for instance, a child may be ready for fourth grade after only two years in school...In a nongraded high school a brilliant student might finish two years of mathematics in one year and be ready to go on to something else. A slower student might take a year and a half or even two years to cover a one-year course (Hodenfield, 1963, Aug. 25, p. K6).

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<sup>111</sup> Without normative grades, parents had a hard time determining how their children compared to the ‘average child’ and there was considerable resistance to modified report cards – parents have to watch the pace of their children’s education as well. Building on a notion that students in ungraded classes were being passed through school without learning anything, Ilg & Ames (1961, Oct. 20) write, “We believe the child goes to school to learn, not to be made happy by being given credit for things he hasn’t learned” (p. 20). However, anxious parents soon turned to standardized measures of education achievement, and some authors suggest alternative means for comparing children such as parents asking school officials what reading book their child was working on or ask what the child’s scores were on standardized tests (Vincent, 1977, Oct. 27, p. C6).

Seeing a “wide variation of learning in the fourth, fifth, and sixth grades,” some authorities argue that taking the labels off the grades would allow schools to better prepare pupils for their fourth year (Hymes, 1963, Nov. 27, p. B1 quoting Elizabeth McMahon, Supervisor of Elementary Schools). Sammis reinforces the acceptability of this notion by stating, “A *normal* span in a *typical* fifth grade level class ranges from first grade through the ninth grade level” (1967, Sep. 16, p. 11, italics added). Nothing could regulate pace better than keeping some students in third grade for two years while allowing others to skip it altogether.

The self-pacing narrative in common-space classrooms allows students to conduct self-examination against the norm. Furthermore, power is reinforced with the structure’s ability to produce pleasure in the taboo contact between ‘slow’ and ‘fast’ learners. Holloway (1956) argues, “The slow learner must be identified with the school in the same way as other boys and girls” (p. 133), but integration always comes with a price. Wilkin writes, “The threat of being taken out of his ‘team’ and made to study himself keeps potential troublemakers on the straight and narrow” (p. 2). The worst consequence for inappropriate behavior would be deportation as a social misfit. Keeping the ‘slow learner’ subject visible, but out of the way of students identified as ‘fast learners’ was thus, the method chosen by many school districts for keeping their students on pace. Few people can argue against a school policy that promises individualized instruction delivered at a student’s ‘natural’ pace. In common-space classrooms, children are like fingerprints – no two are the same; yet everyone knows which finger gets the ring.

Under the guide of individualized education and equal opportunities in the classroom, some authors argue that non-graded schooling and common-space classrooms are designed to protect students from “the stigma of failure” (Wiggam, 1946, Aug. 28, p. 22), others make no attempt to shade the desired results. Sammis writes, “Under rigid grading systems, fast learners have often not lived up to their abilities” (1967, Sep. 16, p. 11). When a non-graded parochial elementary school opened in Newton, Massachusetts, the supervisor of the school stated the purpose of the program with no effort to disguise the emphasis on learning speed. Sister M. Constantine says, “The purpose of a non-graded program, is to allow each child to progress in accordance with his own learning rate and to experience continuous success in social, emotional and academic achievement” (*Boston Globe*, 1967, Jun. 11, p. 38). While this program was “geared not for the slow child or the advanced one, but for the average student,” Sister made clear that, “The accelerated learner may progress as rapidly as his ability permits while the slow learner proceeds at his own pace” (ibid). With the clock gazing at all students, the only measure of success is who can outpace the norm.

If students identified as ‘fast learners’ did slow down at all, it was to help “slower learners master basic skills” (Wilkin, 1959, Jan. 19, p. 2). Authors writing about common-space classrooms in which teams of teachers worked to educate students, argue that cooperation in the classroom increases the rate of learning for individuals identified as ‘slow students’ but does not hamper the ‘progress’ of children labeled ‘gifted’ if they could not afford the time (Wilkin, 1959, Jan. 19, p. 2). Americans are assured that students labeled as ‘fast learners’ are not delayed by their participation in common-space classrooms. Wilkin writes, “Some of them, at midterm, have completed this year’s work

and are solidly launched in next year's assignment" (ibid). If anything, students identified as 'fast learners' in common-space classrooms had to push themselves to their potential in order to 'show-off' their talents. Graded and non-graded schools with common-space classrooms were not designed to support the emotions of less-privileged learners, they were created to inspire children labeled as 'fast' to learn even faster, and they were organized in a way so that students identified as 'slow learners' could learn faster too, but did not constrain the 'progress' of more-privileged students.

Whether education officials structure school environments along common-space designs, tracking, or segregated buildings, the discourse is clear on the ends in mind. School structures are organized to accelerate the learning pace of students identified as 'fast learners' and regulate the learning pace of less privileged subjects. With learning pace norms in place, dividing practices acted out in school force members of society to examine themselves for reasons one acquires privilege and others do not. When educated in a common-space, the gaze of the clock allow each student to measure her or his progress against the norm, and race to gain privilege in society. For these structures to have full power in society, however, classroom instruction has to align with society expectations for the subject. The next section examines the role of curriculum in America's race to educate.

### **"Special" Education: Individualizing the "Slow Learner"**

In April 1965, Washington D.C., Superintendent Carl F. Hansen listened to a panel of 'experts' barrage his school policy at the third annual conference of the National Committee for the Support of the Public Schools. Grant (1965, Apr. 28) writes that one



attack came from Princeton professor of anthropology and sociology, Melvin Tumin, who criticized Hansen's tracking system as a "horrendous compromise" that ensures "slow children remain slow." (p. C2).

According to Tumin, ability tracks reinforce the labels placed on students and act to reinforce a system in which "slow children remain slow or are

*A child who in 1940 was thought of as being intellectually slow and was virtually driven from school by the teacher's ridicule would by the end of the 1960s be seen as learning disabled and deserving of not only compassion and understanding but special education (Franklin, 1994, p. 2).*

made even slower" (ibid). Tumin's suggestion was that schools adopt a system of random groupings assigned to ungraded programs, but Hansen did not take the bait.

Hansen dismissed Tumin's proposal as "idealistic" and said it would create a school where all students were treated as jellybeans – supposedly connoting that all children would assume a universal shape and flavor (Grant, 1965, Apr. 28, p. C2). In his defense, the Superintendent argued that homogeneous groupings reduce the range of differences within each class, and allow teachers to deliver individualized instruction (ibid). For Hansen, segregated classes meant a faster pace for education.

However, at a time when society criticized the tracking system for its discriminatory qualities, school officials like Carl F. Hansen had to look for alternative ways of keeping students 'on track'. Bombarded with complaint of misplacement and mistreatment of students in the Washington D.C. four-track system, Hansen's program came under attack.<sup>112</sup> When students were assessed, school 'experts' found that only 441 of the students previously identified as 'slow learners' scored the intelligence quotient

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<sup>112</sup> Hansen did work to address parents' concerns. The Superintendent allowed parents to "veto" the placement of their child – if they were aware of it – and he ordered the reevaluation of 1,273 children who had been placed in basic classes without prior testing.

required for placement in the basic track (Grant, 1965, Dec. 8, p. A1). The system seemed broken, but if society demanded schools where all children were labeled above average, Hansen seemed happy to comply, but only on his terms.

Adamant that he would not disband the tracking system in either the high school or the elementary school, Hansen conformed to the demands of his community by employing a discursive bait-and-switch. If parents wanted to move their children to more privileged classes, the school would accommodate their request, but any child who entered classes for students identified as 'normal' would be required to 'speed up' to show they were as fast as other privileged students. Everyone was welcome to race; they just needed the proper training.

This new system encouraged the school to increase the pace of education, but it would not work without modifications to the existing curriculum. For Hansen, this meant education officials needed ways to treat students who performed poorly in school, but were cognitively able to keep up with 'normal' kids (Grant, 1965, Dec. 8, p. A1). Thus began a search, "to find stimulating instructional techniques, use of new audio-visual materials and experimentation by teachers to find out how to do this job" (ibid). It was a declaration of a differing approach for treating the 'slow learner' subject – special education.

Superintendent Hansen, however, was not announcing anything in 1965 that was new to the discourse. By the 1930s, the notion that students identified as 'slow learners' needed a special education was being broadcast throughout America. Ingram (1935), for example, argues that the rate of learning should dictate the amount of "special adaptations" needed in one's education. Similarly, a 1936 article in the *New York Times*

announces the City's Board of Education's plan for a project to "determine levels of intelligence, with the object of devising teaching methods to suit each one" (*NY Times*, 1936, Feb. 3, p. 8). In 1949, Marke argues that teachers who consider one's mental ability "can plan education and vocational guidance" (1949, May 4, p. B7; see also Freeman, 1950, May 19, p. 30). Dutton (1964) scolds educators for believing an "increased dosage of the same medicine" would "cure" 'slow learners' of their "ills" (p. 266). With warnings that 'slow learners' educated in "ordinary classrooms" would "fumble and fall;" eventually becoming "drop-outs" (Ilg & Ames 1964, Sep. 10, p. 46), schools had to find a way to keep these students on track.

Quoting Hyrum Loutensock, superintendent of the Lynwood Unified School District in California, Lane writes, "Today, our evaluations tend to identify the problems that cause a learning handicap – whether it's something sociological, like culture, or physical, like a hearing problem – and we can develop a specific program to overcome the problem" (Lane, 1977, Oct. 13, p. SE1). Thus, the 'expert's' job is to find the best methods for ensuring students labeled 'slow learners' make progress at the fastest, most consistent, rate possible, but do so in a way that does not interfere with the 'progress' of students identified as 'faster learners'. Special education classes serve this dual function in American schools. When learning knowledge and skills required for all citizens, education in common-space classrooms provides time for public examination so the subject can judge her or his position against the norm and make adjustments to conform. Yet, special education also allows education officials to "pull" students identified as 'slow learners' out of the classroom when the curriculum is suited to privileged students

– according to the narrative, these “educationally deprived” children would receive remedial training to supplement lessons they *should* have received at home.

The plan that Washington, D.C., School Superintendent Carl F. Hansen announced in 1965 followed this script. The 823 students who were “wrongly placed in the basic track for slow learners” would have access to classes for ‘normal students’; however, before they could join their peers, these children were placed in classes “where they will receive remedial assistance until such time that they can be fitted into the regular school program” (Grant, 1965, Dec. 8, p. A1). Hansen assured parents that the special classes would “stimulate the children to learn and to catch up with others in their age group” (Carper, 1965, Dec. 10, p. B1). Yet, if the students did not meet special education goals set for them, they would remain in the special classes indefinitely.

By 1975, the power of this narrative led one ‘expert’ to state, “special education therapy is the most reliable treatment for the 10% of American schoolchildren with learning problems” (Andelman, 1975, May 11, p. E21). Policy statements such as the 1983 *Nation at Risk* report reinforced the narrative. In the preface to the recommendations section, the report reads,

The most gifted students, for example, may need a curriculum enriched and accelerated beyond even the needs of other students of high ability. Similarly, educationally disadvantaged students may require special curriculum materials, smaller classes, or individual tutoring to help them master the material presented (National Commission on Excellence in Education, 1983).

According to the narrative, special education keeps students on track, but the question of its ends are still a matter of debate.

### **Focus on Teaching: The Gaze on Educators**

For some authors, the answer for keeping 'slow learners' 'on-pace' is found in the teachers who educate the subject (e.g., Carper, 1965, Dec. 10, p. B1). And the power found in teachers' pleasure in seeing their students achieve at 'faster' rates is a force that drives the race to educate.

In 1938, a *New York Times* article cited Dr. Theodore Huebener, assistant director of the foreign language department at New York Public Schools who argues that student success depends on teachers' "resourcefulness and human sympathy" (*NY Times*, 1938, Feb. 19, p. 17). The article states, "If a teacher considers her class a 'bunch of dumb-bells,' it is not likely that the slow children will advance very far" (*ibid*). According to Dr. Huebener, the teacher who accepts students identified as 'slow learners' as "a challenge to her own teaching ability" and attempts to "enrich their lives" will find success in her lessons. Similarly, Holloway (1956) comments, "The slow learner needs a special teacher with special materials and teaching methods. Someone who can give him the special help he needs" (p. 129 see also Handy, 1956, Apr. 20, p. 5; *LA Times*, 1956, Oct. 4, p. C13). Dawson (1961) reminds readers of the teacher's power to "awaken" the "latent intellectual powers" of the 'slow learner' so this "untapped reservoir of strength" can be used "for the good of the individual and for society" (p. 465). The author states, "The good teacher attempts to impel every one of his students, regardless of the individual's inherent abilities, to move another step forward" (*ibid*). For many, the student labeled a 'slow learner' could never hope to match the achievements of

classmates who were “intellectually superior,” but an “understanding teacher” could help them learn ‘faster’ nonetheless.<sup>113</sup>

The media ensures Americans that “if a child comes from a home where education is valued and is taught by a teacher who is dedicated, his chances of learning are high” (Stone, 1972, Feb. 15, p. A19). For some, the most important components of student success are “teachers who are ‘dedicated’ to their jobs and have a ‘firm belief’ in success” (Washington Post, 1956, Sep. 7, p. 35). This of course implies that students who do not learn at fast rates either have neglectful parents or apathetic teachers; a fast-paced education could accommodate neither (see Eldred, 1937, Nov. 14, p. D14; Teacher, 1939, Aug. 20, p. B45; Turpin, 1963, Dec. 8, p. N15; Keyes, 1965; Rich, 1967, May 11, p. D11). The gaze of the race in education is focused on teachers, just as much as it is on students, and teachers’ efficiency in educating children is a measure growing in power during the twentieth century.

To ensure society had the right conductors for students’ journey through school, some promote giving support to those who are supposed to care. For example, Stone (1972, Feb. 15, p. A19) makes an appeal to schools to “ensur[e] teacher dedication by recognizing the importance of the classroom teacher” (ibid). In addition, parents and teachers who felt they lacked ability to care did not have to look far for help. In 1972, the *Los Angeles Times* featured a story about workshops by Lawrence Savercool, an

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<sup>113</sup> Americans are assured that “the slow learner can learn reading, computation and the other fundamentals if taught at his level and his speed with suitable materials by the teacher trained to teach slow learners” (Holloway, 1956, p. 133; see also Senate Committee on Labor and Public Welfare, 1957, Apr. 4; House Committee on Education and Labor, 1959, Oct. 28, 29). Lammers (1967) writes, “If met on a proper basis and treated in an understanding way, they will respond;” for some the education of ‘slow learners’ was most successful when teachers convinced them of their “sincerity, understanding, and desire to help” (p. 298; see also Southworth, 1966, p. 328). Like a lion-tamer approaching a wild animal, the teacher had to win trust first.

instructor in special education at Chapman College, who promised parents and teachers the answer to “how to live with your child and like him” (*LA Times*, 1972, Jun. 14, p 13). The workshops would give “usable techniques” for how to deal with these children at home and in the classroom.

Robey & Cody (1966) voice concern about problems locating teachers who are willing to take on the ‘challenge’ of teaching students identified as ‘slow learners’. They state,

A crucial consideration in an effective program for low-academic students seems one of locating a teacher willing and competent to establish efficient personal relationships with students along with knowledge of subject matter. Here, perhaps more than in any other curricular area, the ability of the teacher in human relations appears to be a vital factor in pupil success (p. 42).

