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The Art Curriculum as a Model Approach for Cultivating Higher Order Thinking Skills Nicole Ross

A thesis submitted to the Graduate Faculty of

JAMES MADISON UNIVERSITY

In partial fulfillment of the requirements for the degree of

Master of Arts

School of Art, Design, and Art History

August 2018

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Dedication

This thesis is dedicated to my Mom, whose diligence surpasses anyone else's I know, my dad, for encouraging me to learn something new every day, and my sister, whose intelligence and altruism have always been virtues I aspire to.

Acknowledgements

I would like to acknowledge the efforts of Dr. Bill Wightman, Dr. Karin Tollefson, and Dr. Roger Tomhave for offering endless insight and advice, not only regarding this body of work, but life pursuits, and everyday minutiae as well. I would also like to acknowledge the contributions and feedback from Dr. Barbara Stern, who was a major influence on this research—even halfway across the country.

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Abstract

As a life-long learner, I am fascinated by the abyss of knowledge that characterizes and composes a life of consciousness. As a teacher and mentor, I am committed to igniting this quest for knowledge in others and developing effective practices in doing so. The curriculum functions as an invitation to knowledge—or what can be seen as the crux of an education. The question I am most interested in answering is: "how can we most effectively approach curriculum in a way that inspires higher order thinking?" Throughout this study, I examined the factors that go into the formation of curriculum, the various types of thinking that different formats of curricula promote, and the potential for an alternative curriculum that would cultivate complex thinking. In the process, I analyzed the Standards of Learning (SOLs) in Virginia, 8th grade unit documents from World History I (WHI), English, and Art, observed classrooms, and interviewed both teacher and student participants. It is my opinion that the structure, format, and epistemological character of the art curriculum could function as a model approach for promoting higher order thinking skills. While curriculum is a constantly debated topic and is only as effective as it is reflective of society, this research is viewed as furthering discussions regarding the formation of a 21st century curriculum.

Keywords: curriculum, higher order thinking, art education, History, English, Standards of Learning (SOLs), standards-based curriculum

Chapter One: Background of Study

The concept of my research was really born out of a Curriculum Theory and Research class that I took at the graduate level with Dr. Barbara Stern. In this class, we studied the evolution of the curriculum and curriculum theory, what was considered worth knowing, and how these decisions were made. I became aware of the various implications that the social, political, philosophical, and economic climate had on the education, and I began to wonder how much of the curriculum was actually concerned with the needs of the individual. Particularly, the development of an individual's higher order and complex thinking capacities.

Reflecting back on my own experience as an Art teacher, a politically and economically charged curriculum didn't seem to be the case—it was much the opposite. The students were the foundation for every lesson plan, and difficult discussions and project synthesis were the driving forces behind learning. The objectives in my classroom, as well as the themes, structure, and climate did not look much like the environment of other classes. Discussions were not fully premeditated or angled towards a particular conclusion, but instead embraced the "widest possible variety of alternatives" (Schwab, 1982, p. 319). The parameters of art projects were loosely defined in structure in order to ensure that each individual could approach the themes and materials from their own idiosyncratic perspective. Students were engaged of their own volition, verbally curious about concepts in discussions, experimental in their thoughts and ideas, appreciative of alternative conceptions, innovative in their making, and profound in their connections.

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I tried to reconcile why this was the case in my classroom, but not for other content areas, and resolved that it was—in large part—the result of the less stringent curriculum in art. While core content classes were prescribed explicit and extensive information for students to master, the art curriculum revolved more around broad ideas and skills. The standards of learning for art in Virginia were pointedly less specific and less detailed than core content classes, which allowed for more flexibility in my planning and teaching. Although comprehensive and effective, the loose vernacular of the art SOLs offered flexibility—not only for the teacher, but also for the students. The objectives, themes, structure, and climate fostered a community of curious researchers, autonomous learners, and broad-minded individuals. I was curious to understand whether or not the format and content of the standards-based curriculum in art, and the resulting instruction and climate of the class, contributed to different types of thinking as compared to other formats of standards-based curriculum.

Statement of Problem

It became clear within my first few weeks as a teacher that the students in my classroom were not in the habit of higher order thinking. Instead, they were "dependent on instructions" (Cabrera, 2011). I suppose I had a looser approach to teaching and learning than what they had become accustomed to in school. I tried to balance the parameters of a project with flexible artistic agency, and in many cases, the subject matter of a project was left to the students' devices. The majority of my students would look blankly at me when I would announce a project without a specific delineation of step-bystep instructions. As a guide, I also stressed the subjective and dialectical nature of art. Students were asked to consider multiple perspectives when looking at art, as well as to

make connections from a multitude of angles. This relativistic approach to knowledge was also new for students—and they seemed frustrated with its' indeterminacy. I could tell that they had adopted a linear way of thinking, and I was determined to disrupt it.

Although current students are subjected to much more information than students were a decade ago, it doesn't necessarily correlate with a higher level of knowledge definitely not higher order thinking capacities. The current standards-based curriculum seems to be "over engineering the content curriculum...[and] surgically removing the thinking so that kids are simply following instructions" (Cabrera, 2011). What this approach has cultivated in schools is an environment of passive learning and rote memorization. Essentially, "kids are flooded with information...encouraged to begin memorizing and regurgitating...[and] look only for the right answer" (Cabrera, 2011). This is predominantly the case in core content area curricula. Students have been forced to accept fixed knowledge, singular truths, and asked to avoid being incorrect. Alternatively, it is my belief that "curriculum thought must assume that teachers and students possess agency...capable of self-determination, self-expression and strong evaluation" and fallibility (Alexander, 2005, p. 345). In class, students engage with "simple connectionist situations," yet, "complicated, unstructured situations" promote more complex thinking (Gredler, 2009, p. 64). This unstructured environment, combined with ill-defined concepts, was exactly what my students needed to break the chains of standardization. In other words, the art curriculum helped promote the complex thinking that these students were lacking.

Hanan Alexander's article *Human agency and the curriculum* explores the less structured environment of an art classroom and the potential it could have as a model curriculum:

The academic curriculum prefers discursive expression of logical form. It aims to convey concepts, methods of inquiry and truths in the precise theoretical language associated with scholarship. The fine arts on the other hand, aim to capture the dynamic form of human feeling in non-discursive expression such as symbols and metaphors. To take seriously the image of teaching and education as fine arts, then, we must understand how they use non-discursive expression to capture and communicate the shape of human feeling. (2005, p. 353)

Unfortunately, though, the arts have often been seen as marginalized in schools throughout the history of American Education. The types of thinking and learning promoted in less structured disciplines (like the arts) are uneasily measured and compared, which is arguably reason for their being overlooked. Ironically, it is my belief that the arts are one of few content areas that offer individuals copious opportunities for higher order thinking. Heath (2014) suspects that "it is nearly impossible to box off one or two key skills or cognitive growth areas as unaffected by sustained arts practice (p. 358). The problem that this body of research emphasizes is not the sidelining of the arts, per se, but the marginalization of higher order thinking in general.

Since the Elementary and Secondary Education Act of 1965, the "School has become subject to aversive control through accountability standards that rely on student performance on standardized achievement tests" (Gredler, 2009, p. 117). This, in turn, has significantly reduced the time available for in-depth rumination and consideration of

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information in various contexts. Maintenance learning has become the priority, whether intentional or not. Oppositely, elaborative and germane learning is what I believe should be emphasized in the curriculum. If these types of thinking are neglected, then schools are arguably "forming children who are only capable of learning what is already known" (Davidson Films, 1973). Thus, the problem is how to create a curriculum that engages students in complex and higher order thinking that will ultimately prepare them for the dynamics of contemporary culture.

In reflecting upon the shortcomings of the standards-based curricula and the natural inclination to dismiss the arts as fertile grounds for learning outcomes, I'd like to redirect curricular research towards the successes of art education with respect to their fostering of higher order thinking skills. And so, it has become my muse to examine the fallouts and triumphs of these varying formats of standards-based curricula, and to identify the different types of thinking promoted within them.

Statement of Need

The nationally adopted standards-based curricula in public schools across America is wildly antiquated and unfit for equipping individuals with the higher order thinking skill that are necessary in the 21st century (Finn & Ravitch, 2007, p.2). The standardization of curriculum is cultivating students with inflexible schema who are ill-fit for the complex conversations of modern society. In *the Assault on Public Education*, the late William Watkins explains, "dramatic changes are underway in America and the world. The physical and ideological landscape of the nation is being reconfigured" (2015, Intro). Through my research, I have found that education has had a way of reflecting the climate of society—up until the 1950s. Since the Cold War Era, the intentions of the curriculum have debatably remained stagnant. Why is it that the intent, structure, and content of the curriculum have not been reflective of the zeitgeist of society for the last seven decades?

Since the Elementary and Secondary Education Act of 1965, the "School has become subject to aversive control through accountability standards that rely on student performance on standardized achievement tests" (Gredler, 2009, p. 117). This, in turn, has significantly reduced the time available for in-depth exploration of information in various contexts. A 21st century curriculum needs to "prepare active citizens who are able to face the challenges of a global society; able to be innovative in order to solve complex problems" (Alismail & McGuire, 2015, p. 154). Latent learning, rote memorization, and well-defined problem solving are not the vehicle to this end. When students are given sets of information to commit to memory, superficial thinking is the only learning outcome. What students need is to "find new ways of thinking and working through uncertainty" (Heath, 2014, p. 361). They need a curriculum that asks them to use their own voice—to find the dead ends in their own logic and become familiar with "experiences that are fleeting and in flux" (Alexander, 2005, p. 352). The "anti-democratic restructuring of education" has really hindered the individual's voice (Apple, 2014, p. 210). The current curriculum presents knowledge as exclusively black and white-but the conversations of society are all hovering in the gray area. A thinking curriculum is in order.

As Alismail and McGuire explain, "a thinking curriculum is one that provides a deep understanding of the subject and the ability to apply that understanding to the complex real-world problems that the student will face as an adult" (2015, p. 152). In the classroom, this translates into application, analysis, evaluation, and synthesis—an

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amalgamation of "knowledge, thinking, innovation, skills, [and] media" (Alismail & McGuire, 2015, p. 151). In other words, a 21st century curriculum needs more of what is found in visual arts curriculum and instruction. Numerous studies have shown that, "the brain learns faster in challenging, creative, accommodating, and healthy environments where student expression and choice are solicited," and that "the more parts of your brain you use, the more likely you are to retain information" (Gredler, 2009, p. 77; Bhatia, 2018, p. 90). This is inherent of artistic endeavors. Through observing, looking, listening, designing, connecting, and inquiring, students make more associations with new information that results in their creating complex networks of schema. Ultimately, a new curriculum is in order that will "enable students to make informed decisions that prepare them to face challenges in the global community and give them the opportunity to be successful in the workplace" (Alismail & McGuire, 2015, p. 151). This research project attempts to address this need and to propose a more adequate approach.