If empathy training did not work to convince some teachers to volunteer for classes with students identified as ‘slow learners’, authors like Dawson (1961) reminded educators of the stakes. According to the author, “one cannot win a race unless one enters it, and there is deep satisfaction to be gained by seeing some ‘hopeless case’ come alive and begin to move ahead” (p. 465). America is in a race to educate, and all members of society, especially teachers, have to ensure that all students ‘progress’ at the prescribed rate.

For those still not convinced, team teaching was sure to provide the emotional strength needed for managing these children. Marusek (1979) writes, “Two or more adults who enjoy working together make the process of teaching slow classes more enjoyable and satisfying; so much so that they volunteer for these classes year after year” (p. 520). With the right bodies in the classroom society would surely see progress. With this narrative reinforced with the pleasure of success in meeting education goals, teachers, like track athletes, look to push their pace even faster.

## **Pedagogy of Pathology: 'Special' Lessons for the 'Slow Learner' Subject**

If the presence of emotionally supportive teachers and competent parents did not keep 'slow learning' students racing in their education, then state of the art pedagogy would. In this line of thinking, students need "educational therapy" that will "build on the learning strengths while strengthening – or compensating for – the area of learning weakness" (Andelman, 1975, May 11, p. E21). If students come to school "uncultured" and "unprepared" for academic learning, society will find a way to teach these children with alternative methods. Thus, the technologies of power employed in classrooms ensure students engage in self-examination throughout their education. Furthermore, differentiated lessons foster a gaze amongst peers to determine why differing students are assigned different lessons.

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In 1937, a writer for the *New York Times* commented on the "nation-wide attempt to revise the high school curriculum to meet the needs of the great masses of unselected pupils" (Block, 1937, Jun. 6, p. 48). In the midst of economic depression, unemployed Americans searched for work in population centers, and school districts designed curricula especially tailored for the students who moved into their jurisdiction - especially those students labeled with intelligence quotients of 75 to 90 (ibid). 'Experts' like Dr. Theodore Huebener recommended that schools "adapt the curriculum to suit their classes" and with the backing of authoritative voices, teachers were inspired to change how they taught (*NY Times*, 1938, Feb. 19, p. 17).



For the New York Board of Education, and many other Americans, individualized education for students identified as ‘slow learners’ meant that high school pupils labeled ‘slow’ needed a “program of maximum value to the non-academic-mind” (NY Times, 1949, Jan. 26, p. 27). Curricula designed for the ‘slow learner’ subject involve “a method of teaching which in a step-by-step fashion works out difficulties in the material so that the blocks to learning are minimized” (NY Times, 1963, Oct. 29, p. 18; see also Golden, 1962, p. 419). In the race to educate, individualized lessons guide students to the fastest learning of which they were capable.

*There are few really slow learners...They are just slow in learning what we're trying to teach them. They may learn the wrong things all too fast. We must find how to make learning in schools a part of their way of life (LA Times, 1963, Nov. 10, p. H3 quoting Dr. Harry Rivlin, dean of teacher education, City University of New York)*

The characterization of the ‘slow learner’ subject as having unstable trajectories comes through in several articles that promote teaching methods for these students. Cautious of these individuals making unpredictable progress, Robey & Cody (1966) for instance, urge readers to give more attention to the development of curricula for “low-academic students” (p. 42). For them, an ideal curriculum would “place

W.J. Henrici, aged 30, a private in Company F. Fourteenth U.S. infantry, committed suicide by shooting himself through the head in a room at the Wabash Hotel, 204 Madison street, early yesterday... The note to his father implied that his act was due to difficulty in learning the Army regulations and drill... The latter note follows: I am so slow learning that I am going to leave the army. I have got nothing to fight for, anyway” (Oregonian 1917, June, 21, p. 12).

central emphasis on his slower and more erratic development in study skills was well as achievement” (p. 42). Students identified as ‘slow learners’ needed lessons that would show them how to produce predictable results.<sup>114</sup>

By the end of the century, this narrative produced a flurry of curriculum innovations that encourage teachers to use graphic organizers and structured planners to accommodate “the slow learner’s need for structure, organization, and clear format” (Luhman, 1992, p. 53).<sup>115</sup> If students labeled ‘slow’ were to make progress, teachers would need to monitor their trajectory at every point, and make sure they moved slowly in the ‘right’ direction.<sup>116</sup>

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<sup>114</sup> The incorporation of musical training, is another example, of lessons targeted towards the ‘needs’ of individuals labeled ‘slow learners’. These lessons encourage “orderly thinking...mental alertness, good memory, accuracy and adherence to purpose” (*LA Times*, 1961, Nov. 5, p. T5; see also Newacheck, 1953, p. 50).

<sup>115</sup> In 1933, Eunice Barnard reported on the work of University of Michigan Professor Raleigh Schorling. Schorling taught 414 ‘slow pupils’ the mechanics of reading with work aimed at students’ experiences. Schorling’s methods employed “visual aids, graphs, diagrams and models” and the researcher claimed that this pedagogy improved reading skills for these students at a rate faster than that of ‘average pupils’ (Barnard, 1933, May 7, p. E8).

<sup>116</sup> According to some, the key to keeping students on the right track was discipline. Military institutions such as the Marine Corps Recruit Depot at Parris Island, South Carolina advertised their system of drill instruction as the best way to make “men out of boys” (Orr, 1957, Mar. 25, p. 18). According to one reporter who wrote about Parris Island, the success of the program rested on a controversial level of “firmness and discipline” (ibid) – a level of discipline that allowed a drill instructor to march his platoon of recruits into a tidal swamp at night, resulting in the drowning of six men (Dumbell, 1964, Mar. 31, p. A6). Orr writes that military schooling at Parris Island used a technique “making slow learning more painful than quick learning” (Orr, 1957, Mar. 25, p. 18), and according to Cpl. Clyde Cottrell, “You’ve got to instill discipline, and to do that you got to keep ‘em in a state of shock” (Dumbell, 1964, Mar. 31, p. A6). That shock, according to the Corporal, was intended to train recruits to complete tasks at the fastest rates possible; it was also intended to help drill instructors identify recruits who required “special treatment.” Instructors reserved “special treatment” for recruits who “refused to buckle under to their sergeant, but usually because of emotional or psychological problems manifested in their refusal to conform” (Dumbell, 1964, Mar. 31, p. A6). One can find this system of discipline in American public schools. For example, in 1959, the *Washington Post* published a profile of James N. Hughes, a teacher at Montgomery County’s Poolesville Elementary School after a 20-year career in the Navy. Hughes taught students aged nine to fourteen, “some of whom couldn’t spell their names or count to 30” (Davenport, 1959, Jun. 16, p. B1). Citing his previous job as a chief boatswain’s mate “who spent much of his time training the Navy’s misfits,” Davenport celebrates Hughes ability to help the student begin “writing stories, solving arithmetic problems, talking a blue streak and learning to do work which will assure them future employment” (ibid). According to some, military discipline could treat the ‘slowest students’, and just as what happened at Parris Island, students in grade schools today who do not conform to discipline codes are labeled with emotional or psychological problems.

For many, the key to ensuring a ‘fast-paced’ education for students is engaging their interests – finding what gives them pleasure, and many reports circulate on the effect these types of lessons have on ‘slow learning’ (e.g., Sierles, 1962; Slade, 1980, May 6, p. C4). In 1938, the *New York Times* reported, “Through the use of a modified curriculum slow pupils were able to ‘acquire with enjoyment’ elements of French, German, Spanish, and Italian” (*NY Times*, 1938, Feb. 19, p. 17). Citing Dr. Theodore Huebener, assistant director of the foreign language department in New York Public Schools, the article states how teachers who used lesson plans involving “games, dramatics, humorous plays and informal class discussions...were able to work ‘wonders’ with the slow children” (*NY Times*, 1938, Feb. 19, p. 17). Similarly, Zamchick (1958) argues that students read “because they are interested,” and because the materials they read “has meaning to them” (p. 43). Keyes (1965) writes, “Nobody does well in anything he doesn't like, and yet we seem to feel children are learning only when they're serious and not too happy with what they're doing” (p. 81). If students have difficulty developing their writing, finding interesting writing topics is key. Dawson (1961) writes about one teacher's discovery of a student's love for music; “When an essay was to be written, he was allowed to write it on some topic relating to music” (p. 467). The student supposedly completed work on an assignment that would have otherwise remained unfinished.

For students who had difficulty progressing in their fluency of reading standard English texts, some authors, like the teacher in Dawson's article, were willing to compromise on content to achieve ‘forward movement’ in a student's abilities. One *Washington Post* article suggests “attuning” reading selections with students' interests will “rais[e] the child's reading and speech levels” (*Washington Post*, 1956, Sep. 7, p. 35;

see also Lammers, 1967, p. 298). Stahlecker (1962) articulates the importance of finding interesting texts as a factor of motivation for students with 'low' reading abilities (see also Daltry, 1968, May 2, p. B1). The author writes, "The twelve year old who is introduced to formal reading experiences does not particularly care what happens to Alice and her doll; he prefers space travel, or baseball, or real people in his everyday life" (p. 80). Though the author communicates a certain narrative about boys' interests, for many it would be hard to argue against this line of reasoning.

For Zamchick (1958), the "treatment" of reading interesting books allowed teachers to "reach" their students; and "when they are reached and touched beyond their walls of resistance, they read more-hundreds of books more" (p. 43) – they must have taken the speed-reading class as well. According to Morgan (1965, May 13), teachers who had 'slow learners' engage with readings "which seem to relate to their own lives" were able to entice these students to learn about topics traditionally reserved for "honor students" (p. A1). According to this author, students identified as 'slow learners' were able to study Shakespeare and Greek tragedies, and "some are reading paperbacks at home" because their teacher modified the lessons in such a way (see also Foster, 1960). Perhaps all that is needed is a 'sympathetic teacher' who can relate to the students and tailor lessons to their experiences; those of us who race to educate at least have to try.

However, for many Americans, the time required for forming relationships with children, learning their interests, and tailoring curricula to their abilities is too long to wait – some demand faster results. Thus, while some authors communicate a 'child-centered' treatment for 'slow learning', others look for more utilitarian prescriptions.

In 1961, one irate parent wrote to the *Los Angeles Times* to defend such a treatment. Writing that her son had been labeled as a ‘slow learner’ when the family moved to a new school district, the author told of a tutor who “covered phonics from the sound of ‘a’ to spelling words by sound alone” (Sylvester, 1961, Apr. 29, p. B4). The mother reported that her son was brought up to reading books “on his grade level” in “approximately six month of three hours a week,” and as a result the tutor told her that he was not a “slow learner.” Commenting on a recent article by Dr. Edward Fry who criticized phonics for “taking the life out of reading,” the mother retorted, “Who cares! We parents don’t care if our children enjoy reading or not. That they can read is our main interest. Eventually they will enjoy it” (ibid). Children’s interests were of no concern, some in society just wanted to see results – the education race has no time for pleasure reading anyway.

In closing her letter to the *Los Angeles Times*, Sylvester (1961, Apr. 29) writes, “It’s really a shame that the educators won’t listen to the parents a little. I’m sure if they did, our children and our schools would benefit” (p. B4). For some, the specialized training of teachers was not enough to warrant their positions as ‘experts’ in the education of children, for that task parents were just as qualified. Thus, if school districts wanted to see the ‘fastest’ results for their students, they would have to import solutions, like phonics programs, from ‘real experts’ (see also *LA Times*, 1969, Jun. 13, p. OC\_C16).

One such program was DISTAR – Direct Instruction System for Teaching Reading – a program published by the Science Research Association in 1967 (Ogletree & Dipaselegne, 1975, p. 633). DISTAR designed instruction on two questions, “1) What do

children need to learn? And 2) How can it be taught most effectively?" (ibid). Working under the premise that the right instructional program would 'fix' any child, regardless of individual differences, the DISTAR program promoted using "materials and methods" that "are the same for all children" (ibid). For some, having 'expert' teachers lead students in their learning is not even necessary, schools just need to hire bodies who could be trained to deliver the scripted programming. Scripted programs are thus one step closer to ensuring the most efficient lessons in the race to educate, and they are supplied with pacing guides that allow teachers and students to monitor the pace of their education.

The publishing industry also tries to shape this discourse by offering curriculum packages that offer not only textbooks, but also guides and lesson plans for teachers. With the stated goal of raising scores on standardized tests, Washington's associate school superintendent, James T. Guines, announced in 1972 a "competitive partnership program" with textbook publishers that would provide the city with "a reading program including texts and availability of consultants for teachers" (Barnes, 1974, May 27, p. C1). To test competing bids for the lucrative contract, the school district arranged a three-year quasi-experiment in which each of the programs would be used in various classrooms and students' progress would be measured by testing them at the beginning and end of each school year. Millions of dollars were at stake for the company that could prove their materials would ensure the 'fastest' results.

The power of the education race focuses on the bodies of students and their teachers. Through technologies that supply pleasure to those who conform to scripted narratives and through dividing practices that ensure differing curricula for students of

differing privilege, the race to educate searches for the most efficient methods for increasing the speed of learning. The discourse gains strength during the second half of the twentieth century when scripted curricula that paced instruction seize the power of time away from teachers; yet, the power of scripted curricula does not compare to that of teaching machines that enter the classroom. The next section of this chapter looks at the role of teaching technologies in the race to educate.

### **Teaching Machines: The Gaze of Technology in the Classroom**

In 1969, Robert N. Kratz praised the planetarium as a pedagogic technology. The planetarium was ideal because “time could be adjusted to the need of the teacher” (Kratz, 1969, p. 349). Students could observe an entire day in three minutes; a month of moon phases could be recorded in just a few minutes; the entire history of the galaxy could unfold in one 45-minute period (ibid). Planetariums provide interesting content, a scripted curriculum, and ‘fast learning’. For many, the planetarium was efficient education at its maxim.

Throughout the twentieth century, powerful voices linked the growing influence of machines in daily life to ‘progress’ in human history. Politicians like John F. Kennedy argued repeatedly that students needed education in science to keep American “civilization” moving forward, and a ‘fast’ education was required for keeping the nation secure (Kennedy, 1960, Oct. 21). Furthermore, machines may be programmed on a pre-set time schedule to regulate the pace of learning and the chaotic pace of human activity does not interfere with the trajectory of the lessons. Thus, according to some experts, the best

way of ensuring 'progress' in schools, is the inclusion of state-of-the-art technologies into the curriculum (e.g., *Boston Globe*, 1966, May 16, p. 43).

This vision was enacted with President Johnson's signature of Title III, Sec. 303(b)(8) of the 1965 Elementary & Secondary Education Act. The law appropriated Federal funds for,

Providing special educational and related services for person who are in or from rural areas or who are of have been otherwise isolated from normal educational opportunities, including, where appropriate, the provision of mobile educational services and equipment, special home study courses, radio, television, and related forms of instruction, and visiting teachers' programs (PL 89-10, 1965, Apr. 11, p. 41)

The American government would fund whatever technological gadget was available if it had any potential in speeding up the pace of learning.

In the twentieth century, while calculators were certainly touted as an aid for students labeled 'slow learners' of mathematics, the discourse promoted tools that stimulate the senses. Thus, audio-visual devices come to symbolized a 'tech-ready classroom', and many people see 'multi-media' education as the best way for ensuring 'progress' in American schools. However, while the media champions each successive invention as 'progress' over the prior ones, few Americans ever question the direction these technologies take us.

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Perhaps the first mass-media technology associated with American education is the telegraph. In 1871, in his third annual message to Congress, Ulysses S. Grant states, "Education, the groundwork of republican institutions, is encouraged by increasing the facilities to gather speedy news from all parts of the country. The desire to reap the benefit of such improvements will stimulate education" (Grant, 1871, Dec. 4). Schools



across the country would receive common news from a common source, and this common curriculum would perhaps produce a common discourse in a fractured nation. If nothing else, this constantly flowing source of information would ensure a common pace for education, and the faster news came to schools, the faster the lessons would be taught.

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Telegraph wires could deliver a curriculum, but teachers were still required to deliver the lessons, and that took time. If a ‘teacher-proof’ *scripted* curriculum was the answer to keeping students ‘on track’, then nothing could be better than a scripted movie. The experts who conducted the Speyer School experiment in New York City found that films were one way to keep ‘slow learning’ students ‘engaged’ in the classroom – at least they would stay ‘sitting’ in the classroom – and their conclusion was just one statement in a chorus of support for this teaching method.

Years before the Speyer School experiment, however, politicians and the media were already promoting movies as a public resource. In 1923, Calvin Coolidge actually called for a tax moratorium on “moving pictures” because of their “amusement and educational value” (Coolidge, 1923, Dec. 6). In a 1932 *New York Times* article titled, “The talkie proves a superior teacher,” Bess Goodykoontz proclaims, “The sound film appears to be a particularly effective method of instruction for backward children” (1932, Jan. 17 p. E7). For those who looked simply to pacify the ‘slow learner’ threat, movies provide a near-perfect solution.<sup>118</sup>

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<sup>117</sup> Remember also that telegraph service was the earliest method for transmitting a common time.

<sup>118</sup> If teachers could not push students to learn ‘fast enough’, then the ‘technology of the future’ would pull these children in the direction of ‘progress.’ Citing a study by Britain’s National Union of Teachers of 3,600 children between the ages of eight and sixteen, Goodykoontz suggests that films stimulated students’ “powers of concentration” and that “sound films might narrow the gap between the two groups in learning ability and progress in school” (ibid). Manchel (1964) argues that his English program that “stressed the *Note continued on next page.*”

When televisions become available to the public, this media became a focus of authors who thought it too would solve difficulties with educating students labeled as 'slow'. In an article on the "electronic-equipped 'school of tomorrow'" presented at the 1958 annual meeting of the National School Boards Association, Buder (1958, Apr. 20) reports on the presentation made by John L. Burns, president of the Radio Corporation of America (RCA). Touting the educational applicability of RCA's newest technology such as televisions, "magnetic tapes carrying pictures and sound" (i.e., cassette tapes), and pupil-teacher "intercoms," Burns announced his company's appropriation of \$100,000 for a workshop at New York University that would "develop and disseminate effective television teaching techniques" (Buder, 1958, Apr. 20, p. 63). \$100,000 was a sizable investment in 1958, but companies like RCA knew that the solidification of a discourse in which technology was required for 'effective teaching' would bring them millions of dollars in return.

The vision for education presented at that 1958 conference pictured a 'plugged-in' education culture in which teachers were just operators on a switchboard. In John Burns words,

On the teacher's desk the traditional bright red apple will have been replaced by a multiple-control pane and magnetic tape players. The tape machines will run three recorded lessons especially geared to the level of the students, ranging from the slow learners to those who are highly advanced. Each pupil will follow the lesson with headphones....When the pupil has a question he will be able to talk to the teacher directly on his 'intercom' without disturbing the rest of the class. In this way the teacher will actually be able to conduct as many as three classes at the same time...Lining the sides of this classroom of tomorrow will be soundproof, air-conditioned private study booths for individual recitation and research. Simply by clicking a switch the teacher will be able to listen in on a pupil's recitation and offer helpful suggestions (Buder, 1958, Apr. 20, p. 63)

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importance of motion pictures" was an effective method for dealing with students' "many reading and writing difficulties" (p. 206). The author offers a bandwagon appeal by stating that "twenty members" of the English department at New Rochelle High School had endorsed his program (ibid). If it was good for them, it must be good for other teachers as well.

In a vision that sounds similar to the rhetoric surrounding tablet computers at the beginning of the twenty-first century, Burns describes the future library as one in which a student “will simply consult his ‘television directory’ and dial a number and, instantly, a microfilm edition of the book will appear on the television” (Buder, 1958, Apr. 20, p. 63). ‘Fast’ education would be segregated, impersonal, and scripted; captivated students would have no choice but to absorb the lessons of some ‘expert’ curriculum producer. Just like prisoners in Bentham’s Panopticon, students would monitor their behaviors under the watch of an invisible gaze, while authorities supervised their ‘progress’.<sup>119</sup>

If authorities could not use television as a total replacement for teachers, perhaps the technology could supplement the instruction provided in school, and furthermore, this technology could supplement the inadequate parenting of over-worked mothers and fathers. On May 1, 1962, President Kennedy signed the Educational Television Facilities Act, which gave the first major federal aid to the public broadcasting infrastructure. The Department of Health, Education and Welfare supervised grants for the construction of educational television broadcasting facilities across the country (Public Broadcasting Policy Base, 2000, Jan. 6). If children did not learn enough at school, they could tune in at home.

In 1967, President Lyndon Johnson announced his plan to build on that infrastructure. In his State of the Union Address, the President states, “We should

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<sup>119</sup> At the same time RCA’s president was promoting his “classroom of tomorrow,” Hagerstown, Maryland was engaged in an experiment to test the effectiveness of television technology. Known as the Washington Country Closed-Circuit Educational Television Project, 37 schools with 16,500 students in grades one through twelve took part in a curriculum that used television instruction for teaching mathematics, language arts, science, social studies, music, art, “remedial reading for retarded pupils” and “advanced college math for outstanding students” (Knoll, 1959, Jun 14, p. B1). For three years, students learned their lessons by watching television – the innovation did not gain the acceptance that some had hoped for.

develop educational television into a vital public resource to enrich our homes, educate our families, and to provide assistance in our classrooms” (Johnson, 1967, Jan. 10). For Johnson, public television served a public interest, and government sponsored programming would keep students focused on their academic ‘progress’. By 1969, Congress looked to establish a National Center for Educational Media and Materials for the Handicapped (Senate Committee on Labor and Public Welfare, 1969, Apr. 21) – if television was the fastest way for students identified as ‘slow’ to learn, then the government would control the content.

Another technology some writers promoted as a means for improving ‘slow-learning’ was the typewriter. In the early decades of the twentieth-century, as efficiency discourse gained power in American schools, the pace at which students write becomes a concern of some officials and some recognized this variable as a sign of intelligence. J. Freeman Guy (1924), for example, describes an eleven-year-old boy who, “wrote at the rate of 70 words per minute, which is equivalent to the median ability of the sixth-year pupils” (p. 106). Guy notes that in a sample of Pittsburgh schoolchildren, “pupils varied in rate from 10 to 156 letters per minute” (p. 101). In the race to educate, every letter counts, those who write the fastest gain the most privilege. Thus, society looked for ways to speed-up the pace of writing, and the answer came in the form of a machine.

Writing from Michigan, a columnist in 1942 offers advice to mothers of children labeled ‘slow’ and “little dreamers” ((Mrs.) V.P, 1942, Jan. 31, p. 12). Recounting her own ‘success’ with a daughter, who “was rated ‘slow’ for some time,” the columnist reports how lessons in typewriting and shorthand, aided her in “learning to think and act more quickly” (ibid). The author was happy to report that after a brief occupation in a

candy factory, her daughter was now a homemaker who was “most efficient” (ibid). For some in 1942, a fast education translated into fast skills on the factory floor, and abilities to handle the fast pace of family life.

Twenty-years later, these skills were a full part of many Americans’ conceptions of “academic skills.” In 1962, researchers at Ohio State University published a study concluding “a direct relationship between typewriting and improved academic performance for elementary school children” (*Christian Science Monitor*, 1962, Feb. 24, p. 5). Despite the fact that the study was supervised by Dr. John C. Tootle, “who had the co-operation of the Remington Portable Typewriter Division of the Sperry Rand Corporation,” the media was willing to ignore this conflict of interest and report the ‘fact’ of this technology’s ‘progress’. According to the *Christian Science Monitor*, the use of a typewriter motivated students “in every activity and contributed substantially to their achievement in a number of subject areas” (ibid). Nothing is more fun than typing essays.

The technology’s benefits for students identified as ‘slow learners’ is the focus of much attention. Citing one teacher who saw the benefits of typing, the *Christian Science Monitor* reports that a boy who could only write two or three sentences at the beginning of the year, was able to write six or eight sentences by the end of the year – without that typewriter, the teacher apparently would never have been able to extend a student’s writing by three sentences during the ten months of school.

The supposed instructional speed of the typewriter was one benefit, but an added bonus was the technology’s ability to hide students of differing abilities. The student identified as a ‘slow learner’ may write twelve pages less than the student identified as a

‘fast learner’, but “his work looked as good as anyone else’s, and this did something for him” (*Christian Science Monitor*, 1962, Feb. 24, p. 5). When it comes to typed reports, size apparently, did not matter, for the machine could hide dividing practices that threatened its hold on bodies.

If typing was the key to student success, and television could keep students’ interested, then imagine the possibilities when experts found a way to connect a television screen to the typewriter. The advent of electronics presented, for some, what seemed to be a revolution in education; next to public schooling, the written word, and printing, the computer was a sign of ‘progress’ in teaching and learning (Jenkins, 1978, Apr. 30, p. EDUC13).

For many, the revolution seemed quick and within a decade of its introduction, the “teaching machine” was promoted as a piece of equipment every school should buy (Turpin, 1961, Nov. 19, p. E3). For those who promoted them, computers represent a cheap solution to the ‘problems’ found in public education. For James H. Scheuer, Representative for Brooklyn and Queen and head of a House subcommittee that held hearings in 1977 on computer-based education, “The problem is large, the promise is high, and the price is low” (Jenkins, 1978, Apr. 30, p. EDUC 13). Classroom drills assisted by computer instruction would help students identified as ‘slow learners’ acquire “basic skills,” and bring “improvement in student motivation” (House Committee on Science, Space, and Technology, 1977, Oct. 4 et al.) – officials could not find a more efficient remedy for their education ‘problems’.

The ‘teaching machine’ was an extension of the television ‘classroom of the future’ described by RCA in 1958 (see Buder, 1958, Apr. 20, p. 63), but the power of the

panoptic gaze grew as autonomous machines became better able to mimic the surveillance of a carefully watching teacher. Reporting on the 1961 meeting of the American Management Association, Dick Turpin, writing in the *Los Angeles Times* explains,

The material may be presented in plain or fancy 'machine' or in special constructed books. The simplest is a box-like affair with a small window near the top which reveals the questions for the student....In one machine, the work sheet tears if the pupil pushes the paper to get a peek at the answer (Turpin, 1961, Nov. 19, p. E3).

According to the Carnegie Corporation, these 'teaching machines' practiced methods comparable "to a conversation between a good teacher and a student" (ibid) – apparently 'good teaching' was having students work in isolation to fill out standardized worksheets under the threat of having their work destroyed.

If in 1961 the 'teaching machine' was presented as too robotic and too tyrannical, by 1967, those who supported the technology had given it a new name – computer<sup>120</sup> – and the technology was presented as an equitable replacement for the empathetic teacher. Quoted in a *Los Angeles Times* article, Dr. Patrick Suppes of Stanford University describes his vision for computers in the classroom: "Each first grader sits in front of a television tube with a typewriter keyboard at his fingertips...He wears earphones, and there is a screen to his left that shows color slides" (Havemann, 1967, Dec. 12, p. F6). According to Dr. Suppes, as students worked through their math assignments, the computer would reward their correct answers with a "smiling face" and show disapproval of wrong answers with a "frown" (ibid). Apparently, that 'smiling face' would keep the students motivated, and encourage them to keep working.

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<sup>120</sup> A term previously reserved for *people* who calculated data.

If the best teacher was caring and patient, and computers could care with their smiles, then they were the perfect teachers because they also had an abundance of the latter. Dr. Suppes, who had used his computerized education with the first graders in Palo Alto, California, reminds his audience, "Patience is the most important qualification for a teacher of slow-learning inner-city children, and computers are noted for that quality" (Havemann, 1967, Dec. 12, p. F6).

Additionally, computers were able to provide the individualized instruction that many 'experts' believed was the solution to the 'slow learner' 'problem' – the dividing practice that secures the race to educate. Some believe computerized education is better than teachers' differentiation because the technology allows "individualized instruction on a mass scale" (Turpin, 1961, Nov. 19, p. E3), and computers allow teachers the freedom to give more personalized instruction to their students (Havemann, 1967, Dec. 12, p. F6; see also Rogers, 1971, Feb. 7, p. B11). Isolating students on computers would keep 'slow learners' moving 'forward', but it would also allow 'fast-learners' to 'progress' quickly (ibid; see also Jenkins, 1978, Apr. 30, p. EDUC13). Most of all, computer programs offered pleasure that brought students and teachers back for more fast-paced education.

Quoting Ellis R. Wayne, adviser to schools on the integration of programmed learning materials within school curricula at the Teaching Materials Corporation, Turpin writes,

If we are to allow a measure of self-determination in the fast learner's ability to accelerate at his own pace, are we to put a governor on him when he returns to the group environment? Or will the slow learner, content in his unhurried pace of auto-instructional technology, again be left behind as he returns to the group pace? (Turpin, 1961, Nov. 19, p. E3)



Wayne seems fine with allowing students labeled 'slow' to continue on their "unhurried pace" as long as 'fast learning' students are allowed to "accelerate." Computers removed the 'speed bumps' that the 'slow learner' subject represents for 'fast learning'.

Reporting on a computerized education program called PLAN (Program for Learning in Accordance with Needs); John G. Rogers positions this technology as a means toward equality in the classroom. According to his *Boston Globe* report, "Since each child moves at his own speed, there's no competition to see who leads the class. No more perplexed slow children dropping behind while the bright ones are bored" (Rogers, 1971, Feb. 7, p. B11). Computers ensure that all students stay engaged in their education; no one is allowed to drop-out with the excuse of teachers not monitoring their needs.

Computers also allow school officials to keep surveillance on their students' trajectories. In a "computer-managed" school, officials can "monitor each [student]'s progress individually;" the software would allow educators to identify students' "problems, and determine what each should do to reach learning targets determined beforehand by the district's teachers" (Jenkins, 1978, Apr. 30, p. EDUC13). According to Dr. Lloyd Eldredge, principal of Robert Frost Elementary in Salt Lake City, the computerized education offered by PLAN was the only way to fix the 'problem' that "haunted" his school – the 'problem' of course being 'slow learners' (ibid).

For those Americans who wished to sidestep teachers and rely on 'experts' to create curricula for students identified as 'slow learners', computers offered another advantage. Computers offer standardized lessons that 'experts' could administer from anywhere in the country. Rogers (1971, Feb. 7) reports that teachers using the PLAN computerized instruction at Robert Frost Elementary School "never have to mark tests or

decide which lessons the youngsters should study next. It's all done for them by a computer more than 1000 miles away" (p. B11). The prestige of the 'computer' hides the sovereign power embodied in the programmers who decide what knowledge that curriculum will contain. Additionally, the pace of education is determined by someone so far away with no reference to the time codes present in the actual learning environment.