Research Questions

- 1. How has curriculum evolved into the standards-based frameworks that dominate public schooling?
 - a. What economic, social, and political factors have contributed to the design of curriculum?
 - b. What learning and curriculum theories have contributed to the design of the curriculum?
- 2. What types of thinking do different formats of standards-based curriculum promote?

3. How can curriculum be better designed and implemented to promote higher order thinking skills?

Assumptions

The conclusions drawn in this study hinge on the assumptions that 1) The historical trajectories of educational aims, learning theories, curriculum theories, written curricula, and art education have influenced the current standards-based curricula; 2) Teachers are influenced by the adopted curricula in their lesson planning and instruction; 3) The adopted curricula influence what and how students learn.

Limitations

The conclusions of this research are limited to 1) The specific 8th grade curricula in the content areas of WHI, English, and Visual Art; 2) The unit documents of the selected teacher participants and myself; 3) The perspectives and experiences of the selected teacher participants, the student participant, and myself; 4) The categories included in the coding instrument, and 5) Educational resources found through the James Madison University research databases.

Definitions

<u>Written // Prescribed // Recommended // Adopted Curriculum:</u> indicates the general goals and specific objectives to be mastered in a content area, and a scope and sequence for their implementation.

*Written, prescribed, recommended, and adopted curriculum are used interchangeably within this study.

<u>Taught Curriculum</u>: the curriculum that is actually delivered within a learning environment.

<u>Standards-Based Curriculum:</u> a curricular system composed of standardized learning objectives that delineate the academic expectations in a given class, discipline, or grade level.

<u>Standards of Learning (SOLs)</u>: the specific learning objectives that compose the curriculum of each content area (in each grade level) in Virginia.

<u>Structured Learning</u>: learning characterized by sequencing, planning, measurable outcomes, and clearly delineated content.

<u>Less Structured Learning</u>: skills, knowledge, and attitudes that can be achieved without the constraints of structured learning.

<u>Classroom Climate</u>: the social, emotional, and educational atmosphere of a learning space.

<u>Core Classes:</u> the generally accepted 'common core' subjects of Math, Science, English, and History.

Educational Aims: The mission, goals, and intentions of schooling.

<u>Higher order Thinking</u>: thinking that involves application, analysis, evaluation, and synthesis of information.

<u>Lower-level Thinking</u>: thinking that involves the recitation and comprehension of knowledge.

Procedural Overview

Phase One. This research study, based on historical, quasi-experimental, auto ethnography, and case study research methods, was conducted in three phases over the

course of eight months. The initial phase of research involved an in-depth study of the history of American public-school education. This research was precursory to a comprehensive analysis of the current curricula offered to 8th graders in three content areas: World History, English, and Art. The social, political, philosophical, and economic implications of public school education were disclosed throughout thorough recounting of American educational aims, learning theories, curriculum theories, written curricula, and the evolution of art education. The trajectory of all of these fields gave context for the current state of public school education in America and were instrumental in understanding the genesis of current curricular structures and practices. Having fleshed out the nuances of public school education, the tendencies of curriculum, and the trajectory of art education, I proceeded to the second phase of the study.

Phase Two. The second phase of this study involved analyzing the standardized curricula for 8th grade World History, English, and Art. I was specifically looking for evidence of various types of thinking that the written curricula emphasized. This component of the study also included the analysis of a unit of study in each of the three content areas. The lesson plans, activities, and assessments from a unit that was taught in the spring of 2018 were collected for examination of the types of thinking promoted. This research was coupled with first-hand observations of these units (two times in each WHI and English 8) being implemented to current 8th graders to enhance my understanding of the unit documents, as well as the manifestation of the adopted curriculum within the classroom. Copious field notes were recorded during classroom observations based on the teacher's questioning prompts. My own lesson plans, activity, and assessment data for an 8th grade art unit implemented in 2015 were analyzed on the

same caliber and according to the same parameters. Although direct observation was not recorded of three classes, my understanding of my own instruction was a given. In phase two of the research, the two teacher participants (WHI and English) were interviewed before and after observations in an effort to understand their experiences with various formats of curricula, their implementation of the standards and their various perspective regarding the written curricula.

Phase Three. The final phase of the study involved a student who participated in all three courses during the 2015-16 schoolyear. The student was likewise interviewed regarding his perspectives on the learning that was fostered in each of these courses.

Chapter Two: Literature Review

Introduction

It is imperative to rewind a couple hundred years in order to informatively examine the current standards-based curricula ubiquitous in American public schools. In order to fully understand the infrastructure, both past and present, it is crucial to also comprehend the social, political, economic, and philosophical implications of the time. Plainly put, "from their beginnings in the 1840s, public schools have stood at the nexus of many US events" (Steeves et. al, 2009, p. 72). Public school education is not its own entity—it never has been. In the following sections, an analysis of the evolution of educational aims, learning theories, curriculum theories, and written curricula in America since the late 1800s is offered. The implications of each of these aspects of American culture are ultimately funneled into the evolution of public-school art education. With a firm grasp on the influences on education throughout the history of formal public schooling, this inquiry examines the nuances of the current state of the standards-based curriculum, and where the art curriculum diverges with it. Literature regarding the advantages and disadvantages of varying formats of standards-based curricula are then examined from several perspectives.

The Evolution of Educational Aims

Historically, the intentions of education in America have reflected national trends and international involvement. Education in the 19th century was characterized largely by religion and foundational American values. Emphasis was placed on recitation literacy, rationalism, and absolute truths. Education in the 20th century cannot be narrowly generalized—as it underwent at least four significant reformations instrumental to the construction of contemporary educational aims. 20th century education was influenced by "factors such as a changing political climate and populace, calls for strengthening national competitiveness, and shifting ideological beliefs about the role of public education" (DeBoer, 2012, p. 424).

During World War I, educational focuses included health, fundamental processes, family values, vocation, civic responsibility, meaningful leisure activity, and character ethics (Schugurensky, 2005, p. 1). These values together formed the 7 Cardinal Principles which were established in 1918 by the National Education Association of the United States. They were reflective of American involvement in total war efforts and an industrializing society. World War II fostered opposing educational values, namely the promotion of mathematics, science, technology, and foreign language. This shift was the product of international innovation competition and paradigm polarities (Steeves et. al., 2009, p. 72). Cold War education was emphasized by the government's "unprecedented role in the development of national education priorities" (Steeves et. al., 2009, p. 73). The Cold War marked the nascence of forceful governmental involvement in public school education. Education was the scapegoat for the loss to the Soviets in the race to space, and also the remedy for a return to global prowess. Students, then, were envisioned as bolstering national defense. The result was a model of education that did not view students "as individuals in process, but as means to a fabricated end" (Steeves et. al., 2009, p. 73).

Conflicting philosophies quickly arose in the 1960s and 70s, due to the Civil Rights Movement, and its corresponding educational agenda. This era of education

emphasized equal educational opportunities for Native Americans, African Americans, Latin Americans, women, and handicapped populations all primarily driven by President Lyndon B. Johnson's War on Poverty (Boers, 2007, p. 141). The 1980s saw another reformation—centering curriculum around America as a global economic competitor. Test scores of American students were compared with those of Japanese students, and the disconnect was alarming to officials. A Nation at Risk was published in 1983 and reported on the failure of schools in America as a result of "apathy, unaccountability, government shortsightedness, and the failures of progressive education reform" (Steeves et. al., 2009, p. 75). In response, the federal government assumed even more control of the "development, implementation, and evaluation of education policy" (Steeves et al., 2009, p. 75). Assessment-based learning took the forefront and remains prevalent in contemporary educational practices. Emphasis was placed on the quantifiability and translatability of learning outcomes. A Nation at Risk triggered the establishment of Goals 2000, which lead to the 2001 enactment of No Child Left Behind (NCLB)-further instituting the standardization of knowledge, curriculum, assessment, and instructional practices. Since NCLB, public education in the 21st century has experimented with other models of curriculum and instruction yet remained chiefly dictated by these principles of standardization.

Particularly influential on the current state of American public education were the values established during the industrialization of the first half of the 20th century, the Cold War Era, *A Nation at Risk*, Goals 2000, and NCLB. During the second half of the 20th century, the government increasingly assumed authority over educational affairs. Emphasis on science, technology, engineering, and math gained prevalence and secured a

primary focus in the curriculum. These domains were understood to be the most relevant regarding international affairs, as well as objective and measurable in nature, thus catering to the standardization and accountability of schools.

Industrialization in America triggered a paradigm shift in educational values. Traditionally appreciated skills such as "reading, writing, arithmetic, geography, and history" (Tyler, 1981, p. 600) were gradually dismissed from classroom agendas and replaced with "emphasis on vocational education, vocational guidance, the junior high school, and the science of educational measurement" (Boers, 2007, p. 48). The transformation of educational agendas escalated during "the period from 1931 until 1942, when the United States got deeply involved in World War II" and resulted in "extensive curriculum development" (Tyler, 1981, p. 599). The mission of education during the industrialization era was to sort individuals into their most productive career path. In Boers's words, education was essentially designed to "train individuals in specific areas for specific occupations to serve as human capital to catapult America into a global economic leadership role" (Boers, 2007, p. 137). The implementation of information was largely reflective of Taylorism factory organization, which was composed of "hierarchical control, social efficiency thinking, and scientific management" (Boers, 2007, p. 48). In other words, learning was designed around "training workers for their best job and making them cooperate" (Boers, 2007, p. 48). The paradigm shift in education during the industrial revolution arguably instigated the push for standardization of curriculum.

Curriculum research in America gained overwhelming traction during the Cold War Era. With the successful advancement of artificial intelligence, America felt

threatened by Soviet communist power and inferior in scientific feats. Naturally, the education system in America was faulted with this inferiority, and an internal investigation of the curriculum was initiated. In 1958, President Dwight D. Eisenhower's administration established the National Defense Education Act (NDEA) which pledged funding to primary, secondary, and higher education institutions specifically for improving the science curricula (Hunt, 2013, p. 1). This act declared math, science, and foreign language the primary focus of education as well as technology, vocational training, and sociological studies (Boers, 2009, p. 139). During this time, schools also took on the identity of "social centers so that they could shape society" (Boers, 2007, p. 138). This was achieved through the establishment of playgrounds, auditorium arenas, school sports, assemblies, and student newspapers, which all supported a semblance of democracy. Essentially, education was redefined to mitigate the fear of a communist takeover and best prepare America for war with the Soviets (Boers, 2007, p. 39). In this model, curriculum was assessment-centered. A legislative framework for curricula was established, and standardized testing was promoted in order to quantify learning outcomes of students. The Cold War Era dismissed child-centered educational aims, and replaced these with social, economic, and political agendas instead in a teacher-centric model.