If teachers did not jump for joy in hearing that computer programmers usurped their power to decide the curriculum, promoters of the technology had other appeals to make. The possibility of never having to grade a test again seems quite attractive, and "being free of all drudgery and record-keeping," allows educators to return to what they enjoy doing most, working with children on an "individual level" (Rogers, 1971, Feb. 7, p. B11, quoting Dorothy Wardrop, PLAN consultant at Robert Frost Elementary in Salt Lake City, Utah).<sup>121</sup>

Computers, for many, are a panacea of hope for schools struggling to keep pace in the education race and experts promised 'scientifically proven' results. Ellis R. Wayne assured reporters that companies like Teaching Materials Corporation had demonstrated that computerized instruction produced "a much faster pace" to learning "and with more motivation," but he assured skeptical readers that more 'proof' of the effect would come from experiments that came "directly from the classroom" and from "controlled

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<sup>121</sup> By isolating students in their instruction, some believe computers can solve the psychological issues brought on by segregated instruction. Harry W. Forgan (1973), for example, writes about the stigmatizing effect he witnessed when he assigned seats based on students I.Q. scores. Forgan found that when students' scores were kept secret, no individual in his class wanted to stray from the area that was assigned to 'average students' – even when every member in his class was told their IQ was 87. Education researchers since the publication of the Speyer School experiment in 1941 had communicated these types of effects when students were identified with less-privileged labels, and computers, with their anonymity, could guise every student as 'normal' while still imposing a power guised as 'progress'.

laboratory projects” (Turpin, 1961, Nov. 19, p. E3). However, schools could not wait for scientific ‘proof’ of such effects; Dick Turpin reminds his readers, “Seldom has there been so urgent a need for the unique benefits which are promised by this new technology” (ibid). Perhaps addressing readers who lacked confidence in the potential benefits of this technology, Dr. Patrick Suppes reminds us, “the first commercial computer was sold 16 years ago [1951]. There’s no telling what computers may be able to do in 16 more years [1983]” (Havemann, 1967, Dec. 12, p. F6). The discourse was clear, computers could bring students to the ‘future’ and there was no time to question their effect.

Framing the computer as a vehicle of ‘progress’ allows its advocates to confirm its importance without supporting the narrative with ‘proof’. In his article, John G. Rogers quotes two elementary school students who he questioned about the use of computers in their classrooms. When asked if they would like to go back to classrooms with no computers, the 10-year-old girl answers, “Go back? Oh, no!” The 12-year-old boy answers, “Never” (Rogers, 1971, Feb. 7, p. B11). Thus, by 1980, roughly \$70 million, or 3.5% of American elementary and high schools’ budgets were dedicated to computer-based equipment (Gallese, 1980, Sep. 8, p. 33). The major textbook publishing companies in America rushed to produce computer-based curricula for teachers, and tap into the public funds devoted to this cause. Scott Foresman of Glenview, Illinois, for example, offered a new line of computer-based programs that would help teach elementary reading and math. Each program license cost \$100, and required a Texas Instruments Inc. microcomputer programmed especially for the software (Gallese, 1980, Sep. 8, p. 33). By the end of the twentieth-century, computers provided Americans with

a level of pleasure adequate for hiding the power embedded within the technology. Furthermore, the framing of computers as the vehicle to the future, as happened with movies, television, and the typewriter, helped this technology deflect Americans' questions about the 'direction' it was taking us. However, we must not lose sight of the characterizations imposed on students who do not have access to this technology; students (and teachers) without the newest machines are often portrayed as 'backwards'. Thus, when new technologies come into our schools we must ask if they are meant for teaching strong critical thinkers, or are they meant just for teaching machines.

### **Extra Help? Expanding Time Commitments in the Race to Educate**

The discourse promotes technology as one solution for solving the 'slow learning problem', but for many, the solution also includes extra time in school. In this line of reasoning, more instructional time brings an added level of surveillance that ensures that these students make 'progress'. For many advocates of additional instructional time for students labeled as 'slow learners' the question comes down to how soon to start the child in school.

### **An Early Start in the Race to Educate**

Contrary to what one might think, some experts argued for a delay start to schooling. Frances L. Ilg and Louise Ames of the Gesell Institute, for example, published a letter from a reader who had delayed her child's start in first grade until he was 6 ½. The contributor writes, "We felt that it is due in a great part to his age

advantage that he has done very well in school. He is almost a straight A student and seems to get along with both teachers and other students (Gesell Institute, 1961, Aug. 30, p. D7). Similarly, a contributor to a 1976 *Boston Globe* advice column writes, “Our family doctor always said ‘children should be at least seven’ before entering grade school. He said ‘What is the hurry? They are not mentally or physically ready’” (Wild Lilacs, 1976, Nov. 2, p. 19). With many states’ compulsory education laws requiring children to attend grade school by age six, this author’s solution was keeping the child in kindergarten for two years. According to her, spending two years in kindergarten “relieves the child of the stigma of being ‘held back’ a grade, and looked down on by his peers” (ibid). Apparently, this author did not consider the event of staying in kindergarten while friends moved to the first grade ‘stigmatizing’.

Parents unsuccessful at playing the school system, but still wishing to delay their child’s entry into school, may have listened to advice given by Ilg and Ames (1956, Sep. 17, p. C8). Proposing an alternative strategy the ‘experts’ suggest, “You might take your son to a local psychologist for an examination to

*What’s the point of sending little ones out to school before they are out of the cradle? Do mothers really want 3 and 4-year-olds to learn or are they simply seeking a baby-sitter? Perhaps they consider tiny scholars a status symbol? (Irish Indian, 1965, Dec. 24, p. 10)*

determine whether or not he is ready for first grade...Some of the school systems will pay attention to a report from a child specialist” (Ilg & Ames, 1956, Sep. 17, p. C8). If a psychologist’s examination was not effective, the two authors suggest, “Sometimes a school system will honor a pediatrician’s statement that a child is not ready for first grade;” parents could hope that the doctor would declare the “long sessions and heavy demands” of the school day “injurious to his health” (ibid). Only with the prestige of an

expert examination from within the medical discourse could parents shield their children from the gaze of the public school<sup>122</sup>. A temporal diagnosis (e.g., ‘too immature for school’) was exchanged for a medical diagnosis (e.g., ‘too sick for school’), but examination of the child’s body remains a powerful tool for controlling one’s ‘trajectory’.

While some argue for an accelerated start for ‘fast learners’, others believe ‘slow learners’ need the earliest schooling. Citing Helen Rubin, “director of nursery schools for retarded children in Montgomery Country,” the *Washington Post* writes, “early planning and placement are more beneficial than delaying

*Slow Learner*  
You, cricket! Practicing violin in my ear,  
Tempo and rhythm off enough  
to horrify cricket professors,  
you are too near!  
Back off a bit.  
Retreat to distant grasses.  
Having flunked  
your early season classes,  
you stay behind, persistent,  
while aggressors  
that were your classmates  
all have packed and gone.  
If you stay on,  
you’ll saw my sleep to fragments.  
But I shall find you then  
and cage and feed you  
eggplant by the hearth  
where at your leisure  
(and at a distance from  
my sleepy ear)  
you may all winter  
practice for the concert  
in which you ultimately  
will appear.  
(Malody, 1971, Sept. 30, p. 6)

entrance” (*Washington Post*, 1971, Jun. 7, p. B6). According to Helen Rubin, “Retarded youngsters need pre-school much more than do the bright ones,” and parents who “put off schooling for these children” were neglecting their care (*Washington Post*, 1971, Jun. 7, p. B6).

For many, the age at which a child would enter school was dependent on factors affecting the child’s readiness. Citing the findings of three researchers at the Merrill-Palmer School in Detroit, Michigan, a *Daily Boston Globe* article reads, “Some children

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<sup>122</sup> See e.g., Grumet (1988) for more on the inequality of parents (especially mothers) versus ‘experts’ in shaping educational discourses in schools.

are perfectly capable of entering kindergarten at age 3 or 4, while others are not ready even at 5 or 6” (*Daily Boston Globe*, 1959, Sep. 20, p. B2). According to these experts, ten-percent of students attending a “middle-class school” should be “held back until ages 6 or 7,” and five to ten-percent of students were prepared for school at ages 3 or 4 (ibid). The race in education does not necessarily require early entrance as long as students are ready to learn ‘fast’ once attending school.

To help answer this question definitively (or at least with the prestige of science), many experts looked to standardized tests to determine a child’s ‘readiness’ for school. The researchers at Merrill-Palmer School in Detroit, Michigan claim that their battery of tests, “can predict for a high percentage of children their overall ‘readiness’ to fit into school” (*Daily Boston Globe*, 1959, Sep. 20, p. B2). The tests would “seek to uncover the child’s learning capacity and personality development, his ability to relate ideas to his daily life, and his ability to perform tasks” (ibid). Having a child ready to “fit in” was the most important factor in determining her readiness for school; the *Daily Boston Globe* predicted that scores on these types of tests would become gatekeepers to students’ entrance into school and a sorting device for separating students into “fast-learners, slow learners, and average-learners” (ibid).

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In 1964, the Federal Government lent its power to those who argued that ‘slow learners’ needed a head start in the education race. Enacted into law with the Economic Opportunity Act of 1964, President Lyndon Johnson launched an attack in his War on Poverty with a “child development program offering the economically disadvantaged pre-school children learning experiences and medical attention” (Belok, 1969, p. 265).

Located in cities across America, Head Start enrolled 560,000 children the first summer of its existence (1965) and within a year, it expanded to enrolling 1.3 million children in 2,400 communities (ibid, citing Brazziel, 1967, pp. 344-348). According to the Catalog of Federal Assistance Programs published in 1967, the purpose of Head Start is to, “provide appropriate social services for the family in order that the child of poverty may begin his school career on more equal terms with his more fortunate classmates” (p. 554, found in Belok, 1969, p. 265). Moreover, if the program enrolled children as young as three-years-old, as President Johnson envisioned, Head Start would “maintain its educational momentum by following through in the early years” (Johnson, 1967, Jan. 10). According to many ‘experts’, Head Start helps less-privileged individual overcome the conditions of poverty, and the program gives every American an equal chance (see also House Committee on Education and Labor, 1968, Jul. 16, 17; House Committee on Education and Labor, 1983, Oct. 6). However, individuals becomes subject to the governmentality of the discourse and the power of government assistance is hard to turn down when the gaze of society is staring at one’s family.

Statements made about equalizing opportunities for all Americans undoubtedly helped change the discourse regarding the treatment of children growing up in urban communities; however, this narrative also hid the temporal concerns that accompanied this discourse. According to Belok (1969), two concerns inspired the proliferation of pre-school enrichment programs, such as Head Start, during the 1960s. One, a belief that “the number of children and young people in whom the ability to learn is severely retarded is growing at a rapid rate;” and two, a belief that children who “lost opportunities for mental growth” would never be able to ‘recover’ (p. 263). This



narrative is found in President Johnson's 1965 message to Congress; in it he states, "Tests show that [the child from the urban or rural slum]<sup>123</sup> is usually a year behind in academic attainment by the time he reaches third grade – and up to three years behind *if* he reaches the eighth grade" (Johnson, 1965, Jan. 13, p. A10, my italics). In 1965, Title III, Sec. 303 (b-1) of the Elementary & Secondary Education Act appropriated money support programs for children who posed a threat to society. The act allocates money to

comprehensive guidance and counseling, remedial instruction, and school health, physical education, recreation, psychological, and social work services designed to enable and encourage persons to enter, remain in, or reenter education programs, including the provision of special educational programs and study areas during periods when schools are not regularly in session (PL 89-10, 1965, p. 41)

Schools would keep students contained for as long as possible, but by 1969 these concerns proliferated to a point that some Americans believed "their presence in society is creating an acute national problem" (Belok, 1969, p. 263). To keep children from "urban and rural slums" on track and in school, society had to take them away from their parents' influence as early as possible.

Many advertisements for away-from-home daycare promised their care would provide services that traditional at-home care could not provide. A 1971 *Washington Post* article quotes Helen Rubin, director of the nursery school for "retarded children" in Montgomery County who states, "A good special pre-school, staffed by well-trained teachers, can help with social and emotional growth, as well as basic skills and physical development" (*Washington Post*, 1971, Jun. 7, p. B6). To reinforce the power of this narrative, some authors attack 'traditional' day-care providers who engage children in activities that 'waste time'. In 1972, Ted Irwin praises a "pioneering day-care program"

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<sup>123</sup> My edit comes from Johnson's previous sentence in which he describes the subjects targeted by his initiative.

that used the time children were in their care to “educate them, rather than wasting it in aimless activities” (Irwin, 1972, Jan. 9, p. B10). Irwin writes, “Unlike many other day-care centers, which are merely places where working mothers park their toddlers all day and pick them up at night, Little Rock’s Kramer School...is a hive of purposeful activity where three-year-olds learn numbers and four-year-olds explore basic math concepts” (ibid). This preschool was set in regular elementary school and all parents who entered could compare their children to those who had been enrolled to see how ‘wasted time’ affected their child’s ‘progress.’ With such a public gaze on these types of programs, it would be no surprise that this concept of sending children to away-from-home education so young drew “deep interest elsewhere” and had potential for changing the temporal structure of American education (ibid). Additionally, as more mothers returned to the workplace during the late 1960s and 1970s, some of whom were convinced by the narrative that their public-sphere employment contributed to society’s ‘progress’, it may have seemed necessary to convince them that their child’s away-from-home care was contributing to society’s progress as well. Nevertheless, the gaze of power in the race to educate children focuses on the home and many parents believe that social privilege is achieved by enrolling their children in school at the earliest possible point. However, this narrative only applies to those families on the margins of society, for privileged families, delaying entrance as long as possible gives their children an advantage, and allows them to maintain status in a system where they already enjoy most of the benefits.

## **Long Hours in the Race to Educate**

In a discourse that promotes a notion that the ‘slow learner’ subject needs “continuous guidance,” public schools came to be the locus of supervision for society’s ‘problems’(see Robey & Cody, 1966, p. 43). Thus, if parents were unwilling to send their children to school earlier than the legally required age, the authorities could at least control the length of the subject’s enrollment by controlling the pace at which students advanced through the grade hierarchy established in the school.

In nineteenth century America, before compulsory education laws became standard across the country, students who did not ‘keep pace’ in public school usually had the option of dropping out and working with their family or some other mentor in the trades – the family was the supervisory unit (Frey, 2005). By the end of the nineteenth century, as many as 70% of students had been retained in the same grade for two or more years, but ‘problem students’ were able to drop out as soon as they could (Karweit, 1991; see also Zimmerman, 2009). However, as industrial culture gained power in America, and family structures changed, the supervisory role of the school changed with it.

Being gifted means having to stay in for kindergarten recess to do first-grade math. –Girl, 12, Germany (Delisle, 1987, p.4)
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For many Americans in the race to educate, the public school surpassed the parents, especially immigrant parents, as moral caretakers. With compulsory education laws, students have to stay in school until they can show they possess the ‘right’ knowledge; students who do not ‘keep pace’ with their peers are retained in grade until

they are ready to 'pass'.<sup>124</sup> Thus, while the chorus of debates about tracking policies and common-space classroom structures took center stage, arguments about the length of time public schools would control students remained in the background.

The length of time a school required students to remain depended on at least two conditions. One, how many years of schooling would it take before society would accept the subject as 'normal'; and two, how much money was the community willing to spend for this education?