A Nation at Risk was the result of a decade of concern regarding the standing of American education. In the years after World War II, America had reclaimed its territory at the top of scientific and technological innovation, however, America began to feel threatened by other nations economically. In A Nation at Risk: The Imperative for Educational Reform (1983), David P. Gardner explores the underpinnings of the report: In the late 1970s and early 1980s, there was widespread public perception that something [was] seriously remiss in our educational system. There was a general concern that the U.S. educational system was falling short of the implicit goal of keeping American students better educated than students in the rest of the world. Longtime U.S. industries were becoming challenged by high quality products produced less expensively overseas; many believed this was due to American students falling behind their foreign counterparts in learning the skills necessary to keep the American economy afloat. Consequently, the federal governmentinitiated steps to examine the quality of the education students in U.S. schools were receiving. (p. 1)

The report disclosed comparisons made between the curriculum and teaching methods of selected nations. The education system in the United States was juxtaposed with that of West Germany, Japan, Canada, and the USSR—and came up short. The report concluded "that declines in educational performance [were] in large part the result of disturbing inadequacies in the way the educational process itself [was] often conducted... [as in] content, expectations, time, and teaching" (National Commission on Excellence in Education, 1983, p. 120). The government set out to oversee these four pillars of schools, ultimately trying to determine the who, what, when, and where of the curriculum. Once again, a back-to-basics approach to education was installed. While industrialization and The Cold War Era set the stage for politically, socially, and economically motivated, teacher-centric and standardized education, the *A Nation at Risk* report triggered the explicit federalization of public schooling in America.

Goals 2000 was a reform proposal drafted by the Clinton Administration, and was the response of action to *A Nation at Risk*. The proposal sought to "create a national structure for supporting school reform" by establishing three measures: "(1) education goals, standards, and assessments; (2) state and local educational reform; and (3) work force standards" (Stedman, J. B., and, O., & Library of Congress, W. S., 1993, p. 1). This proposal authorized financial grants to state and local education institutions for adhering to the mandates of the report, thus incentivizing schools to comply. It also established a board to "develop a national system of voluntary occupational standards and certification" (Stedman, J. B., and, O., & Library of Congress, W. S., 1993, p. 1). With this proposal, adopting national content and assessment standards became essentially a condition of funding. The goals outlined in this proposal were to be met by the year 2000 and paved the way for further federalization and standardization of the curriculum.

The No Child Left Behind (NCLB) policy of 2001 followed Goals 2000 with continued federalization and standardization of the curriculum. NCLB's greatest legacy was the emphasis on "centralized accountability" (DeBoer, 2012, p. 419). This policy required that districts, schools, teachers, and students would be held accountable for mastering learning objectives. NCLB all but mandated standardized curricula and high-stakes testing in public schools across America. Without documentation of "content and achievement standards, aligned assessments, school report card procedures, and statewide systems," schools did not qualify for federal school improvement funding (Paige, et. Al., 2002, p. 10). NCLB originated in an effort to improve education through methods of accountability and competition among schools, yet ultimately promoted yet another business model of education. Capitalist underpinnings are evidently at work under

NCLB, again proving the all-but child centered nature of modern American education. The conditional funding further federalized the structures of schools, and the mandated annual yearly progress reports and implementation of required standardized testing galvanized the centralization of curriculum.

The dawn of industrialization cultivated the social, economic, and political educational agenda that would be the foundation for the future of public schools. In public schools today, the value of sameness still trumps the value of the individual, as the growth of the individual is secondary to the promotion of global economic, political, and social competence. The Cold War Era triggered the federalization that is representative of today's education. These values, along with centralization and accountability, were reinforced with A Nation at Risk later in the 1900s, Goals 2000, and No Child Left Behind at the turn of the 21st century. These events have set the precedent in schools that "a specific agenda is set [by the federal government], policies are put into place, and results are expected" (Steeves et al., 2009, p. 79). Contemporary public education remains in the age of accountability, centralization, and standardization. Classrooms are overwhelmingly commanded by the state and federal government. State and federal policy-makers have established a national curriculum "clear enough and standard in such a way that anyone [can] teach it to any group of students" (Steeves et. al., 2009, p. 78). Teacher-proof curricula are commonplace now and include curricular frameworks and scope and sequence documents. Schools are still held accountable for standardized test results, and federally supported accordingly.

While these five historical developments have had a significant impact on the curricula that exist in schools today, many other factors have been in play as well. In the

following section, the trajectory of learning theory research and the implications it has had on the curriculum will be discussed.

The Evolution of Learning Theories

Learning theories have developed alongside educational reforms and are, likewise, reflective and indicative of the times. Learning theorists research the "acquisition of a variety of capabilities and skills, strategies for functioning the world, and attitudes and beliefs" (Gredler, 2009, p. 2-3). Learning theorists propose how to compose instruction to most effectively promote learning. Understanding various philosophies regarding how and when learning takes place are essential for pinpointing where these moments are prompted in the current curriculum. For the purposes of this study, the development of learning theories can be organized into five main platforms that span across the 20th century and into the first two decades of the 21st century. Behaviorism was the focus of learning theorists for the majority of the first half of the 20th century, followed by cognitivism, constructivism, brain-based learning, and multiple intelligences. Each of these theories assumes a different approach to ontology, epistemology, research, hypotheses, and conclusions regarding the act of learning.

The study of behaviorism was prompted by the hasty industrialization of the 1900s, and was predominantly shaped by theorists Ivan Pavlov, John B. Watson, Edward Thorndike, and B.F. Skinner. With the onslaught of factory work and social efficiency concerns, behaviorists set about to uncover how and when the behaviors necessary for this kind of labor could best be learned. Observable actions were the focus of behaviorist research and were studied in their simplest form. The process of learning was believed to be evidenced through behavioral change (Gredler, 2009, p. 37). In short, Pavlov's

research indicated that involuntary behaviors could be manipulated with conditioned stimuli (Gredler, 2009, p. 38-39). His theory is known as classical conditioning and was extrapolated by Watson onto human emotional responses. Watson's research illustrated how human emotional responses could also be manipulated through stimulus-response pairing (Gredler, 2009, p. 42-43). Pavlov's classical conditioning and Watson's behaviorism can be recognized in the factory-schooling model emphasizing teachercentric instruction and subsequent standardized student production.

Thorndike's research varied from his predecessors in that he studied voluntary, self-directed behaviors. His theory—Connectionism—illustrated how a subject establishes their own personal associations with stimuli and self-initiated behaviors (Gredler, 2009, p. 46). Thorndike's research suggested that a correct response (or incorrect response) could be gradually strengthened through repeated exposure (Gredler, 2009, p. 47-48). Thus, repetition was crucial in the process of learning according to Thorndike's work, which arguably gave rise to the "busy work" common in instructional practices today. Skinner's Operant Conditioning (1938) emphasized positive and negative reinforcement in the process of learning. He supplanted this notion with primary, secondary, and generalized reinforcement. These reinforcers were believed to promote learning through the use of programmed and scheduled reinforcement. Ultimately the mission of Operant Conditioning was to develop "progressively more accurate behaviors" such as contingency and rule-governed behaviors (Gredler, 2009, p. 115). Together, Connectionism and Operant Conditioning contributed to the authoritative and mechanistic nature of schooling during the era of industrialization.

Broadly, behaviorist research contributed to the teacher-centric, authoritarian classroom with programmed instruction, and harbored passive student learning of given knowledge, and the rote memorization of information. Behaviorist research can be linked to Taylor's factory model emphasizing "punctuality, work habits, and, most of all, standardization of procedures" that shaped not only American industry, but evidently, education and curriculum as well (Boers, 2007, p. 137).

Cognitivism developed out of behaviorism and in response to the problemsolving, scientific, and technological innovation crisis triggered by The Cold War Era. America was concerned with the status of education after Russia surpassed the US in the race to space, and education was accordingly pitted "as the guardian of a free society's scholarship and technological achievements" (Gredler, 2009, p. 14). Cognitivism focused more on mental processes than on voluntary or involuntary responses in order to better understand how to cultivate higher order thinking. While behaviorism neglected the human conscience entirely, cognitivist researchers studied the process of how individuals connect symbols in a meaningful way. Jean Piaget was instrumental in this research, as his Developmental Psychology research (1963) set the stage for cognitivism.

Piaget delineated four stages of cognition including sensorimotor (0-2yrs.), preoperational (2-7yrs.), concrete operational (7-11yrs.), and formal operational (11yrs. on) (Gredler, 2009, p. 280). These phases represented mental processes that were inherent of each age group and indicate what is mentally possible of a child at each stage of development. This research was especially influential in the re-organization of curriculum to be grade-level specific. Piaget's Cognitive Development Theory also insinuated that learning was a process—not an instantaneous moment. According to this theory, knowledge was something that individuals build upon as they mentally mature and interact with the environment, connecting new information to prior learning. Piaget recommended engaging activities, student-directed research, simulations, role playing, and a variety of disciplines in the schools (Gredler, 2009, p. 291-92). Physically engaging with information was the proposed solution for the innovation deficit caused by the characteristic direct instruction of behaviorism. This model diverged remarkably from the behaviorist factory-model of schooling and influenced subsequent learning theory research.

Jerome Bruner believed the purpose of education should be to promote the mental growth of an individual, not the rote memorization of information. The education he imagined would be based on real life, and students would discover knowledge through interacting in these situations. His theory of Discovery Learning further promoted problem-solving education through *ad hoc* teaching. Discovery Learning (1966) promoted inquiry, hypothesis-testing, curiosity, engagement, and the scaffolding of information within the classroom (Gredler, 2009, p. 14). These methods of instruction were believed to be crucial for developing the creative problem-solving skills necessary for national security.

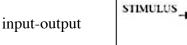
David Ausubel's Theory of Meaningful Learning, also known as the Assimilation Theory (1963), pushed cognitivism beyond Piaget's stages. Ausubel's research applied more directly to the classroom and the delivery of instruction. He believed that new information had to be assimilated into prior knowledge in order for individuals to make sense and meaning of it. Information could be superordinate, ordinate, or subordinate in combinatorial learning. For any of these cases, the interaction of new and existing information would result in stronger cognitive structures: "the essential role of the student's prior knowledge in learning" (Gredler, 2009, p. 215). Ausubel, like Piaget and Bruner, valued meaning-making over rote memorization of information. Instruction for meaningful learning encouraged more structure and organization of curricula.

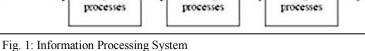
Although cognitivist research largely valued perception and cognition, Donald Broadbent's Filter Model of Attention (1958) ultimately dominated the translation of cognitivism into the classroom (Gredler, 2009, p. 17). Broadbent proposed a model of mental processes based on information processing, which compared the process of

Input

learning to the

processing of





Storage

computers. Broadbent and other theorists contributed to the Information Processing System which is visually represented in figure 1. Not surprisingly, this research developed around the same time that computers were invented. Broadbent theorized that humans had a limited capacity for information to be processed and, therefore, a selective filter determined which pieces would be transmitted for further processing (Broadbent, 1958, p. 10). Thus, "a filter at the entrance to the nervous system which will pass some classes of stimuli but not others" existed (Broadbent, 1958, p. 47). Broadbent's research promoted an education "whereby individuals perceive, encode, remember, recall, and apply information or knowledge" (Gredler, 2009, p. 215). In practice, this recreated another mechanistic style of schooling. Even with the precedence of a problem-solving curricula, cognitivist approaches to education "expected students to master, in a preordained sequence, sets of facts and procedures that represent the content domain"

RESPONSE

Output

(Gredler, 2009, p. 251). Ultimately, cognitivism fell short in changing the epistemological approach to knowledge and failed to alter the deterministic, *one-size-fits-all* classroom of traditional education.

Constructivism developed in response to cognitivism and expanded the study of acquiring knowledge beyond the individual. Constructivist theorists believed that learning was picked up through observation and sensorial experience, and thus, was a social process (Gredler, 2009, p. 320-23). The study of constructivism pivoted from behaviorism and cognitivism and redirected focus to the nature of knowledge and metacognition. Epistemological and ontological approaches also differed significantly. This transformation was reflective of the Civil Rights Movement, and the climate of the 60s and 70s, as well as a move away from the mechanistic, factory-model schools of previous generations.

Lev Vygotsky and Albert Bandura led the movement from cognitive research to constructivist research in the late 1970s. Constructivism hinged on the notion that knowledge was created both individually and socially (Gredler, 2009, p. 313). Bandura's Social Learning Theory (1977) posited that learning takes place via imitation, modeling, demonstration, and collaborative group work. He discovered this through studying the interactions of a child and a Bobo Doll before and after the child observed another individual's interactions with the same doll. This suggested that knowledge is actively constructed, contextualized, and social—a "three-way interaction between the environment, personal factors, and behaviors" responsible for learning (Gredler, 2009, p. 372). Beyond stimulus-response and mental processes, constructivism introduced the environment into the process of learning.

Vygotsky's Social Developmental Theory (1978) also supported the notion of social learning, posturing that learning occurs first at the social level and then on the individual level: "first between people as an intermental category, then within the child as an intramental category" (Gredler, 2009, p. 321). In other words, students first encounter knowledge socially, and then master knowledge independently. He also published the Zone of Proximal Development Theory in 1978, further corroborating this notion. This theory described a specific moment in which an individual is learning at their maximum capacity. This moment was coined the Zone of Proximal Development (ZPD)-existing in between an individual's ability to perform a task independently and their ability to perform it with guidance (Gredler, 2009, p. 449). At this moment, a second individual, or more knowledgeable other (MKO) steps in to help the student attain the skill they are trying to master. The child then masters the skill independently. Vygotsky's Social Developmental and Zone of Proximal Development Theories supported more of a collaborative learning experience in the classroom. Scaffolding and learning with a MKO was integral to instruction, unlike the teacher-centric model of schooling during the Industrial Revolution. In this model, knowledge was discovered both by the individual and collectively, and was recognized for its dialectical and relative truth. Analogously in American culture, conventional knowledge was being challenged and multiple perspectives became more valuable than one singular truth.

Bandura and Vygotsky's work promoted the return to a child-centered education through evidence that mental processes and growth were idiosyncratic to each student and needed to be catered to uniquely. Constructivists emphasized reasoning, active listening, and verbalizing viewpoints. In the classroom, scaffolding was crucial, as was group-work, dialogue, and autonomous learning. This approach emphasized mastery learning, applying knowledge, pupil-centered instruction, and questioning within the classroom (Gredler, 2009, p. 208).

Robert Gagne's Conditions of Learning Theory (1985) expanded upon the Information Processing Systems Theory and a return to behaviorism. His research took place around the time of *A Nation at Risk and* reflected the report's call for a return to standardized curriculum. He hypothesized five products of learning including verbal skills, intellectual skills, cognitive strategies, motor skills, and attitudes (Gredler, 2009, p. 150). He also proposed a learning hierarchy including discriminate, concept, rule, and higher order rule learning (Gredler, 2009, p. 158). Higher order rule learning (problemsolving) was at the top of the hierarchy and is reflective of the federal push for a more innovative society, while the other types of thinking are reflective of behaviorist approaches. Gagne delineated the steps necessary to achieve learning outcomes in his Instruction Design Concepts. This design included nine steps for cultivating learning and was influential in the inception of curricular frameworks present in the adopted curricula today (Gredler, 2009, p. 155). The Instructional Design Concepts promoted a teachercentric, mechanistic classroom of passive student-learning and absolute knowledge.

Brain Based Learning (BBL) surfaced in the late 1980s to combat Gagne's behaviorist model and the standardized centralization of education prompted by *A Nation at Risk*. BBL is contemporary learning theory research and is reflective of neuroscientific research and constructivism. Brain Based Learning functions based on twelve assumptions: 1) the brain is a parallel processor, 2) learning engages the entire physiology, 3) the search for meaning is innate, and 4) occurs through patterning, 5) emotions are critical to patterning, 6) the brain processes parts and wholes simultaneously, 7) learning involves focused attention and peripheral perception, and 8) conscious and unconscious processes, 9) individuals organize memory into a spatial system and a system for rote learning, 10) understanding is most effective when facts and skills occur in natural, spatial memory, 11) complex learning is enhanced by challenge and inhibited by threat, and 12) every brain is uniquely organized (Caine, R. N., & Caine, G., 1990, p. 66-70). In essence, BBL is a comprehensive approach to learning encompassing the whole body based on knowledge of brain structures.

Neuroscientific research has elucidated our conception of the organization, development, and functions of the human brain. fMRIs, PET scans, EEGs, and other technologies have made it possible for researchers to visually and anatomically understand the process of learning. The activation of different parts of the brain indicate "the complex and variable interactions between genes and the environment" (Gredler, 2009, p. 76), and have also aided learning theorists in contemplating the most effective variables for learning. Broken down, brain-based learning promotes problem and community-based learning, simulations, role-playing, group learning, as well as fluctuating and multisensory environments, self-expression, personal connections, and active discussions (Caine, R. N., & Caine, G., 1990, p. 66-70). This approach to learning is similar to that of cognitivism and constructivism. Ultimately, "the objective of brainbased learning is to move from memorizing information to meaningful learning," plainly rejecting behaviorist and mechanistic approaches to learning (Caine, R. N., & Caine, G., 1990, p. 69).

Howard Gardner's Multiple Intelligences Theory (1983) is characteristic of Brain Based Learning. Gardner embraces the comprehensive approach to learning that BBL proposes, particularly advocating for the teaching of "important material through multiple learning pathways," and the presentation of information through a multitude of channels (Willis, 2007, p. 311). Gardner (originally) suggested that every individual is born with seven intelligences that vary in strength from individual to individual. These intelligences include visual linguistic, logical/mathematical, musical, bodily/kinesthetic, interpersonal, and intrapersonal. Gardner's Multiple Intelligences (MI) are connected to research on left and right brain processes, brain systems, and brain structure functions. Student-centered learning, concept-based curriculum, multi-media presentations, authentic assessments, and self-directed learning are all staples of this theory (Garden & Hatch, 1989, p. 7-9). MI instruction is essentially the polar opposite of behaviorist learning. Gardner even explicitly challenged the validity of standardized and IQ testing, remarking that "the correlations are not impressive" (Gardner, 1987, p. 28). The Theory of Multiple Intelligences is emblematic of "the shift in research focus in the late 1980s and 1990s to learner construction, interpretation, and adaption of knowledge" situating "primary importance on the thinking strategies of students" (Gredler, 2009, p. 239). Gardner ultimately advocated for a more differentiated and "pluralistic view of intellect" (Gardner, 1987, p. 29).

Derivations of BBL and MI are prominent in contemporary learning theory research. Current research advocates child-centered, more holistic and comprehensive, less microcosmic, and more application-based learning. Two other cogent theories will be discussed in the following section that are also characteristic of contemporary research in the field: Social and Emotional Learning (SEL), and Student Regulation Learning (SRL).

The expansion of Social and Emotional Learning was a concern generated by Vygotsky's Social Developmental Theory (1978) and the BBL assumption that complex learning is enhanced by challenge and inhibited by threat (Caine, R. N., & Caine, G., 1990, p. 66-70). SEL emphasizes the core emotional and social aptitude of individuals including self-awareness, self-management, social awareness, and relationship skills (McAllister et al., 2017, p. 75). The educational implications of SEL include cultivating a safe, welcoming, and nurturing environment for individuals, as "research reports that when students feel they belong positive emotional and cognitive outcomes occur" (McAllister et al., 2017, p. 75). While subjective and emotional personality traits have been largely dismissed from the curricula for the past century, these skills have gained importance in the research field.

Student Regulated Learning is likewise contemporary in research. This theory stresses the necessity for self-monitoring and management of learning in spite of the vastness of available information (de Bruin & van Merriënboer, 2017, p. 2). This model of instruction encourages "less emphasis on transmission of information, and more emphasis on development of domain-general skills, such as literacy skills and selfdirected learning skills" (de Bruin & van Merriënboer, 2017, p. 1). SLR discourages the delivery of voluminous facts, and instead, advocates for critical analysis and literacy skills. This type of learning is necessitated by the onslaught of information provided through new platforms such as the internet. Instead of mandating that students memorize behemoth amounts of information, SRL proposes students learn how to generally decode information. With strong analytical skills, individuals would then be able to apply this knowledge to any and all information that they engage with.

As expected, the direction of learning theory research has veered away from teacher-centric, authoritative, and survey-type curriculum and instruction. As Don Edgar summarized in his article *Learning Theories and Historical Events Affecting Instructional Design in Education Recitation Literacy Toward Extraction Literacy Practices*, "A holistic approach to learning is what is defining learning today, and learners are expected to have extraction skills to be knowledgeable in today's world" (2012, p. 7). Based on my perspective, education and curriculum have not adequately reflected modern and contemporary learning theories. This disconnect will be discussed further in chapter five. The study of learning theories is closely related to that of curriculum theories, which is research regarding the specific approach to curriculum construction and organization. The evolution of curriculum theory will be explored in the following section.