Leonard P. Ayres (1909) brought attention to the issue of money. His study of the New York City school system outlines the "money cost of the repeater" and gives evidence to those who believe keeping kids in school was too much of a burden on taxpayers (p. 89). It was perhaps coincidence, but by the 1930s, education scholars were also writing on the correlations between retention, student achievements, and behavior (Owings & Magliaro, 1998). By 1941, the New York Regents issued a report stating,

a much wiser and more profitable procedure than nonpromotion is to adapt instruction to the needs of the pupil at all times, and at the end of the year to advance him to the next grade or class and there continue to adjust instruction to his needs (quoted in Rothstein, 1998, p. 198).

Additional research findings against grade retention also started to pile up at this time. A 1949 study found that students retained in grade were more likely to drop out of school than those not retained. In 1951, another study reported that students retained fare no better than students who are socially promoted. By the 1960s and 1970s, social promotion became regular practice in some schools across America (Owings & Magliaro,

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<sup>124</sup> A study conducted in 1914 by Stanford University researchers found that grade retention rates in their 100 school district sample ranged as high as 63% of students (see Rothstein, 1998).

1998). Efficient schools process students as fast as possible, but members of society were still aware of the social ‘cost’ of this policy.

Economic concerns and appeals to democratic education did not convince all people that grade retention was wrong – many Americans support prolonged school enrollment for students identified as ‘slow learners’ based on their preparedness for society. Reporting on a proposal made by Dr. William Jansen, Superintendent of Schools in New York City in 1953, the *New York Times* explains a plan to extend the “slow track for slow learners” in the elementary school program from six years to seven (*NY Times*, 1953, May 9, p. 21).<sup>125</sup> In a discourse of universals, if society wants everyone to ‘progress’ to a designated point of knowledge, having to deal with students of varying learning speeds means either modifying the curriculum for some (i.e., changing the education distance), or modifying the amount of time each student is allotted for finishing the course; Jansen chose the latter.

At the high school level, Robey and Cody (1966) similarly suggest, “Extend the length of the time which is normally required for graduation so that the low-academic or slow-learning student who needs more time can complete his secondary education or training” (p. 43; see also Eliasberg, 1963, Jul. 14, p. 156). In a seeming attempt to convince readers that extending time in high school is socially acceptable, Macroff (1981, Nov. 3) writes, “There is now more willingness to accept the idea that some students need more time to get through the required curriculum and should be allowed to proceed at their own pace” (p. C1). According to Joseph Smith, principal of Harlan High School

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<sup>125</sup> The Superintendent suggested this initiative in reaction to a 1946 policy that established a system of “continual pupil progress” that allowed pupils to move through the grades “regardless of how they fared academically” (ibid).

in Chicago, “Some arrive with a fourth-grade reading level and we could not possibly move them through here in four years” (ibid); however, while it may be unimaginable that a student identified as ‘slow’ could develop eight years of reading level in just four, it is granted that students already identified as ‘fast’ could. Maeroff cites a growing acceptance of an idea that some students require less than four years for completing their high school courses (ibid). Some students would be held on the ‘slow track’ while others would be ‘accelerated’ on the ‘fast track’, and if the ‘right’ track was not available, a student’s departure would just be delayed.

In school systems that organize common-space classrooms, ‘experts’ also found a way to keep students on separate tracks. Methodology, such as University of Chicago Professor Benjamin Bloom’s “mastery teaching” model promised to ensure that schools organized classes “so to give each student the time and teaching he or she needs without slowing down the class as a whole” (Fiske, 1976, Aug. 29, p. 131). In this system, teachers who employ Bloom’s methods create assessment gateways that ensure that that class could only move to the next topic when a certain percentage of students mastered the content. Students who failed to demonstrate mastery are given “special assignments (known as ‘correctives’)” until they can prove themselves worthy to join their peers on the next unit; proficient students are also asked to tutor students labeled ‘slow learners’ to bring them up to the passing score.<sup>126</sup> Theoretically, schools lock students who do not master a knowledge skill in place until educators give up and move on, or the student is able to escape by dropping out of school – neither option seems ethically justifiable. In

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<sup>126</sup> “Mastery teaching” is supposed to (re)organize lesson structure from a system in which teachers had to expect varying levels of mastery because of the uniform time of exposure to the contents, to a system in which, “the amount of material to be thoroughly learned is held constant, and time becomes the variable” (Fiske, 1976, Aug. 29, p. 131).

any case, when marginalized students are in school, the governmentality of the institution ensures that students proceed at their expected rates; students who do not learn fast enough just have their sentences extended.

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In many school districts across the country, students find the key to 'advancement' through school in completing homework. Schools cannot force students to come early, nor can they force them to stay late, but they can send work home with the expectation that completion of those assignments will signal a student's mastery of the required knowledge. However, despite homework's value as a panoptic mechanism, this pedagogical practice has been controversial throughout American history.

The role of homework in America's race to educate is supported by stories of heroism in the American narrative. Published memoirs from notable historical figures such as Ben Franklin (1786) and Frederick Douglass (1845/1845) reinforce the notion that a child's learning should not be contained by school hours. In his *Narrative*, Douglass writes, "When I was sent of errands, I always took my book with me, and by going one part of my errand quickly, I found time to get a lesson before my return" (p. 39). Douglass describes how he would trade bread to poor boys in a local town in exchange for their school lessons – knowledge was freedom for him.<sup>127</sup>

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<sup>127</sup> Assuming value in this work ethic, many parents fret when teachers do not assign homework to their children. For example, in 1961, Ilg & Ames responded to a parent of ten-year-old twins who was concerned about the amount of homework being sent home. The parent complains, "The teacher of one has refused to let the entire class bring homework home all year...Even if a child is at home sick she won't send work home" (Ilg & Ames, 1961, Oct., p. 53). For this parent, homework is a cause of academic 'progress'; "My son who has this teacher isn't anywhere near as far along in his subjects as his twin who is permitted to do homework" (ibid). In this line of reasoning, homework is a privilege, and children are to be thankful for teachers who give them "permission" to do it.

Supporting a narrative that frames homework as a positive part of students' lives, columnists like Ilg & Ames try to disparage any activity that interferes with academic work. In one article, Ilg & Ames write about a set of parents who question the value of their local high school, "which overemphasizes the extracurricular, social side of school life," according to them, "it offers little incentive for academic achievement" (Gesell Institute, 1961, Aug. 30, p. D7). For some, students need to make academic 'progress', and home lessons allow students to work towards that goal, thus there is no time for play. In terms of the discourse, homework brings the gaze of the race to educate into the home, and with an hour or two of self-examination, students are reminded of their place in the hierarchy of privilege along the norm.

Yet, not all statements in the discourse agreed with this ethic. In 1887, for example, Francis A. Walker challenged the prevailing notion that students need to spend two to three hours studying each night. In his recommendations to the school committee of Boston on the topic of *Arithmetic in Primary and*

*Grammar Schools*, Walker states, "Home lessons in arithmetic should be given out only in exceptional cases" (p. 3, 11, & 27).<sup>128</sup> Similarly, popular

*Why do much homework? Two or three hours a day is not at all unusual even in the lower grades. When do youngsters find time to play and unwind? (Irish Indian, 1965, Dec. 24, p. 10)*

media, such as the *Ladies Home Journal*, push back on this notion of 'home lessons' for every student. At the turn of the twentieth-century, *Journal* editor, Edward Bok (1900a; 1900b; 1913) was a vocal critic of homework, especially for young children. Bok advocates for the complete abolition of homework for students under the age of fifteen

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<sup>128</sup> In his argument, Walker cites concerns over frustrated children who struggle to complete their homework each night (p. 19) and concerns over a curriculum of "new subjects to which pupils are now required to give their time and attention" (p. 8).



and believed that high school students should receive no more than one hour per night (see Gill & Schlossman, 1996).

Appeals based in the labor movements of the early twentieth-century had power in the discourse, but arguments also came from the medical discourse. For example, the *Brooklyn Daily Eagle* reported on doctors who declared homework dangerous to children because the heavy book loads were causing “lateral curvature of the spine” (*Brooklyn Daily Eagle*, 1913, p. 41, quoted in Gill & Schlossman, 1996, p. 39). Additionally, one editorial reports that a fifteen-year-old girl had died from over studying (*Brooklyn Daily Eagle*, 1913, p. 34, see Gill & Schlossman, 1996, p. 39).<sup>129</sup> In this discourse, strong physical bodies are necessary, remember, for society’s ‘progress’ on the Great Chain of Being, but homework is also necessary as a disciplinary mechanism in the race to educate children – the discourse contradicts itself.

*John W. Warren, 39...started as a student at American University 10 years ago and will be graduated June 11 with a bachelor of science degree. It isn't that he's a slow learner; for nine years Warren attended night classes two nights a week while working full time for the Chesapeake and Potomac Telephone Co. (Washington Post, 1961, Jun. 2, p. B6)*

For students who want to graduate with their peers, but who do not have ‘time’ at home to complete their extra lessons, many authors suggest that they should essentially extend the hours of their school day.<sup>130</sup> In supporting added instructional time at school,

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<sup>129</sup> In 1930, Jay G. Nash, physical education professor at New York University, argued that physical activity was critical for people’s health. According to Nash, children from the age of ten required six to seven hours of “vigorous” physical activity daily, and thus ‘home lessons’ were an impediment to the development of the body’s large muscles (Nash, 1930; 1931; 1932 see Gill & Schlossman, 1996, p. 42).

<sup>130</sup> Myrtle Meyer Eldred is one example of an ‘expert’ who warn parents against the extended school day. Eldred asks, “If she stays after school daily and has to accomplish some of the other activities you outlined, when can the child play?...Despite her accomplishments, she is still a child and deserves more interest in her day than just school and home duties” (Eldred, 1943, Apr. 23, p. B3). However, statements like these are diluted by the more powerful discourse that calls for maximized educational efficiency.

the media makes clear that nothing illustrates a caring teacher like one who comes in early and stays late for her or his students (e.g., Daltry, 1968, May 2, p. B1). In this line of reasoning, responsible teachers put in extra hours to show they are dedicated to their students' education.<sup>131</sup> According to some, extra-academic instruction keeps children 'on track' and if teachers monitor after-school programs, qualified supervisors are present to track student work.

Parents could also turn to organizations like the Young Men's Christian Association that hosted before- and after-school programs for students 'at-risk' of 'falling behind'.<sup>132</sup> These after-school programs seemed to have the required components: state-of-the-art curricula, language training, activity for good health, and a caring guide. Furthermore, the private sector also appeals to parents who seek additional instructional time for their children. Perhaps in an attempt to draw more business, some after-school programs advertise their lessons as a cure for 'slow learning'.<sup>133</sup> Appealing to parents who had "slow learners because of disabilities," a nonprofit clinic called the Learning Skills Laboratory advertised their program that consisted of two 30 minute sessions a week for up to ten months as, "Help for children in the development of perceptual skills,

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<sup>131</sup> Describing New York City's All-Day Neighborhood Schools a 1959 *New York Times* article states, "The curriculum is enriched; slow learners and those with language difficulties receive special help... a specialized recreation program is provided, under the guidance of a warmly understanding adult" (*NY Times*, 1959, Mar. 26, p. 30).

<sup>132</sup> Emphasis on academic training seemed important; describing a YMCA program in North Orange County, one *Los Angeles Times* article stresses, "Reading, spelling and penmanship lessons for non-readers and slow learners from the first through sixth grades will be conducted" (*LA Times*, 1969, Jan. 5, p. OC2). The same YMCA program in North Orange County was cited as having a teacher with four and a half years of experience tutoring 'slow learners', and expertise in using Dictaphone, phonics instruction, and "look-say methods" (*LA Times*, 1969, Jun. 13, p. OC\_C16).

<sup>133</sup> Advertising in the *Los Angeles Times*, the Lionel Institute pitches their course in "Quick Learning and Retention for Junior High, High School and College Students" (Lionel Institute, 1969, Apr. 20, p. B1). According to the advertisement, the program consisted of five "specialized lessons" over five weeks, and there was no speed reading involved; "By taking this course right now you will be ready for final," the Institute claimed, and "Anyone can master it, even slow learners" (ibid).

sensory integration and motor training” (*LA Times*, 1980, Mar. 23, p. V2). For only \$16 a week, parents could show that their child put in the time required in America’s race to educate.

Along with the disciplinary power that pushes students, teachers, and parents to extend the hours of education, governmental actions also worked towards this end.

Policy documents like the 1983 *Nation at Risk* report work to institutionalize extended hours for students ‘behind’ in their work. Recommendation C of the report reads,

We recommend that significantly more time be devoted to learning the New Basics. This will require more effective use of the existing school day, a longer school day, or a lengthened school year (National Commission on Excellence in Education, 1983).

Recommendation C-4 of the report suggests that modification of classroom management techniques and organization of the school day will provide additional time for “the special needs of slow learners, the gifted, and others who need more instructional diversity than can be accommodated during a conventional school day or school year” (ibid). For those who privilege Newton’s laws, more time equals more learning, and more time learning means Americans anxious about the future of the nation could breathe a little easier knowing that they contributed to the country’s security.

When students fail to make ‘adequate yearly progress’ during the school year, summer schools are there to help ‘make up for lost time’. Summer school programs offer supervision, and eight weeks for students to examine their education pace next to their peers. Any student could put in the extra time with their education, and that included the

learners labeled 'fast' as well (see also, Johnson, 1956, Mar. 4, p. 13; Knoll, 1958, Jun. 30, p. B1; *LA Times*, 1965, Jun. 20, p. OC4; *LA Times*, 1982, Jun. 17, p. SG12).<sup>134</sup>

Students who expected a book-free summer at camp would have been surprised when they arrived at the Baldwin Camp in Keene Valley, New York. The daily routine at the 7 ½ week camp for boys aged nine to eighteen included four hours of tutoring or small group instruction in "remedial reading, arithmetic, science, English, math, history and languages" taught by "experienced public and private school teaching staff" (Lyons, 1964, Mar. 29, p. SM87). After three hours "devoted to recreational pursuits," campers were supervised in a one-hour study hall. Parents were assured 'progress' with reports that showed campers' test scores before and after the summer of 'fun'.<sup>135</sup>

Similarly, a 1967 article about Boston's summer school programs paints a program that emphasizes academics first. Parents are assured that the child's summer would be filled with "trips to museums, concerts, recreation areas and neighborhoods never before seen" (Waters, 1967, May 31, p. 14) – remember how much these types of experiences are promoted as being part of the 'normal development' of a child. Yet, Waters reminds parents, who may question the value of these 'field trips', "most programs...are concerned with remedial training, usually in reading and mathematics"

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<sup>134</sup> In 1957, Clifford Kopitzke, elementary school educational consultant in the Alamos School District announced summer sessions that would "attempt to further the progress of special types of students" (*LA Times*, 1957, Apr. 14, p. O4). According to Dorothy Kelly, publicity director for the Alamos District, the six-week program ran from 8 a.m. to noon, Monday through Friday and enrolled students in grades 3 through 7 who needed help in language arts, arithmetic and reading. The program also enrolled "superior children" in grades 4 through 7 who were allowed to sign up for one class (ibid).

<sup>135</sup> In the same paper, the Rhinebeck Country School advertised their "specialized program for the slow learner" (*NY Times*, 1964, Mar. 29, p. SM87). This coed school offered a "warm home atmosphere, animals, shop, gym, [and] 110 acres;" students would have access to "remedial instruction [and] vocational activities," and every camper would have "psychiatric services" available when needed (see also, *NY Times*, 1975, Jun. 22).