The Evolution of Curriculum Theory

Curriculum theory has its roots in the Progressive Era in America. This field of study is similar to that of learning theories, although it is more directed towards the actual content and design of curricula. By Hanan Alexander's definition (2005), "a curriculum theory prescribes policies concerning what to teach children in school and how to teach it to them" (p. 348). In other words, curriculum theorists ascertain what should be taught in schools and how it is to be the most effectively organized. For the purposes of this study, the history of curriculum theory will be retraced through six main approaches throughout the 20th century: perennialism, essentialism, progressivism, existentialism, social

reconstructionism, and reconceptualism. Curriculum theory and research today largely revolves around the idea of transnationalism narrative inquiry, which will also be discussed in this section.

Perennialism shares many ideological foundations with the coinciding study of Behaviorism. It was a popular approach to curriculum from the end of the 19th century into the 1920s, during the advent of industrialization. Perennialism is related to theories of rationalism and idealism. These philosophies favor knowledge informed by reason, which is perpetuated in perennialism (Ornstein, 1991, p. 105). This approach to curriculum was structured around eternal truths, objectivity, and the study of humanities. Perennialists advocated for learning from the triumphs and failures of the past in order to adhere to an existence of what is tried and true. Passing on the narrative of US history and Western civilization was essential (Cohen, 1999, p. 3). Christianity was assumed ubiquitous and classical texts such as the Bible were the sources for learning, with an emphasis on reading, literary analysis, writing, and ultimately a "constant curriculum" (Ornstein, 1991, p. 105). The mind was believed to be the promise for a better future, so mental discipline was integral in intellectual and existential endeavors. Individuals were accepted as immoral; thus, a heavy moral curriculum was also imperative to guide individuals towards a worthy existence (Ornstein, 1991, p. 106). Perennialists believed that a common curriculum would ultimately unite society under a shared belief system and common identity. This was especially critical in the aftermath of the Civil War and given the influx of immigration during the time.

Perennialist curriculum involved a teacher-centered environment, as well as rigidity of objective and factual information to be taught. Precision, drill and practice,

computation, recitation, debate, and discussion were fundamental in a Perennialist classroom, which was often characterized by orderliness, regularity, exactitude, training of will, and contemplation (Reinert-Alumni Library, 2010, table). Pillars of perennialism concur with the nature of behaviorism, so it is no surprise that these two philosophies were in practice simultaneously.

Essentialism was a curricular approach that piggy-backed on the foundations of Perennialism, as well as in response to the simultaneously developing platform of Progressivism. This curricular approach was, likewise, traditional, conservative, and linked with behaviorist learning theories. Similar to Perennialists, essentialists valued intellectual and mental discipline, orderliness, and the teaching of absolute truths specifically the "acquisition of pre-determined knowledge" (Takaya, 2008, p. 18). In addition, essentialists advocated for the uniformity of learning. This can be connected to the scientization of society brought on by industrialization. Accordingly, standardized testing, IQ and diagnostic tests, and performance-based competency tests surfaced during this era. Essentialism promoted "detailed planning of objectives and content and activities...scope and sequence, the learning environment; and evaluation" (Schubert, 1993, p. 82). In the classroom, this translated into "lecture, recitation, uniformity, behavioral objectives, and Socratic dialogue" (Reinert-Alumni Library, 2010, table). The Seven Cardinal Principles (1918) are largely reflective of essentialist curriculum theory. Essentialism is often referred to as a *back-to-basics* curriculum, composed of the practical knowledge essential for creating valuable citizens in a rapidly industrializing society.

Franklin Bobbitt was instrumental in essentialist curriculum theory. Bobbitt proposed that curriculum be cultivated scientifically (Schubert, 1992, p. 82). He believed that "truth [could] be discerned by objective inquiry," and consequently, evaluated through the use of testing (Schubert, 1991, p. 82). Other important essentialist figures include William Bagely, E.D. Hirsch, and Arthur Bestor. Bagely published The *Essentialist's Platform* in the early 1900s, which proposed "a specific program of studies...taught as such through a systematic program" (Bagely, 1938, p. 307). His philosophy was diametrically opposed to that of the progressivist platform, and instead proposed a return to a "traditional subject-centered curriculum" (1953, 8; Davis, 1976, p. 198). Hirsch published Cultural Literacy–What Every American Needs to Know (1984) outlining what he deemed essential common knowledge. He also founded the Core Knowledge Foundation in 1986, which advocated for "a universally shared core of knowledge," thus, uniformity in curricula (Hirsch, 1991, p. 2). Essentialism experienced a resurgence immediately after World War II and again during the Cold War Era with "more traditional demands for conformity and regimentation as many classrooms in the 1950's returned to a discipline-centered approach" (David, 1976, p. 198). In today's curriculum, essentialism is manifested in the standardization and centralization of education, as well as the annual high-stakes testing.

Perennialism and essentialism compose the traditional and conservative curriculum theories of the late 19th and early 20th century. These curricular approaches haven taken the backseat in research until sporadic resurgences in the second half of the 20th century and into the 21st century.

Progressivism succeeded these traditional approaches in curriculum research beginning in the early 1900s and continued throughout the majority of the former half of the 20th century. Progressivism marked the diversion from rationalism and realism toward empiricism and experience-based learning. Progressivist curriculum research also diverged from behaviorism, and instead aligned with cognitivist and constructivist learning theories. Progressivists perceived reality as dialectic and relativistic, and rallied to promote schools as a place "to improve the lives of individuals" (Parker & Parker, 1992, p. 3). Education historian, Lawrence Cremin, offered a comprehensive overview of progressive education in his book titled <u>The Transformation of the School: Progressivism</u> in American Education, 1876-1957:

First, [progressivism] meant broadening the program and function of the school to include direct concern for health, vocation, and the quality of family and community life. Second, it meant applying in the classroom the pedagogical principles derived from new scientific research in psychology and the social sciences. Third, it meant tailoring instruction more and more to the different kinds and classes of children who were being brought within the purview of the school. (1961, p. 8-9)

Generally, progressivists advocated for "learning by doing, curriculum reflecting community life, cooperativeness, rejection of rote learning, interacting with nature, and a focus on problem solving and communication" (Lewis, 2014, p. 193). Hands-on learning initiatives, inquiry-oriented themes, problem solving, projects, critical thinking, and interdisciplinary connection-making were also emphasized. Progressives valued a democratic educational experience—implementing democratic values into the classroom

through dialogue, a more equal teacher-student dynamic, and collaboration (Lewis, 2014, p. 196). Ultimately, progressives believed the purpose of schooling was "to produce not mechanics or technicians but citizens" (Lewis, 2014, p. 203). Making use of community resources was integral as well in the curriculum as well, and students would ideally learn the application of knowledge in real world settings. In this approach to curriculum, education was not perceived as a product of schooling, but rather a process of living.

John Dewey is recognized as the grandfather of progressive curriculum theory and advocated his research in such writings as The School and Society (1899), *Democracy and Education* (1916), and *Experience and Education* (1938). Dewey proposed an education comprised of "a scientific aspect; an aspect of art and culture, and an aspect of communication" (Dewey, 1897, p. 79). He opposed the static and prescribed nature of learning promoted by his contemporary traditionalists, and instead supported a child-centered, curiosity-engaging, and individualized setting (Cohen, 1999, p. 3). Dewey advocated for an interdisciplinary and in situ curriculum with contributions from community members and students alike (Schubert, 1993, p. 83). Elliot Eisner was also a prominent figure of the Progressivist Curriculum Movement. Eisner was the first theorist to formally debase the glorifications of objective measurements of learning and behaviorist notions, citing that both techniques were limiting in nature and "homogenous in character" (Eisner, 1967, p. 17). Eisner alternatively endorsed *expressive objectives*, which "[are] intended to serve as a theme around which skills and understandings learned earlier can be brought to bear, but through which those skills and understandings can be expanded, elaborated and made idiosyncratic" (Eisner, 1967, p. 18). In other words, Eisner advocated for a curriculum that stressed complex thought and personal connection. This was arguably presaging of Howard Gardner's Multiple Intelligence Theory, which is discussed in concert with Brain-Based Learning.

Progressivism lost esteem amidst the turmoil of WWII, although aspects of progressive curriculum philosophy remain cogent today. Some of these aspects include "inquiry or discovery learning, self-paced instructional approaches, field trips, flexible scheduling, open-concept classrooms, non-graded schools, [and] small group activities" (Brown, 2017, p. 12). Eisner remained especially relevant throughout the 90s, and even still today. Yet, in the thick of WWII, centralization, federalization, and standardization were considered more valuable in education. This resulted in a return to essentialism with the Tyler Rationale (1949). Ralph Tyler's approach represented a more "practical approach to curriculum development" (Wraga, 2017, p. 228). While this model was the reality in schools, curriculum theory continued to push boundaries. Curriculum theory following WWII took on a more liberal persona and will be discussed in the following text.

Social Reconstructionism and Existentialism were both tangential to Progressivism and surfaced in refute of the essentialist revival. These philosophies also coincided with the Civil Rights Movement. Social reconstructionism, commonly referred to as critical theory, embraced the child-centered environment fostered by progressivism, but took this philosophy to the next level by incorporating social justice reform. Social Reconstructionists believed in a curriculum that would "foster social action aimed at reconstructing society; it should promote society's social, political, and economic development" (Ornstein & Hutchins, 2009, p. 204). Ultimately, these theorists perceived curricula as an instrument to advance social justice. Social reconstructionist curriculum was driven by cultural pluralism, intrapersonal relations, politics of change, economic interests, and real-world issues (Reinert-Alumni Library, 2010). Learning was fostered through problem finding and problem solving, group processing, critical and creative thinking, action research, and internships (Reinert-Alumni Library, 2010, table). The mission of learning was to manage and resolve conflict, build communities, and create transformational thinkers and leaders and agents of change to ultimately form a more perfect and equal society. Teachers, instead of acting as messengers of eternal truths, were to be tolerant of indeterminacy and ambiguity (Reinert-Alumni Library, 2010, table). While there is a healthy coalition of educators and theorists who are proponents of social reconstructionism, these theories have proven to be too progressive for the "nightmare" that is the state and nationally prescribed curriculum (Pinar, 2004, p. xii)

Theodore Brameld was one of the founders of the social reconstructionist curriculum movement, which was initially a reaction to the Great Depression, the failures of capitalism, and the destructive realities of World War I (Cohen, 1999, p. 3). Brameld, and other social reconstructionists, believed that controversial issues should govern the curriculum in schools including topics of "violence, hunger, international terrorism, inflation, and inequality" (Cohen, 1999, p. 3). Later and especially noteworthy advocates of critical theory include Michael Apple and the late Paulo Freire. Freire understood education to be instrumental in reinventing the world. He believed that, through critical conscious and inquiry-based curriculum, oppression could be confronted and surpassed (Cohen, 1999, p. 3). Apple perceives schools as biased institutions with political, economic, and social agendas that reinforce inequalities. Both theorists advocate for the democratization of education as a remedy to ameliorate these inequalities. Existentialism was premised on the belief that education is for the selfactualization of individuals. Individuals, hence, should be the center and genesis of all educational endeavors. Originally a European philosophy of the early 1900s, existentialism was reinvigorated in an American educational context post World War II. Existentialists supported epistemology as the domain of the individual, and individualized education as the most effective curriculum (Reinert-Alumni Library, 2010, table). Existentialists placed emphasis on the humanities in the curriculum, as well decision-making, Socratic dialogue, reflection, flexible thinking, and open participation (Reinert-Alumni Library, 2010, table). Moreover, existentialists advocated for learning as an introspective journey mediated by the subjective and reflective teacher.