(ibid). This training was “designed to bring slow learners or problem students up to a competitive level” (ibid). For some, a summer designed to keep students ‘on-track’ could not be all ‘fun-and-games’.

A summer full of extra-scholastic activities may have been the answer to keeping children on pace in their education, but some education officials believe summer programs are better used for preparing students for the careers the officials saw them entering once the students left school. In 1965, the *Washington Post* wrote a summary of Superintendent of School, William S. Schmidt’s plan for his district’s summer school. According to the Superintendent of Prince George’s County, the program would take place at an abandoned NIKE missile base close to town. There, “slow learners and potential dropouts” would be able to choose from a number of courses “designed” for these students and “uniquely suited to the summer months” (*Washington Post*, 1965, Dec. 1, p. B10). The courses included “lawn and yard care, painting and refinishing...custodial work...duplicating and clerical services” (ibid); Schmidt was prepared to sacrifice valuable resources to help these students prepare for their futures – I think the only course he forgot to mention was training on how to clean his summer pool. For some, summer education served as a vehicle for getting extra help for students identified as ‘slow learners’, for others, these children in summer programs are the extra help, and with stories like these, one can imagine an anxious parent double-checking her or his child’s diagnosis.

Regardless of this corruption, government policy statements like the 1983 *Nation at Risk* report call for extended schooling into the summer. Recommendation D-3 calls on schools to adopt an eleven-month contract with teachers, so that educators would have

time to develop curriculum and engage in professional development, but more importantly, so schools could offer “programs for students with special needs” (National Commission on Excellence in Education, 1983). In the twenty-first century, education officials often write extended-year programs into students individualized education plans as a legal requirement for their education – perhaps cleaning the superintendent’s pool was not so bad after all.

### **Doping America: Drugging Students in America’s Race to Educate**

‘Expert’ diagnoses, caring teachers, close supervision, extended instructional time, state-of-the-art technology, individualized lessons, and plenty of testing are adequate interventions for many Americans who see their country ‘falling behind’ in the race to educate children. Education may be the best treatment for ‘slow learning’, but many ‘experts’ ensure society that it will be a long process. Child psychiatrist Dr. Larry Silver, for example, states, “The work is not fast...some children appear to overcome their handicaps and move ahead at one pace; others appear to learn more to compensate for their disabilities and make progress at a slow rate” (Andelman, 1975, May 11, p. E21). Andelman comments, “of course, parents and youngsters wish progress would go faster, but no fast process is yet available...many parents seek out a magic pill or quick cure because they can’t deal with the fact that their child may not be all they had hoped” (ibid; see also Eldred, 1935, Oct. 19, p. A5). However, a “magic pill” was just what some Americans were looking for, and a “magic pill” is what they found.

By the end of the twentieth-century, a medical narrative had gained power in shaping the discourse of treatment for the students labeled ‘slow learners’. The

pathology of 'slow learning' centered in the brain, and according to 'experts' like child psychiatrist Dr. Larry Silver, the solutions to this 'problem' are found in brain. Silver assures us that these 'problems' were "primarily neurologically based, not emotionally or culturally based, not retardation" (Andelman, 1975, May 11, p. E21). If 'slow-learning' originated with a pathology in the brain, then perhaps there was a cure, and that treatment would be found in pharmacology.

It was actually thirty years earlier that Americans first heard of a pharmaceutical cure for 'slow learning'. In 1948, the Child Welfare Society, in partnership with the U.S. Navy, Welfare Clinic and Children's Hospital of Washington, D.C. conducted an experiment to test the effects of amino acid supplements on the learning rates of "mentally retarded children" (*Washington Post*, 1948, Feb. 29, p. M12).<sup>136</sup> The study at Children's Hospital sampled participants from 2 ½ years-old to 14 years-old, and consisted of "feeding the children three times daily several teaspoons of glutamic acid, in crystal form resembling but not tasting like coarse sugar" (*Washington Post*, 1948, Feb. 29, p. M12). According to Emma Gilbert, lead researcher and Children's Hospital psychologist, 'slow learning' was potentially caused by the subjects' inability to properly distribute amino acids metabolized from the grain-based portion of their diets. With hopes that supplements would "overcome" this "maldistribution" of necessary nutrients, the examiners fed children a diet of the "vile tasting" cubes (*ibid*). To measure 'progress', children were assessed for "mental progress" with a "whole battery of established tests" and the researchers in Washington anticipated participants doubling

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<sup>136</sup> The experiment was similar to a contemporary study carried out at Columbia University's Neurological Institute in New York City with participants aged 5 to 17 years-old (*Washington Post*, 1948, Oct. 6., p. 15).

“mental growth rates” as preliminary results had shown in the New York experiment (ibid), but expectations of a cure soon led to disappointment.

Perhaps the most significant finding of the research conducted at Columbia University and at Children’s Hospital in Washington, D.C. was an observed discursive shift in the narrative of how society would treat children identified as ‘slow learners’. Emma Gilbert is quoted as saying,

This study brings a new approach to research on mentally retarded children...Before this, children with problems were studied by a psychologist, a psychiatrist, and a social worker. The mental world was the focus of interest...The new plan means that the entire child will be under observation, and the complete picture understood (*Washington Post*, 1948, Feb. 29, p. M12)

No part of a child’s body would escape the ‘experts’ gaze, they would test, diagnose, and treat every abnormality they came across, and the subject would search for even more that society could ‘fix’.

At the end of the *Washington Post* article about the amino acid experiment (i.e., Feb. 29, 1948); the author suggests that if the price of the supplements dropped, Americans would one day take them in place of their daily vitamins. By 1975, forty-percent of students diagnosed with a ‘learning disability’ were also diagnosed with hyperactivity or short attention spans, and the pharmaceutical industry was ready to meet the demand with psychostimulant drugs that promised to ‘get attention’ (Andelman, 1975, May 11, p. E21). According to some, these medications are the perfect treatments for abnormal children on both ends of the spectrum of learning speed because the pills keep students “available for learning,” and that was the right medicine for all American children in our race to educate (ibid).



By the early 1970s, middle-class parents had found a diagnosis that explained their ‘gifted child’s’ inappropriate behaviors (i.e., Attention Deficit Disorder), and the ‘magic pill’ according to some was not used to treat obnoxious behaviors, but instead it was administered to help teachers who could not keep up with their ‘fast learners’.<sup>137</sup> However, despite critical accolades from various members of society who praise psychostimulant drugs for their ability to pacify ‘unpredictable’ children, some people question their ‘true’ effect. Stone (1970), for instance, argues that psychostimulant drugs have more placebo effect than officials are willing to recognize. Citing a news story “about Omaha school children,” the author states,

One parent, badgered by her child’s teacher to provide the drug pills for her son, finally told the teacher the boy was taking them. In fact he was not. Soon a report card came home indicating improvement in the boy’s behavior (Stone, 1970, Jul. 22, p. 4)

Stone reports that one (unnamed) psychology professor found that children whose teachers were told that their pupils had “spurt potential” gained up to twenty points on their IQ testing compared to students who were labeled “normal” or “delayed” (ibid). Regardless of that statement’s accuracy, Stone’s article shows that even when Americans were becoming convinced that drugs were the proper treatment for their ‘slow learners’, members of a skeptical public voiced their rejection of such a narrative.

One can also see skepticism in this narrative in discussions about the role of drugs in other contexts of American life. It seems no coincidence that just as voices for

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<sup>137</sup> In 1972, a contributor to the *Boston Globe* advice column wrote to report her daughter’s academic success after the student began taking “medication to slow her down a little” (Meow Chat, 1972, Jan. 19, p. 27). The author writes, “Her teacher this year was unable to keep her busy enough to keep her out of mischief,” but with the magic pill, “We have discovered for the first time in six years that our girl can walk instead of run and hop” (ibid). Meow Chat wrote her reply in response to a contributor who links the child’s academic issues to the “high-strung parent” who admitted she had to “work at keeping my temper” (ibid). Nevertheless, for Meow Chat, the child’s brain was dysfunctional, her behavior was just a secondary cause.

psychostimulant treatments were gaining power in American schools, so too were those members of society who voiced concerns about the influence of alcohol and narcotics on America's educational trajectory. In 1969, for example, the Senate Committee on Labor and Human Resources held a hearing on the Drug Abuse Prevention and Rehabilitation Act which authorized officials to carry out drug abuse education programs (Senate Committee on Labor and Human Resources, 1969, Aug. 6-8). In 1972, the House Select Committee on Crime held hearings to,

determine the extent of drug sales and use by school children and to investigate the failure of governmental institutions, particularly schools, to control the increase in narcotics abuse by school age children (House Select Committee on Crime, 1972, Sep. 28-30).

Congress, and American society as a whole, seems to condone the use of drugs in a War on 'Slow', but we spare no expense in our War on Drugs when they are perceived to keep kids slow – remember kids, “just say no!”<sup>138</sup>

### Summary

In 1980, Robert Reinhold reported on the public's growing discomfort with states' laws allowing the sterilization of individuals labeled with “developmental disorders”.

Quoting K. Ray Nelson, director of the Lynchburg Training School and Hospital, Reinhold writes,

The rights of the retarded are very much protected now, having moved in the direction of the right to treatment. In the past the treatment was sterilization. It could not happen today. The rules of the game have changed (Reinhold, 1980, Feb. 24, p. A2 quoting K. Ray Nelson, director of Lynchburg Training School and Hospital)

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<sup>138</sup> President Reagan launched the “Just Say No” campaign in 1983, the same year *Nation at Risk* was published.

Nelson is correct; officials were taking the century-old laws that allowed states to usurp individuals' reproductive rights off the books and the rules of the game had changed. Yet, officials still held concerns about the reproductive rates of less-privileged subjects (e.g., House Committee on Education and Labor, 1978, Jul. 24; Foltz, 1972).

However, the treatment for 'slow-learning' was no longer centered on such a visible elimination of individuals reproductive power, the treatment now focuses on the sequestration of the subjects' mind. Many individuals who would have been sent to specialized schools a century ago are now educated in public schools with children identified as 'normal', but instead of segregating the less-privileged learners into other buildings, we now test them, track them, differentiate them, summer school them, retain them, mechanize them, and drug them. Today, students labeled 'slow' are marginalized in society by education practices that impose

a temporal structure onto their learning that does not correlate to the experiences they

*Marginalized voices, which are by definition weak, are not heard. They are rendered non-existent, non-influential [sic] (Kramer & Johnson 1997, p42-43)*

have outside of school (Lofty, 1995, p. 36). Additionally, the productive power of technologies, such as the computer and progress monitoring, enforce a self-subjectivity that less-privileged individuals make part of their knowledge of themselves. However, marginalized by a narrative that privileges linear predictability, these students lose their voice; they become extinct in a discourse that has no time for them (see Kramer & Johnson, 1997, p. 42-43).

Thus, laws that allowed the physical sterilization of less-privileged subjects may have been repealed decades ago, but replacing those statutes are laws and labels that are no less effective in creating a quarantine for subjects judged 'at-risk' of slowing down

social progress. *The rules of the game have changed* and the names now differ, but the ends remain the same – American schools aim to produce fast-learners with predictable outcomes – anyone who steps in the way of America’s race to educate risks being run over.

## Chapter VII

### QUESTION THE RACE: (RE)FRAMING AMERICAN EDUCATION

#### My Profession: Alchemy

One who reads about the professional life of Isaac Newton is apt to come across references to alchemy. Though the knowledge remained hidden for over two hundred years it is now well verified that much of Newton's professional life was devoted to finding the 'philosopher's stone' (Dobbs, 1975; Fanning, 2009).<sup>139</sup> Newton, like alchemists who came before him, searched for this object, believed to be the "medicine of the metals" – a substance whose properties were thought able to cure "diseases" in the living and material worlds. The most famous claim of alchemists is that the 'philosopher's stone' can 'cure' 'flawed' metals such as lead and tin, 'purifying' them into gold and silver (Fanning, p. 2; see also Read, 1957). Despite modern attempts to decipher Newton's cryptic notes, to the best of common knowledge, he did not discover his coveted element; however, his work continues in American schools today.

*All that glisters is not gold –  
Merchant of Venice (Shakespear [sic],  
1750, p. 31)*

In surveying the discourse, one may notice that society routinely dehumanizes less-privileged individuals through our characterizations of them that are certainly not true in many cases. In the twentieth century, students identified as 'slow learners' were

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<sup>139</sup> From Newton's death in 1727 until John Maynard Keynes' discovery of his papers in 1936, a history of Newton's practice of alchemy hid from society.

characterized as Neanderthals, rodents, ‘block-heads’, and the like, while students identified as ‘fast learners’ were characterized a precious gifts, enriching society with their academic abilities. Thus, I end with, what I think is the central metaphor for understanding how we came to race our education. For over a hundred years, American educators have continued the alchemists’ work. We start with a binary of values; for alchemists the binary contrasts lead and gold; for educators, the binary contrasts ‘slow’ and ‘fast’ learning. As researchers, we continue searching for methods that can change the characteristics of ‘flawed’ subjects; as teachers we experiment with various methods hoping that one such formula will result in a magical transformation. The discourse is clear; if we find the right combination of initial conditions, then we can set any student on a trajectory of ‘fast learning’. In effect, we teach in an effort to turn lead into gold, ‘slow’ into ‘fast’; yet our search is unwarranted.

Francis Bacon compares the pursuit of the ‘philosopher’s stone’ to a father who told his sons that he had left them gold buried somewhere in his vineyard, “where they by digging found not gold, but by turning up the mould about the roots of the vines, procured a plentiful vintage” (in Read, 1957, p. 144). Undoubtedly, one can trace modern discoveries in chemistry and physics back to the philosophy that shaped Newton’s search for the ‘philosopher’s stone’ (Dobbs, 1975; Fanning, 2009).<sup>140</sup> However, as instrumental as Newton’s discourse has been in promoting discoveries in the natural sciences, we must

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<sup>140</sup> In many fields, scientists have gone searching for Newton’s gold and they have returned with a plentiful vintage worth more than we expected. The discourse that Newton promoted inspired humans to land on the moon; his thinking allows us to cure deadly diseases, construct safer shelters, grow healthier foods, and explore the fabric of the cosmos – for many, this discourse has led to a beautiful existence. Modern physicists have even discovered a ‘philosopher’s stone’ – it’s called a particle accelerator. Today, with enough energy we can create gold by separating three protons and six neutrons from a lead atom (Enloe et al. 2001, p. 443); with enough energy we can also produce the opposite reaction and change gold into lead (Smith, 1987, Mar. 12, p. 43). *With enough energy*, physicists can create a universe.

be weary of a regime that promises the future without regard to the means by which we get there, or without knowledge of the world that we act to create.

The history of American schooling presented in the current study is a history of our search for treatments that promise to purify our 'slow children' of their 'diseases'; it is a history of our search for the 'golden child' who promises to 'learn fast' and move our country into the future. Yet, unlike some of those who search in other fields, American educators have not procured a plentiful vintage. Instead, in our race to educate, pushing aside all that does not glitter, we have destroyed much of the crop. In our haste, we mistake 'diseases' for qualities we should value; we see 'flaws' where we should see characteristics worth keeping; we cast aside the smallest seeds without regard to their worth; we pull the 'slowest' growth in favor of 'fast-growing' weeds. We privilege the newest vintage despite tilling under the finest harvest.