Maxine Greene was a noteworthy existentialist advocate. Greene, like critical theorists, embraced the subjectivity of meaning and truth. She believed that the "object [was] not the answer, but to engage the student in the search," and to "empower the child to search for meaning" (Hancock, 2001). Greene perceived facticity and objectivity as locking people into constructions of reality and limiting their consciousness. Instead, she stressed the multiplicity and plurality of knowledge (Hancock, 2001). She contended that if a student were "made aware of the multiplicity of possible perspectives, made aware of incompleteness and of a human reality to be pursued, the individual may reach a plane of consciousness of highest tension" (Greene, 1977, p. 124). Her philosophy is still renowned today among theorists and educators alike, though her ideals have not visibly materialized within the curricula of most disciplines. While Greene's existentialist curriculum glorifies the individual and the diversified capacities of the mind, the current curriculum seeks a more pragmatic and matter-of-fact approach. In concert with the

disconnect between social reconstructionism and the adopted curriculum, existentialism, and successive curriculum theories have not tangibly translated into the adopted curricula.

Reconceptualism is an emancipatory approach to curriculum theory and development that was pioneered by curriculum theorist William Pinar (Pinar, 1977, p. 14). Reconceptualists have diverged from classical categories of curriculum theory and research in that they do not necessarily prescribe a certain structure for curriculum—but rather, a curricular approach of "consciousness raising" (Pinar, 1977, p. 11). This approach embraces the subjectivity of knowledge and the un-answerability of phenomena. Patrick Slattery of Texas A & M proposed a dialogic approach for reconceptualizing the curriculum. Instead of a strictly delineated set of standards and objectives, he believed the curriculum should "require consideration of the widest possible variety of alternatives" (Slattery et al., 2007, p. 551). In this model of education, individuals would engage in the metasystematical journey of constructing new knowledge, instead of adopting predetermined knowledge. Slattery celebrates the irony and ambiguity of the human condition, and advocates for a move away from certitude and fixedness. Reconceptualism is an ongoing conversation today, but the current standards-based curriculum poses cumbersome obstacles for its actualization. Also in conversation are narrative inquiry and transnationalism.

A narrative approach to curriculum is centered around story-telling. By Clandinin and Connelly's definition, narrative inquiry is

a way of understanding experience. It is collaboration between researcher and participants, over time, in a place or series of places, and in social interaction with milieus. An inquirer enters the matrix in the midst and progresses in the same spirit, concluding the inquiry still in the midst of living and telling, reliving and retelling, the stories of the experiences that made up people's lives, both individual and social. (2000, p. 20)

This approach emphasizes three pillars of human existence; interaction, continuity, and situation, and stresses these in the curriculum. Narrative inquiry is similar to constructivist learning theories in that it assumes knowledge is both socially and individually constructed. Storytelling, or narrative, is a way of understanding experiences both first-hand and second-hand. Through narration, one can sincerely capture the complexities of human existence in time and space—truer to the narrator than any other communication of experience. Storytelling can also be effective, reflective, and interactive for those who are receiving the experience—an active method of instruction and learning unlike direct and passive instruction. In short, "the study of narrative is the study of the ways humans experience the world" (Clandinin & Connelly, 1990, p. 2).

Transnationalism is reflective of current conversations surrounding social justice. Regarding the curriculum, transnationalism emphasizes the importance of a plurality of wisdom from a multitude of sources and proposes that the curriculum "acknowledge insights from non-English sources, scholars from other places, races, languages, cultures, socioeconomic classes, value systems, and levels of oppression" (Schubert, 2017, p. 2). This theory is seemingly derivative of social reconstructionism/critical theory. In this approach, "the 'pluriversality' of human beings can flourish directly through the potential embodied within the traditions and knowledge" (Means, 2017, p. 974). This notion of pluriversality resembles Greene's existentialism, specifically, her appreciation for "the multiplicity of possible perspectives" (Greene, 1977, p. 124). Certain Curriculum theorists, such as Noah De Lissovoy, foresee the manifestation of transnationalism in the curriculum through the decolonialization and decanonization of the current curriculum. In other words, the un-teaching of western constructions. Granted the reconceptualization that this approach requires of the curriculum, compounded by the trend of progressively stagnant curriculum, it is unlikely that this theory will be the philosophy that bridges the gap between theory and practice.

In summary, the more recent curriculum theories—similar to the more recent learning theories—place much more emphasis on the individual, relationships, macrocosmic ideologies, and meaningful learning than traditional curriculum theories. In general, curriculum theories have also become more liberal and conceptual over time, although the actual adopted curriculum has not reflected this progression. The trajectory of the written curriculum will be explored in this next section.

The Evolution of Written Curriculum

The history of written curriculum doesn't formally initiate until the late 20th century. Hitherto the Educate America Act of 1994, written curriculum only existed hypothetically among policy makers, formally among curriculum theorists and researchers, and informally among educators. While curriculum discourse had been prevalent since the late 19th century—reaching heights around the time of WWI, the Great Depression, WWII, The Cold War Era, *A Nation at Risk*, and NCLB—it wasn't until the end of the 1900s that discourse was transformed from theory into standards. For the purposes of this study, the evolution of written curriculum will be reviewed in three

phases: The Progressive Education Movement era, the Post-Cold War Era, and the era of accountability. The analysis of these eras will cover from the end of the 19th century to present day. The interrelated studies of historical events, learning theories, and curriculum theories will be illuminated as well.

The Progressive Movement era of curriculum spanned from the end of the 19th century (in this discussion) up until the 1950s. The original Department of Education (DOE) was established in 1867, marking the first ever federal bureau dedicated to education (US Department of Education, 2017). The DOE's purpose was to gather information from schools and teachers in an effort to cultivate the most effective education in American public schools (US Department of Education, 2017). Although benign in influence, the implementation of the DOE initiated the extensive deliberation about curriculum that would infiltrate America for years to come. In the early 1890s, the National Education Association (NEA) delegated a committee of ten education connoisseurs with the task of establishing curriculum standards for America (Ornstein, 1985, p. 37). This was deemed necessary in spite of the dawn of industrialization and evolving notions of what knowledge and skills were necessary to succeed in American society. The Committee of Ten proposed an educational system composed of eight years of primary school and four years of secondary school. Four different curriculums were designed for secondary schools, each including courses in English, foreign language, mathematics, science, natural history, civil government, and political economy (Ornstein, 1985, p. 37). These proposals were influential in the organization of elementary and high schools, as well as in the content taught in high schools. Even so, specific standards for each discipline were left to the authority of schools and teachers. During this time,

secondary education was dependent upon higher education, which "determined the course of American secondary education for a generation" (Butts & Cremin, 1953, p. 390).

The Smithes-Hughes Act of 1917 provided federal funding to states in exchange for promoting vocational education. Courses included industrial education, home economics, and agriculture (Steffes, 2014, para. 1). This act was a product of the spreading ideology of vocationalism—the notion that education should be dictated by economic interests (Steffes, 2014, para. 2). Briefly after this law was enacted, the "Cardinal Principles of Secondary Education" (1918) identified seven objectives that ought to be the focus of the curriculum. These principles further supported vocationalism. The Cardinal Principles included health, command of fundamental processes, worthy home membership, vocation, citizenship, worthy use of leisure, and the ethics of character (Schugurensky, 2005, para. 2). Although vocationalism, like the Committee of Ten, didn't result in specific written curriculum, it influenced which disciplines would be taught in schools: "curriculum was viewed almost solely as the list of subjects and sequence in which they were to be taught" (Tyler, 1981, p. 599). From 1931 through 1942, Virginia and Kansas devised committees to design "a comprehensive set of scope and sequence guidelines" in the curriculum for public schools (Tyler, 1981, p. 599). Still, "plans drawn up by central committees or by expert consultants were not being carried out by most teachers" (Tyler, 1981, p. 599). The core disciplines had been accepted widely, yet the disciplines were being taught differently in classrooms across America. This continued to be the case regarding the written curriculum, until instrumental events during the Cold War Era.

Russia launched satellite Sputnik into orbit on October 4, 1957, officially surpassing America in the space race. This influenced Congress to enact the National Defense Education Act (NDEA) in September of 1958, which was the first instance of widespread federal involvement in public education (Hunt, 2016, para. 1). The NDEA redirected the aims of education to align with excellence in math, science, engineering, and foreign language in an effort to strengthen national security. The emphasis on these subjects were also capitalized on so the US could compete with the Soviets in science and technology (Hunt, 2016, para. 1). The curriculum marginalized humanities and the arts, although standards of learning for math, science, engineering, and foreign language were still absent from national curricula.

In 1965, President Lyndon B. Johnson's administration enacted the Elementary and Secondary Education Act (ESEA), which promised equal access to education for all children. The proposal also pledged funds for schools that exemplified high standards and accountability (Brown, 2017, p. 13). This redirected curriculum discourse from curricular content to curricular equality and accountability. ESEA was a product of cognitivist learning theory, arguably influenced by Bruner's Discovery Learning Theory (1963). In 1972, Fenwick W. English introduced the technique of curriculum mapping and auditing, which promoted the alignment of the taught, written, and tested curriculum (English, 1984, p. 1). It is likely that the contemporary era of accountability is linked with English's research. During the turmoil of the Civil Rights Movement, President Ford's administration implemented the Individuals with Disabilities Act (IDEA), which guaranteed a free, public education for children with disabilities in the least restrictive environment (Guide, 2012, p. 1). These proposals were all reflective of the Civil Rights Era, yet short-lasting in hindsight.

The conversation returned to curricular structure and content in 1983 with A Nation at Risk. This report triggered what I refer to as the "era of accountability." A *Nation at Risk* outlined the failure of the American education system in comparison with Japanese test scores, and necessitated the reformation of curriculum (Gardner, 1983, p. 2). In 1989, the first written curriculum, "Curriculum and Evaluation Standards for School Mathematics," equipped with fifty-four standards, was published (National Council of Teachers of Mathematics Commission on Standards for School Mathematics, 1989, p. 1). This document outlined standards for grades K-4, 5-8, and 9-12. Still, the standards were relatively vague. For instance, "algebra, geometry, trigonometry, functions...statistics, probability, and discrete mathematics" were to be covered, at some point, in high school math (National Council of Teachers of Mathematics Commission on Standards for School Mathematics, 1989, p. 5). This document was distributed to government officials, universities, primary and secondary schools, teachers, school administrations, and the PTA, although, the implementation of this written curriculum was not mandated. It wasn't until the 21^{st} century that national written curricula would be enforced.