I am intentionally using Bacon's agricultural analogy here because it stands in stark contrast to the industrial model by which we have designed American schools. Industrial discourse and efficiency education have led to our society objectivizing our children as widgets. The discourse of universal time and linear progress forces us to see the world in one dimension - students are either 'fast' or 'slow', they are some number on a continuum of intelligence. Mastered by the clock, we monitor students' trajectories to ensure they make 'progress', and we race to the top pushing aside those who choose another path – a different pace. We promote an anxious drive to the 'future' all the while tracking over the 'slow' growth that often produces the most coveted varieties of individuals.

Education in the 'fast' lane ignores the reality that we live in. Humans live in many dimensions; we are chaotic beings governed by thousands, if not millions or billions, of variables each day. Yet, until we understand humans as complex and multi-dimensional beings, we will continue to label students 'slow' and we will continue to miss the value that heretofore marginalized individuals have to offer our society.

Remarkably, though, even after a century of tilling for Newton's gold, there are still some roots left for us to salvage - some of which may produce the finest vintage. Yet, to procure a better vintage we must stop racing our children's education; we must double back to care for those who have been uprooted in their school experience; we must return to those we labeled and ask, "Who are you?" And we must reach for the borders of understanding, never satisfied with the knowledge we hold. Unless we stop to question why we race, we will continue searching for our future, ignorant of the most valuable gifts that rest at our feet.

### **Education in a Post-Newtonian Space-Time**

In Chapter III, I positioned theories of time and space from relativity theory, quantum theory, and chaos theory as problems for the dominant discourse of universal time and linear progress that drives America's race to educate. Here I wish to return to those theories and imagine narratives for learning that serve as alternatives to the dominant discourse. In effect, I pause now for an ethical holiday to promote what I see as hospitable environments for educating our children. I walk on the margins of knowledge in an effort to expand the menu of pedagogy with which we currently teach.



In this thought experiment, let us ponder how these theories would shape the education of students in American schools. For that purpose, I have recruited two hypothetical volunteers, two identical twins: Star, a 14 year old, and her sister Stasha (short for Stashionary). Theoretically, both young women have identical abilities, and just as the cliché requires, they often share common thoughts simultaneously. In fact, Star and Stasha are so identical, that if they stood next to one another, they would act, speak, and think in such a way that they are impossible to differentiate – not even their finger prints are different – remember, hypothetically speaking.

Let us first test how Einstein’s discourse of time, posited in the theory of General Relativity, would shape one’s education. For this experiment we have sent the twins to attend different boarding schools. Star is sent to a school high up in the Rocky Mountains, while Stasha decides to attend a school ten feet below sea-level in New Orleans. According to General Relativity, the two girls will experience different times because of the differing gravitational pulls on their bodies.<sup>141</sup> As predicted, when the twins return in a year, we find that Star, in accordance with the premises of General Relativity, because of her relative speed and gravitational attraction on the surface of the earth, has aged faster than Stasha. Time, though very minimally in this context, has passed faster for Star than it did for Stasha. In the current discourse that views time as a universal phenomenon, Stasha and her teachers just cannot understand how Star was not able to learn as much as her sister in the same amount of time – even though the two sisters employed identical work ethics. Yet, because of the time dilation caused by the

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<sup>141</sup> Chou et al. (2010) used two optical atomic clocks and were able to detect the influence of elevation on time dilation to an accuracy of less than one meter from the earth’s surface. Yes, time for your toes is *not* the same as time for your nose.

different elevations, the twins experienced different amounts of time. The difference may only be a billionth of a second, but I exaggerate the difference here to make a point – time is not a universal phenomenon. In an education discourse that understands the relativity of time, we must question the power in whoever sets time expectations for student learning in schools. Why should some bureaucrat 3000 miles away decide what time is right for our students when *our* time is right here?

An ever-willing participant in education research, Star agrees to the next phase of the experiment that will test Einstein's theory of Special Relativity. This theory posits the interconnection of space and time and suggests that as a body moves faster in space, the measurement of time slows down.<sup>142</sup> To see how this theory of space-time affects her education, Star has agreed to go on board a school located in a space-craft; we've secured her place at the Einsteinian school of light-speed learning (sort of a new definition for semester at sea) and this year's field trip is to the star Proxima Centuri, roughly 4.2 light-years away. The theory of Special Relativity holds that as Star approaches the speed of light, time as measured by an outside reference frame will slow down for her but remain constant for the outside observer. Subsequently, when Star returns home from her trip, in which she traveled at 99.9% the speed of light, she is amazed to find her sister has aged over 23 years, while she has hardly felt the passage of time (PBS, 2005). When she returns to her original school, her teachers (their retirement benefits were cut so they're still working!) scold her for her slow-witted learning, and lack of progress on school work during her 'field trip' – she is just immature, they think. Star is labeled a 'slow

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<sup>142</sup> Similar to their findings with altitudinal time-dilation, Chou et al. (2010) were able to detect disagreement between two optical atomic clocks at relative speed differences of less than 10 meters per second, that's 22.37 miles per hour for us Americans.

learner' even though she and her space-ship principal promise that she studied hard the entire time – her teachers maintain she is just a “space cadet.” Because one frame of reference has power over the other, this student with inter-solar traveling experience now is chastised for her lack of knowledge and ‘slow pace’ despite seeing a distant solar system up-close. Again, while we have no present way of taking light-speed field trips to distant solar-systems, this experiment is presented as metaphor for how we treat students who do not think in the privileged reference frame. How many ‘space cadets’ in American schools today are chastised for their wandering imaginations and their ‘slow’ paces compared to their peers? An education that recognized the relativity of time would understand that not all students learn at the same pace, nor do all students think rapid thoughts. However, every thought is important because we do not know whose thoughts will be the next stroke of genius (think of Albert Einstein daydreaming out his classroom window on this one, what were the thoughts in his brain that his teachers never bothered to hear?)

To the point, for the next phase of our experiment, we will need to abandon our assumption of Star and Stasha as physical bodies, and instead conceptualize the subjects, and ourselves, as energy;  $E$  does equal  $MC^2$ , right? Though this alternative subjectivity may be hard to swallow, think of all the electrical activity that comprises the thought process in the brain. While there is a chemical component to neural functioning, it is worth noting that the only way we know how to ‘observe’ human thought is through the measurement of energy waves. Thus, it should be possible to conceive of the self as a form of energy, and the process of thought as the transmission of information at, or near,

the speed of light.<sup>143</sup> Thus, if we are allowed to play with such a conception of human beings, when explaining human learning, we must not adhere to the physical laws that poorly explain falling apples, or planetary movements, but rather we can position ourselves within a discourse able to explain movement at the speed of light (Hawking, 1996, p. 18). While this conception of the human subject is one we may hold with our understanding of quantum theory, if you are not willing to believe such a conception at this point, just suspend disbelief for now and play with the following idea as metaphor.

If we accept quantum theory as a possible model for understanding matter, energy, and the human subject, let us bring back Star and Stasha for some additional experiments with education. For this phase of the experiment, we have agreed to return Star and Stasha both back to their identical ages of 14 years, and we have agreed to let them attend the same school, at the same time, at the same speed. However, now that she has returned from space, Star no longer shares thoughts with Stasha. When working on her physics classwork, Star cannot help but contemplate all the possibilities of solutions for these problems, while Stasha keeps her eye on time and writes-down the desired answers. Star's thought process travels in every-direction trying to find some compromise amongst all these possibilities; she becomes lost in concentration, and does not even notice the rest of class, including her sister, walking to lunch. Startled, Star looks up in surprise as her teacher scolds her for failing to complete the work. "You are so slow compared to your sister," her teacher quips, "Maybe we should have you tested."

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<sup>143</sup> Much emerging research into the physics of consciousness supports this assertion the human thoughts work on a quantum scale (e.g., Stern, 1994; Tuszynski, ed., 2006; Joseph, 2011; Mensky, 2011; Clark, 2011).

Yet again, the student who makes quantum leaps in her thought process is judged by the same standard as those who stayed on the trajectory privileged by their teacher.

Like most 14 year old students in the United States, Star and Stasha sit down for their yearly standardized testing. Since Star and Stasha think identical thoughts at the identical time (or at least we thought they did), they usually receive identical scores on their state's tests. However, this year, let us test the double-slit principle of quantum theory in an educational context. For this experiment the twins complete a standardized test; and while Stasha receives her usual 'proficiency' mark and will head to the high school next year, Star on the other hand, did not make 'proficiency' and will have to attend remedial classes during the summer. The two girls cannot believe it! However, in the quantum theory of time and space, anything is possible. While they were happily learning all year, when test time came, observation forced the girls to choose a path of identity (Star answered B and Stasha answered C), and in the current model of knowledge, Star chose the 'wrong' path. Most people recognize that a testing situation changes the nature of how we think and act, it even influences the thoughts that we have available; yet, we still insist on observing students and 'checking' their 'progress'. What was a future of possibilities for Star and Stash, has now turned into a predictable course because of our observations.

While this might seem ridiculous to some, maybe we should consider the tests themselves in this quantum light. The uncertainty principle states that we cannot measure both the position and speed of a particle accurately. While Stasha's teachers assume that she is running towards high school success based on a measure of her position, the next location of knowledge could very well be a confused state of paralysis. Likewise, Star's

apparent academic collapse as measured by this test, could be an inaccurate measure of her overall state. Slattery (1995) reminds us that the concepts in the uncertainty principle have always been known at some level in American schools. He states,

Educators have always instinctively known this to be true. The presence of an observer in the classroom measuring effective teaching changes the dynamics of the lesson, impinges on the attitudes of the students and teacher, and dramatically alters the lesson being observed (Slattery, 1995, p.22, *Time and Education*).

Additionally, one must be aware of bias in valuing what otherwise would be judged as random results (Mlodinow, 2008). For each student, there is a probability that their test scores result from the interplay of random factors. On multiple-choice tests, especially, there is a probability that one can achieve a perfect score by just guessing, or one can achieve a failing score by making the wrong guess on one or two questions. With the Race to the Top's increasing insistence on measuring student 'progress', educators everywhere should remember this when officials claim to have good tools for assessing student learning (see Willingham, 2010, Feb. 4, p. A11).

In a final exploration of this theme I wish to recreate another famous thought experiment testing the quantum theory uncertainty principle. In 1935, Erwin Schrodinger devised an experiment where he put a cat (remember all conceptual – never hurt animals) in a sealed box with a potentially radioactive material and a Geiger counter. The substance in the box had equal chances of giving off radiation or remaining inert, but if the Geiger counter detected radioactivity, it would release a poison that would kill the cat. If the radioactive material has an equal chance of either releasing energy or remaining stable, Schrodinger theorized that until one opened the box, the cat would be, according to the uncertainty principal and the premises of quantum theory, simultaneously dead *and* alive – that is until one opened the box and observed the conditions (Greenstein &

Zajonc, 2006). This experiment is simultaneously gruesome and sad, but it highlights the real life problems inherent with uncertainty.

To see how this thought experiment can be applied to an educational setting, let us avoid bombarding hypothetical cats with poison and instead let us use our hypothetical twins in a thought experiment I call *Schrodinger's Eighth Grader*. While both twins are completely safe from poison and radioactivity, we have asked Star to enter the box for a yearlong schooling experience. With plenty of oxygen, food, books, and educational guidance in the box, the only rule for Star is that she cannot have any contact with the outside world (not even texting). For this experiment we have invited a state testing official to open the box at any random time during the school year and then administer a standardized test to assess Star's academic 'progress'. Until the official opens that box however, we are unable to tell if Star is studiously completing her assignments or if she is daydreaming away her captivity - even her twin, Stasha, is unable to tell. Finally, the randomly chosen time comes and the official opens the box, finding a very alive Star ready to take the test; what will be her score? Would her score have been different if the box was opened a week before? Would our judgments about Star's progress have changed if we opened the box a month later? Would she test differently if a different examiner opened the box? Would our judgment of her change if we knew what she was doing all that time?

The point here is not that educators should bury our heads in the sand and never assess student learning. Rather, the thought experiment of *Schrodinger's Eighth Grader* shows that the timing of that observation can radically change the findings. Furthermore, we should suspend the value judgments that go along with these observations in

recognition of the uncertainty in which the data is collected. For example, how many times in our lives does one suddenly have that “aha!” moment when we finally understand a concept? Does time pressure help that moment to come sooner? – Maybe for some, but not for all people. Additionally, is it fair to label a child or make radical decisions regarding her or his education not knowing when that moment will come? Thus, a quantum model of time in education challenges us to suspend judgments about students’ trajectories in their education, and asks us to accept the impossibility of predicting the life outcomes of students with any certainty.

Let us now examine chaos theory and complexity theory, which each have great implications for schools if one is to privilege this discourse. As Cilliers (2005) states,

To *fully* understand a complex system, we need to understand it in all its complexity. Furthermore, because complex systems are open systems, we need to understand the system’s complete environment before we can understand the system, and, of course, the environment is complex in itself. There is no human way of doing this (Cilliers, 2005, p.258, original italics).

Though I am not here to advocate a certain theology, it seems that many people believe there is only one being who is capable of seeing the completeness of our world at all times, simultaneously. It would follow that those educational policy makers who believe we can judge the ‘progress’ of children wish to play the role of the All-Seeing. However, much like Icarus, who wished to fly close to the sun, these people too shall fall.

Let us bring back our stellar student-twins, Star and Stasha, for one more thought experiment to help us illustrate the impact chaos and complexity theories could have on school environments. For this experiment the young women have agreed to return to conceptual identities as physical matter – we can even use the classical conception of the particle to problematize the education race with chaos



theory. Now in ninth grade, the girls have entered a new school - the School of Chaos. The School of Chaos is an open system, just like any other school in which millions, if not trillions, of variables influence the course of learning every day. Teachers often wish they worked in a closed-controlled environment, but we all know that this ideal is just not reality.<sup>144</sup>

Changes in the external factors that affect school learning have always been an elusive, and often ignored, problem in the field of education research. As Radford (2006) states, "The connections that constitute an interlacing pattern within the organization will reach out and both influence and be influenced by factors over which there is limited control" (p. 184). In short, the government and American citizens pay so much attention to accountability in schools. Yet, we do not measure the influence of television, computers, cell phones, nutrition, drugs, differing parenting styles, clothing, air pollution, lighting conditions, water pollutants, friendship networks, heat waves, absent parents, economic factors, bad-hair days, relationship struggles, sexual behavior, neglect, lunar cycles, etc. when measuring 'adequate yearly progress.' The government pretends that the school and the teacher are the most influential variables in a child's education, when in fact, teachers play only one role, sadly, often times a very small role. However, in the current discourse, someone must be responsible for student learning, and today that responsibility rests on the backs of teachers and the 'slow

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<sup>144</sup> While, it has been shown that some of the greatest educators of our time can retain focus and continue reading books like "The Pet Goat" in the most chaotic of circumstances, most of us just need to experience a routine fire-drill to see how one chaotic event can affect the entire day. I once witnessed a school engaged in their state's high-stakes test experience a fire drill in the middle of the testing session – I'm not sure that event fell under the state's conception of standardization.

learners' they identify. Perhaps we should reevaluate the rest of society's role in this endeavor.<sup>145</sup>

Scholars such as Slattery (1995a; 1995b; 2006), Kyburz (2004), and Mason (ed.) (2008) have written extensive arguments for a conceptualization of curriculum as a chaotic and complex endeavor so I will not do that here. However, we must do more in conceptualizing ourselves as chaotic and complex beings. Unfortunately, much of the scholarship that has researched the chaotic nature of academic achievement has focused on urban environments and the 'plight' of African American males (Davis & Jordan, 1994; Fine, 1991; Garibaldi, 1992; Kozol, 1991; Leake & Leake, 1992; Polite, 1993). Let us be clear, chaos affects *every* student, not just those who we traditionally frame as subjects of underprivileged environments. The education of a child in any open system may be as equally affected by the flap of a butterfly wing as any other student in a similarly open system.

In terms of our favorite students in the School of Chaos, Star and Stasha now have teachers who understand their worlds as complex and chaotic spaces. Their teachers understand that it is impossible for one to completely understand the child, and thus they reach out to their students for guidance in understanding what learning goals the class should engage in, and what artifacts they hope to create in their journey of exploration. These teachers see education as an open-ended question, rather than an answer that must be filled-in at the end of each

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<sup>145</sup> Why do J-Woww, Justin Bieber, and the scores of other teen idols get to keep their jobs when kids 'fail' in school, but the people trying to help students learn the desired knowledge lose their jobs? Why do we shut down schools that fail to educate, and leave websites like Facebook and Twitter untouched despite students spending more time looking at that content than they do their homework.

year. Students' work takes them out into the communities and these assignments morph into life-long projects and are a focus year after year. Star's and Stasha's teachers adapt lessons to fit the current needs and interests of their students, and they work to expose their students to new and exciting knowledge that they may have never seen. Students are allowed to play with ideas without fear of being judged, and those who want to be judged can sign up for the challenge. With a discourse of chaos theory, a single history of thought as linear progress cannot be left to stand; progress can shift and change with the flip of a butterfly's wing, and a chaotic event can break that line into a right-angle, or even a U-turn.

What many child development 'experts' positioned within the race to educate fail to recognize in their creation of metrics for measuring 'progress' is that humans do not 'develop' at uniform rates. In terms of physical growth, most parents recognize that the child grows with chaotic irregularity – think of buying shoes for a child, or keeping clothes that fit. Similarly, the cognitive abilities of the mind develop at a non-uniform pace. Most importantly, not every child follows the same path of growth and many 'abnormal' trajectories provide great value for the individual and for society as a whole. However, the discourse of linear time and universal progress creates a powerful truth about uniform human growth that inspires many in American society to have great anxiety about their child's 'development'. While some voices attempt to normalize chaotic growth, the dominant discourse affords privilege to those individuals whose behaviors correspond with predictions.

Syndicated writers Frances L. Ilg and Louise B. Ames capture this conflict in one of their 1957 columns. To begin their article, Ilg & Ames quote a “young father” who explains his anxiety about his child’s chaotic development.<sup>146</sup> The father states,

We thought that child would never walk...Walk! We even began to think he’d never creep...Then one day he was up on his hands and knees, and the very next day he was creeping...We began to think he’d creep to college on all fours. And then one day he stood up and walked almost as suddenly as he had crept earlier (Ilg & Ames, 1957, Mar. 5, p. A6)

Ilg and Ames describe how it was only after the parents consulted a school psychologist that their worries were put to ease. The ‘expert’ described their son as a “spurt and plateau boy” – a child who seems to accomplish several months growth in a few weeks, and then for months seems idle in his (or her<sup>147</sup>) ‘progress’. The father goes on to explain how the same characterization held true for his son’s academic ‘progress’. He states, “The teacher had just about given up, and then overnight, it seemed, he was almost fully educated” (ibid). Left to learn at his own pace, this child proved wrong those who doubted his ability to learn.

In the race to educate, if a child, regardless of gender, remains unpredictable for too long, or fails to progress at the privileged rate, ‘experts’ are called in to fix the problem. However, despite the fact that individual rates of learning are chaotic by nature, the media certainly make clear that ‘slow learning’ and unpredictability are problems. It is this anxiety that pathologizes the millions of spurt-and-plateau boys and girls who struggle to learn while growing up in American society; it is this anxiety that drives the race in education.

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<sup>146</sup> Ilg & Ames give no evidence that either father quoted in their article is actually a real person. They seem, rather, to be characterizations of two differing viewpoints on child ‘development’.

<sup>147</sup> We must remember that these characterizations may apply to individuals positioned anywhere on the gender spectrum, though the male gender is privileged as the most ‘progressed’ in many instances.

## AFTERWORD: MY CONFESSION

A critical ontology aims to clear the terrain so that heretofore silent voices may speak. However, one cannot guarantee that better virtues will fill a power vacuum, especially if individuals are not completely successful in modifying the discourse with the introduction of border knowledge. Just as Lysol promises to kill only “99.9% of germs and odor-causing bacteria,” a

critical ontology does not eradicate

*What's in a name? that which we call a rose, By any other name would smell as sweet; - Romeo & Juliet (Shakspeare [sic], 1840, p. 29)*

100% of a discourse; it merely changes its power, providing room for other voices to play. However, just as that 0.1% of germs may come back stronger and more resistant, I fear that without more work we will only see the discourse of universal time and linear progress continue to grow in its effect on our understanding of human learning.

The effect of this discourse on education policy in the United States is hard to miss, and it is even harder to break away from. As I have written this history, I have awakened to the power that shapes my practice as a middle school social studies teacher, and I am conscious of how my knowledge of time impacts my understanding of myself; yet, I lay trapped on a web of power – stuck in practices that silence my students and limit my moral growth. Though I question my understanding of myself as an object in the race to educate, I still conspire in racing students through their education. “You’re taking too long with that assignment,” “You should know this by now,” “Hurry up, I’m not going to wait for you,” “You don’t have time to do that,” have all been phrases that have escaped my lips even when I know they do not further the educational values I wish to teach. Due dates should be less of a concern than the learning that goes into the project; what students do not know should be less of a concern than what they wish to

learn; my pace should not be the pace of everyone I come into contact with. Yet, I still search for methods that motivate students' to finish the work I privilege; I still complain about students who enter my room without learning 'the basics'; and I still grow frustrated with students who do not complete their assignments. Even though I know that the issue is in my conception of the students and my conception of my role as a teacher, not in my students' abilities. The power of this discourse is strong, even for those who reach for the border.

Each year, I spend September and early October preparing my students for the standardized testing required under the No Child Left Behind policy (before that law was passed I did similar preparation for a test called the TeraNova). In our race to educate, I see students assigned to Response to Intervention groups based on their test scores. We spend days preparing for a second standardized test that determines students' courses in high school; we work on the computer with specialized curricula to speed response times and we hold meetings with parents to consider if we should label a student with an Individualized Education Plan. How does any of this make my students better people? How does it make anyone in our society a better person?

School officials praise this pedagogy as a 'philosopher's stone' for rising test scores, but those scores do not reflect students' anxiety of 'falling behind' or the ways in which students have come to subjugate themselves. Each year I'm confronted by students who call themselves "stupid" because school officials place them in "dumb math" (i.e., the least privileged track) due to their test scores. Others come into my room complaining about their remedial reading class, knowing that some of their higher-scoring peers are learning Spanish next door. Still others sit in my study period

completing tedious work unrelated to their experiences in society while more-privileged students get pulled out to experiment with their latest projects in the 'gifted and talented program'. I need not mention the anxiety that comes about when it is time to schedule classes at the high school – the look on a student's face when one sees that she or he is in a lower track breaks my heart. Like lead tossed away by the disheartened alchemist, students who we do not 'cure' are cast aside for want of more promising pupils. Little do we recognize that the 'dullest' of elements have properties that provide value in our lives – every individual has value, much of it hidden from view, and a beautiful society would value a multiplicity of abilities, humble in our ignorance of what good may come from them.

Moreover, I know many students who anxiously ask for their scores on the standardized test we take on the computer twice a year. We teach them that adding a point or two to their score each year means they are learning; a drop in score only implies the opposite. How must it feel to work for ten months in school and then see that one is scored less intelligent than when one first walked in the door; what is the point of coming to school? We must realize that one chaotic event can create significant variation in students' abilities to perform their knowledge. If we are to run school under a discourse of 'science', then we should stress to students that learning is more than one test score on one day. I will use these scores to determine my teaching policy when I can measure the topics assessed on the test, the level of interest the students will have in each item, the dialect used in forming test questions, and of course, the time allowed for taking the test. Furthermore, in a chaotic world, if I am to more accurately assess the significance of their score, I must measure students' bed-times, their diets, the amount of television they

watch, the number of stories they read as two-year-olds, the amount of exercise they receive, the number of cigarettes their parents smoke, the role models in their lives, how many glasses of alcohol their mother's drank while pregnant, who they had for teachers for the seven years prior to entering eighth grade, who they talk to on the bus, how many minutes they text each day, the number of students in their class, the salaries of their parents....must I go on? If education took place in a hermetically sealed laboratory, than I could judge students based on some standardized test score, but it doesn't, and students should only be held accountable for the factors that they can control.

So how do we teach in a world that denies us the language with which to speak of difference, absent of values? I find myself struggling to speak in a discourse that limits my language. My colleagues seem puzzled when I speak of 'less-privileged learners' or 'students labeled with learning disability', but they need time to piece it together. My students and I enter a debate when I speak of 'differently abled' adults instead of using the terms 'handicapped' or 'disabled', but these discussions must happen. I draw the air out of the room when I switch codes and I ask a colleague if a student is 'retarded', but we must know the power of this history. Why are some of us comfortable today speaking of children as "SPED kids" or "students with learning disabilities" or "children with ADHD," but we cannot imagine using the terms "culturally deprived," "retarded," "moron," "imbecilic," or "idiot?" Most schools would suspend a teacher for calling a student any of the latter terms; however, if we are not comfortable with the labels used decades ago, why are we comfortable assigning new labels with the same stigma?

Some labels change because of modifications in power – racial terms used for describing members of the Black community are one example that comes to mind – and



many change for good reason. Yet, my doctor can tell me I had cardiac arrest, and it is still as painful as a heart attack. We can diagnose students with 'learning disabilities' but the labels are just as stigmatizing as when we called the subjects 'morons'. Changing the labels we place on students has not changed the privilege certain individuals enjoy, in our schools, and that is what must change – language matters not without meaning.

If we wish to produce a beautiful society, we must change the privilege given to 'abnormal' individuals. If we concentrate our efforts on providing *all* students the support *they* need, there seems to be no use for the Individual Education Plan process at all, and certainly no need for labels that stigmatize children and limit their experiences. Therefore, I struggle against the dominant discourse through the practice of critical ontology by asking my students Derrida's question, "Who are you?" I cannot control the politics that write my profession, but I may still play on the margins, and my students may play on the margins of the knowledge that shapes their identities.

With a curriculum that challenges students' subjectivities, my students and I may see the problems with the dominant discourse and work to alter its hold on our lives. Eighth graders are amazed to learn the basic premises of quantum mechanics – the double slit experiment boggles the mind. Why are we waiting to teach these concepts in graduate school instead of grade school? Even if we wish to privilege linear progress, the 'future' is in the former field of study. If we wish to educate future scientists, why are we not educating them on the quantum frontiers of knowledge? Likewise, show a class Rene Magritte's painting "This is not a Pipe" and students will sit talking all period trying to figure out what it is (Foucault, 1982, *This is not a Pipe*). Follow by asking, "Who are you?" and every student will be writing – even if they need to learn the alphabet first.

We live by the clock, but rarely do we teach students the history of this power; it is time we trace the histories that shape our lives. For students to answer, “Who are you?” we must allow them to explore and play on the margins of knowledge – that does not happen when we race in our education. With a curriculum of critical ontology we can stop watching children, and let them grow at their own pace – it’s time...

**APPENDIX**

**Table 1: Term Usage in *New York Times* (Sept. 18, 1851-Dec. 31, 2008)**

<b>Term Usage in <i>New York Times</i></b>							
<b>(Sept. 18, 1851-Dec. 31, 2008)</b>							
	<b>Backward Child*</b>	<b>Feeble-minded</b>	<b>Slow Child*</b>	<b>Slow Learn*</b>	<b>Cultural* Depr*</b>	<b>Learning Disab*</b>	<b>at-risk and student</b>
<b>Before 1900</b>	81	277	3	0	0	0	1
<b>1900-1904</b>	31	73	0	3	0	0	0
<b>1905-1909</b>	37	79	0	0	0	0	0
<b>1910-1914</b>	166	273	1	0	0	0	0
<b>1915-1919</b>	137	186	0	1	0	0	0
<b>1920-1924</b>	168	183	2	1	0	0	0
<b>1925-1929</b>	149	201	0	0	2	0	1
<b>1930-1934</b>	167	229	15	3	0	0	1
<b>1935-1939</b>	181	192	15	23	0	0	1
<b>1940-1944</b>	43	83	13	29	1	0	1
<b>1945-1949</b>	32	76	30	44	1	1	0
<b>1950-1954</b>	8	53	52	95	0	0	0
<b>1955-1959</b>	18	40	64	115	10	0	1
<b>1960-1964</b>	13	23	43	138	104	3	0
<b>1965-1969</b>	9	35	68	280	150	86	1
<b>1970-1974</b>	10	18	20	256	68	615	1
<b>1975-1979</b>	5	22	3	76	57	981	0
<b>1980-1984</b>	2	27	8	106	39	1013	72
<b>1985-1989</b>	2	14	5	44	17	1082	346
<b>1990-1994</b>	3	17	6	55	16	727	332
<b>1995-1999</b>	0	16	3	46	7	700	315
<b>2000-2004</b>	2	26	6	25	3	412	170
<b>2005-2008**</b>	1	12	0	17	2	381	128
<b>*Search terms abbreviated to allow derivations of words.</b>							
<b>**Note: This data does not cover the same number of years as other series in the chart.</b>							

**Table 2: Term Usage in *New York Times* (Sept. 18, 1851-Dec. 31, 2008)**

<b>Term Usage in <i>New York Times</i></b>							
<b>(Sept. 18, 1851-Dec. 31, 2008)</b>							
	"Retarded Child**"	"mentally handicapped"	Moron	Gifted child	gifted student	gifted and talented	fast learn*
Before 1900	0	0	987	21	1	2	52
1900-1904	0	0	71	3	0	2	7
1905-1909	4	0	121	7	2	1	3
1910-1914	2	2	139	4	2	1	5
1915-1919	5	1	215	3	2	0	6
1920-1924	10	4	384	12	4	1	11
1925-1929	29	12	487	27	16	0	10
1930-1934	87	27	561	64	19	1	5
1935-1939	107	33	453	62	15	1	6
1940-1944	148	19	253	77	22	2	14
1945-1949	220	31	468	53	12	0	27
1950-1954	490	48	816	63	25	0	43
1955-1959	667	39	813	158	119	4	58
1960-1964	797	50	1996	174	84	5	67
1965-1969	1122	97	1969	142	40	1	100
1970-1974	986	161	974	122	66	18	106
1975-1979	805	147	2045	164	84	78	214
1980-1984	583	165	1152	258	159	179	286
1985-1989	384	176	1015	199	152	191	280
1990-1994	319	140	769	179	129	162	149
1995-1999	174	77	641	122	167	150	179
2000-2004	78	42	2143	52	98	73	36
2005-2008**	34	28	495	82	108	98	14
*Search terms abbreviated to allow derivations of words.							
**Note: This data does not cover the same number of years as other series in the chart.							

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