In 1994, the Goals 2000 proposal suggested a national set of educational content, standards, and assessments (US Congress, 1994, sec. 3). This materialized in 2000 with the installment of George H. W. Bush's No Child Left Behind (NCLB) movement. NCLB mandated school accountability of student success through the implementation of standardized testing (Ohnemus, 2002, p. 9). Statewide annual assessments were to be

administered in grades three through eight to evaluate student and school success on statewide standards in science, math, and English (Ohnemus, 2002, p. 9). In addition to state standardized tests, a national assessment would be administered biennially in reading and math to 4th and 8th graders (Ohnemus, 2002, p. 16). Implied within the standardized testing was the requirement for "states to put into place a series of measurable objectives about student performance that states, school districts, and schools are expected to meet" (Ohnemus, 2002, p. 20). In other words, a single, standardized, written curriculum was to be established in each state in the areas of math, science, and reading/writing. The implications of NCLB largely characterize the written curriculum today, more than fifteen years later. In 2009, with concern that state standardization of curriculum wasn't standardized enough, the Common Core State Standards (CCSS) were developed. The CCSS delineated learning objectives in English Language Arts (ELA) (reading, writing, speaking, listening) and Math for grades K through 12 (National Governors Association Center for Best Practices, & Council of Chief State School Officers, 2010, About). By December of 2013, 45 states had adopted the CCSS (National Governors Association Center for Best Practices, & Council of Chief State School Officers, 2010, Timeline). Today, there are only 7 states that have not adopted this common core state standards into their written curriculum: Alaska, Indiana, Nebraska, Oklahoma, Texas, South Carolina, and Virginia (Achieve, 2013, map). A national, standardized, standards-based curriculum remains the reality in American public schools today.

Currently in Virginia, the World History and Geography to 1500 A.D. curriculum, which is implemented in the 8th grade, consists of sixty-six standard objectives that invite

"chronological thinking, historical comprehension, historical analysis and interpretation, historical research, and decision making" (VDOE, 2015, p. 1). The learning objectives require the acquisition of precise information such as "describing characteristics of hunter-gatherer societies, including their use of tools and fire" (VDOE, 2015, p. 1). The list of standards is followed by a curriculum framework that delineates the essential understandings, questions, knowledge, and skills for each individual standard. For instance, standard WHI.2b regarding hunter-gatherer societies, requires students know that these societies "were nomadic, migrating in search of food, water, shelter, invented the first tools including simple weapons, learned how to make and use fire, lived in clans, developed oral language, [and] created cave 'art'" (VDOE, 2015, p. 12). The curriculum framework is a comprehensive, fifty-seven-page document not only breaking down the exact knowledge an 8th grade student must know, but also instructing the teacher exactly how to deliver the information.

The current 8th grade English curriculum in Virginia is broken down into sixtynine standards. They are, likewise, specific and arranged into strands: communication, reading, writing, and research (VDOE, 2017, p. 30). Relative to the World History standards, the English standards are less narrowly defined. For instance, standard 8.1a requires that students "select, organize, and create multimodal content that encompasses opposing points of view" (VDOE, 2017, p. 30). Evidently, the specific platform, content, and organization are left to the students' devices. The less-prescriptive nature of the English curriculum is especially evident in the vague rhetoric of the document. The level of descriptiveness if the standards in the art curriculum are even more vague. This will be explored in the following discussion about the evolution of art education.

The Evolution of Art Education

Given the knowledge presented regarding the social, political, and economic implications for public schools in America, this section will overtly explore how these implications influenced the curriculum of the art classroom. The trend in art education has loosely followed the stipulations of the written curricula. It seems as if there has always been a push to adhere to adopted curricular strategies while simultaneously preserving the subjective nature of art as a discipline. This reluctance has contributed to a relatively shorter and vague set of standards for each grade level. For this purpose of this study, the evolution of art curricula will be discussed through six approaches: mechanistic, expressionistic, experiential, scientific, discipline-based, and ultimately, comprehensive.

The history of formalized art education in public school America begins roughly in the second half of the 19th century, in concert with industrialization, behaviorism, perennialism, essentialism, and the establishment of the Department of Education. Naturally, the art curriculum was dictated by principles of industrial design, mechanical drawing, and rigid, authoritarian instruction (Wygant, 1983, p. 131). By the 1880s, the curriculum in art curriculum shifted toward a more child-centered and cross-curricular approach. Louis Prang, lithographer and publisher, released a more progressive compilation of curriculum and instruction in art in 1883 (Stankiewicz, 2001, p. 15). Prang's *Complete Course in Form and Drawing* incorporated three types of art one: constructive, representational, and decorative. By the 1890s, the demands for art education included a pivot away from the South Kensington model, a system of art education derived in Britain centered around technical and scientific drawing/design

(Redgrave, 1876, p. 9). Replacing the South Kensington values was a child-centered approach, that encouraged idiosyncratic interest, instinctive creation, originality, and selfexpression (Larkin, 1949, p. 293). These values were reflective of the Progressive Education Movement, the beginnings of cognitivism, and the avant-garde artwork of the time. Throughout the 1890s, art education would toil with admissions of freedom and discipline in the classroom. Many advocates believed that "the object of art education in the school [was] to develop in the pupil a love for beauty and the power to produce beautiful things," (Harris, 1897, p. 270), yet art education was still not unified under a singular mission. Art education took on the roles of instilling aesthetic values, decorating spaces in schools, crafting objects and materials for leisure use, pageants connecting the disciplines through performance, and gender-based vocational training (Efland, 1990, p. 176). Common art classroom practices included nature drawing, handicrafts, model/object drawing, and color and design (Efland, 1990, p. 177). Leading British art critic, John Ruskin, advocated for yet another approach to art education that would accommodate a cross-curricular focus: "I think it would be much more sensible to consider drawing as in some degree teachable on concurrence with other branches of education" (Ruskin, Vol. 36, p. 136). Ruskin saw the accessibility in the teachings of geography, botany, history, etc., and believed it to be an effective means for teaching both art and other subjects simultaneously.

By the twentieth century, art had established itself as integral within the domain of public school education (Wygant, 1983, p. 135). Like the curriculum in other content areas, the art curriculum remained overwhelmingly Perennialist and Essentialist in approach. Arthur Wesley Dow, a professor of fine arts from Columbia University, published a new framework for art education entitled *Composition* (1899) that would set the stage for the art curricula in the twentieth century. Dow's curriculum revolved around elements of art and principles of design. His agenda for art education included aesthetic appreciation through global art traditions and quasi-scientific means for classifying universal guidelines for making and analyzing (Stankiewicz, 2001, p. 133). In this approach, art education was a hybrid platform with mechanistic *and* expressionistic aims, which proved practical during an efficiency and scientifically motivated time. The Arts and Crafts Movement also peaked during the first decade of the twentieth century in combat with the industrialized aesthetic that pervaded society. In trying to beautify the aesthetics of American life and create a more perfect society, art education appeased the social efficiency concerns. Functional and decorative processes were taught in art classes during this time in such courses as ceramics and magazine publication. In successive years, art education assumed a different narrative characterized by experiential learning.

Influential avant-garde artists like Alfred Stieglitz and exhibitions like the Armory Show of 1913 that denounced hegemonic art redirected the aims of art education. John Dewey and Harold Rugg's theories of education, along with new cognitivist research and studies on the subconscious also contributed to the reconceptualization of art curriculum. This redirection lasted from the 1910s through the 1940s. Stieglitz, who believed art education needed to do away with restrictive instruction, contributed to the developmental and expressionistic model of art education. Rugg's *Child-Centered School* (1928), Dewey's *Art as Experience* (1934), and Piaget's Cognitive Developmental Theory (1936), also supported this approach to the art curriculum (Stankiewicz, 2001, p. 30). This experiential approach emphasized the development of individual personalities, free and self-expression, social realism, imagination, and democratic ideals. The child's pursuit of creative instinct was encouraged, and children were perceived as innately creative, and inhibited by "the sociocultural environment" (Stankiewicz, 2001, p. 131). Viktor Lowenfeld, art education researcher, "saw free expression as necessary to the healthy growth and development of the child" (Efland, 1990, p. 235). Art educator, Franz Cizek took these ideals to the extreme and taught with "no insistence on technique, no ordered method of study...Method, material, subject, purpose, all these are left to the child's free choice" (Efland, 1990, p. 198). This existentialist/laissez-fair approach to art education was denounced in the 1950s during the Cold War Era and the resulting federalization of curriculum.

The Cold War Era elicited a scientific approach to art education. Given the US's defeat in the *Race to Space* by the Soviets, American public education was accordingly restructured around the content areas that were believed to guarantee a return to the top. Art was marginalized, while core content classes took center-stage in schools. Around this time began the upward battle of justifying the arts in education. Arthur Bestor, an historian who fervently opposed the progressive education of the first half of the twentieth century, asserted that progressivism "seriously undermined the intellectual quality of American education" (Efland, 1990, p. 227-28). President Kennedy was also concerned for the legitimacy of art education in American public schools and proposed a "political impact of science upon the arts" as a remedy (Efland, 1990, p. 241). In this approach, art education would be contributing to the scientific and economic prowess agenda that had seized the curriculum of other content areas. The scientifically modeled art curriculum included an "organized body of knowledge [and] specific methods of

inquiry" (Efland, 1990, p. 241). This model was a total about-face from the preceding experiential approach, although, reminiscent of the mechanistic model of art curriculum.

The scientization of the art curriculum was rivaled by the concurrent arts-ineducation movement, which coincided with myriad other civil rights movements in the 1960s. The arts-in-education movement resisted "the notion of a packaged curriculum" (Efland, 1990, p. 245). The movement argued that art was an experience rather than a discipline. Advocates promoted art as interdisciplinary and capable of teaching non-art content. Proponents also perceived art education as instrumental in an individual's realization of self, as well as having the potential to induce social reform. Art as social reform was reflective of reconstructionist curriculum theory that was also in concurrence. The arts-in-education movement successfully indicted the trivialization of the arts as an issue in the schools, and effectively presented art education as active and participatory (Efland, 1990, p. 247). Unfortunately, in 1972, this movement met its demise due to lack of funds and leadership, so the curriculum remained science-oriented.

Throughout the 1970s, the art curriculum continued to be characterized scientific ideals. Beyond WWII and the Vietnam War, Americans feared the end to economic prosperity historically brought about by total war efforts. Society looked to the schools as the source of this problem—particularly at declining test scores in the latter half of the 1960s. By the early 1970s, the accountability of schools was at the forefront of all deliberation, and "curricular affairs shifted from consideration of content to identification of effective devices for evaluation and measurement" (Efland, 1990, p. 248). Instructional and behavioral objectives were the perceived solution regarding issues of accountability and had consumed research in art education by the latter half of the 1970s.

Art education was taxed with requirements such as objective evidence of learning, predetermined outcomes, and scientifically formulated instruction. By Arthur Efland's account, "to remain in the schools, art educators had to show that art activities were amenable to the same kind of rational, technological manipulation being developed for education as a whole" (1990, p. 250). Federally funded Aesthetic Education Curriculum research promoted art appreciation, art criticism, art history, and art production as pillars to organize the curriculum and prepared an elementary art curriculum accordingly in 1976.

At the same time, opponents of objectives-based curricula recognized the limitations it posed to learning and advocated for qualitative inquiry instead. Curriculum theorist, William Pinar, coined the name *Reconceptualists* for these opponents and summarized their educational values as "holistic" (Efland, 1990, p. 251). Qualitativeinquiry proponents "valued personal liberty and high levels of consciousness," and believed in more relativistic and dialectical thinking (Schubert, 1986, p. 323-24). Reconceptualist theories were reflective of constructivist learning research, particularly Vygotsky's Social Development Theory (1978). Qualitative inquiry platforms reached far in the realm of educational research, although not in the art curriculum, nor any curriculum for that matter.

Ultimately, the movement for accountability prevailed with corroboration from the *A Nation at Risk* report in 1983. In 1984, The J. Paul Getty Trust published a discipline-based art education (DBAE) framework that remains largely in place in public schools across America. DBAE curriculum is structured around four topics: art production, art history, art criticism, and aesthetics (Dobbs, 1992, p. 30-31). These are reminiscent of those proposed in 1976 by the Aesthetic Education Curriculum researchers, and likewise follow the principles of instructional standards.

In 1994, the National Art Education Association (NAEA) released comprehensive framework for art curriculum. These national (voluntary) standards were the result of the Goals 2000 proposal. Although these national standards are not mandated, state standards are mandated in public schools, which are oft derivative of the national standards. The National Core Arts Standards were last updated in 2014, and revolve around creating, producing, responding, and connecting (National Coalition for Core Arts Standards, 2014, homepage). The most recent version of the curriculum consists of fifteen learning objectives per grade level. Mindful of the "inherently ambiguous nature of its subject matter, where right or wrong answers are not readily forthcoming," the standards are open-ended and accommodate various methods of implementation (Efland, 1990, p. 251). For instance, the fifth standard of the 8th grade art curriculum states, "select, organize, and design images and words to make visually clear and compelling presentations" (National Coalition for Core Arts Standards, 2014, p. 2). Although derivative of the disciplinebased educational reforms that emphasized scope and sequence, (and despite the insistence of accountability and measurability in schools), the art standards have effectively remained subjective.

The Fine Arts Standards of Learning in Virginia were developed by the CTE resource center, which is "a grant project administered by Henrico County Public Schools" (Virginia Department of Education, 2013, prelude). This project included "contributions from classroom teachers, curriculum specialists, administrators, college faculty, professional artists, fine arts organization representatives, and museum

personnel" (Virginia Department of Education, 2013, v). Like its NAEA counterpart, the Virginia visual arts standards are open-ended in nature and offer flexibility in their implementation. In Virginia, the art curriculum consists of between eighteen and twentyfive standard objectives depending on the grade level and are organized around the fours strands: 1) visual communication and production, 2) art history and cultural context, 3) analysis, evaluation, and critique, and 4) aesthetics (Virginia Department of Education, 2013, viii). In eighth grade visual art, half of the curriculum is focused on visual communication and production while the other half combined focuses on art history, cultural context, analysis, evaluation, critique, and aesthetics (Virginia Department of Education, 2013, p. 16-17). Although structured and seemingly objective, the standards are significantly less prescriptive than the standards in WHI and English 8. For instance, standard 8.6 reads: "the student will communicate ideas, experiences, and narratives through the creation of original works of art, using selected media" (Virginia Department of Education, 2013, p. 16). In this example, the ideas, experiences, narratives, and media are all undefined, which allows for a healthy degree of teacher and student input. This is the case for the majority of the standards.

In summary, the art curriculum in American public schools has essentially mirrored the evolution of educational aims and written curriculum. Yet, the art curriculum has not adhered stringently to these aims or policy demands. Instead, the curriculum has allowed for the integration of concurrent learning and curriculum theories. While core content areas, such as WHI and English 8, have not been cultivated with the same level of leniency, the adopted art curriculum has managed to maintain a considerable degree of flexibility. These varying formats of curriculum inherently promote different types of thinking, which will be investigated in the quasi-experimental and auto-ethnographical component of this study. In the fifth chapter, I will consider how and when the WHI, English 8, and Art 8 curricula invite higher order types of thinking. The data analysis, as well as scholarly literature, will guide my proposal for a curriculum better suited for promoted higher order thinking. Related scholarly literature will be explored in this next section.

Alternative Approaches to Curriculum

The following review will be useful in answering the third research question: How can curriculum be better designed and implemented to promote higher order thinking skills? For the purposes of this study, these skills include application, analysis, evaluation, and synthesis. Scholarly literature on this topic has been synthesized into three broad approaches: holistic, posthumanist, and dialogic. All three approaches share certain foundational philosophies, yet each has its own unique focus. I will describe the intention of each approach, specifics of the curriculum, and implications for instruction. Ultimately, these approaches aim to broaden and adjust the structure and content of the current standards-based curriculum.

Holistic. Holistic education was established in response to the reductionist, static, and fragmented reality of standards and testing. This approach is connected with an indigenous and ecological worldview, life philosophy, systems theory, and feminist thought (Mahmoudi et. al., 2012, p. 180-81). The current standards-based approach to curriculum has often been criticized for its mechanistic and mainstreamness. In other words, it is a one-size-fits-all model. The holistic paradigm seeks to include "dynamic and holistic views of reality" in an effort to cultivate the various capacities of the

individual (intellectual, physical, spiritual, emotional, social, and aesthetic) (Mahmoudi et. al., 2012, p. 178). The currently adopted curricula is not concerned with the different aspects of the individual. A holistic education would focus on "life experiences" instead of the current focus on predetermined "basic skills" (Mahmoudi et. al., 2012, p. 178). Ultimately, a holistic curriculum seeks to encourage the development of the individual to his/her fullest potential.

A holistic curriculum would be much more qualitative than the current model. It would include the development of cognitive and affective capacities of the individual. For instance, the curriculum would stress the development of relationships both inter and intra-personal, between individual and nature, and between emotion and reason (Mahmoudi et. al., 2012, p. 178). Essentially, this curriculum would emphasize the exchange between experience and reality, and the contexts which "shape and give meaning to life" (Mahmoudi et. al., 2012, p. 179). The fact and skill-focused curriculum would be replaced with one that ultimately encourages meaning-making. A holistic approach would cultivate a global, more macrocosmic awareness through emphasizing the interconnectedness of individuals and society, nature, and experience. The holistic paradigm specifically cites five "levels of wholeness" including wholeness "in person, in community, in society, in planet, and in cosmos" (Mahmoudi et. al., 2012, p. 182-83). Although a curriculum of standards and testing is reflective of a materialistic and consumerist society, a holistic curriculum is a better representation of the globalism that has characterized society more recently.

In the classroom, a holistic design would affect the structure and climate of everyday learning. Instead of the authoritarian, teacher-centric, direct instruction model that the current curriculum necessitates, a holistic approach would incorporate students as active and critical participants in the curriculum and learning. A holistic curriculum would be "flexible and dynamic" in order to accommodate for both teacher and student input (Mahmoudi et. al., 2012, p. 179). In written form, the curricula would be loosely detailed and focus on themes instead of specific information. Certain themes would include human development, individuality, experience, freedom of choice, participatory democracy, global citizenship, and spirituality (Mahmoudi et. al., 2012, p. 184). Teachers and students alike would improvise within these concepts to accommodate for personal differences, experiences, and progression (Mahmoudi et. al., 2012, p. 179). There wouldn't be a specific scope and sequence or curricular framework for teachers to follow, as the nuances of learning would unravel in real time. Broadly, the content of the curriculum would revolve around four "pillars of learning" including learning to be, learning to learn, learning to do, and learning to live together (Mahmoudi et. al., 2012, p. 181-82).

In short, the holistic paradigm aims to educate every layer and component of the individual. This approach also seeks to embrace (instead of simplifying) humanity and the environment in all of its complexities. In doing so, proponents of holistic education believe that this design will cultivate more self- and globally-aware individuals. Many aspects of this philosophy can be traced throughout the posthumanist approach as well, which will be explored in the following section.

Posthumanist. Posthumanism is a conversation that has infiltrated many disciplines in the last decade or so. The term *posthumanism* refers to a philosophy concerned with the traditional notions of humanity and the human condition.

Posthumanist discourse in education is a product of developing cognizance regarding the hegemonic and imperialist structure and content of education. In education, a humanist curriculum articulates information from an anthropocentric perspective. This has been the case throughout the history of curriculum and remains to be the case in curricula today. A posthumanist curriculum would reconceptualize how we situate humans in the world. Instead of assuming that humans are "the center of the universe," a posthumanist curriculum would "interrogate the relations among the terms in the cybernetic triangle of human/animal/machine" (Snaza et. al., 2014, p. 40). In this approach, knowledge would be considered beyond a solely human experience--through the lenses of other-than-human beings. Ultimately, a posthumanist approach aims to "produce new subjectivities and ways of doing things" through "reconfiguring identities" and reconsidering "humanistic practices"(Snaza et. al., 2014, p. 48).

From a posthumanist perspective, the current curriculum is composed of closed systems. In other words, knowledge is fragmented—not only between disciplines, but also with regard to the experiences of each domain within the cybernetic triangle. Consequently, human existence is considered independent of animal and machinic existence. In reality, humans, animals, and machines exist in open systems that are co-dependent. After all, "there is no possibility of a detached, self-contained local existence" (Morris, 2002, p. 571). This theory of interdependence is characteristic of systems theory and is also referred to as ecological consciousness (Morris, 2002). Ecological consciousness "resituates us as human creatures dwelling in the world" cohabitated by animal and machine creatures (Morris, 2002, p. 571). Our existences are entangled and transactional, so to consider knowledge solely based on human experience is to

understand only a fraction of existence. Theoretically, this perspective would enhance individuals' theory of mind, and, similar to the holistic paradigm, cultivate a more global-awareness.

For this theory to translate into the curriculum, the current curriculum would have to be jettisoned. This new approach would "undo knowledge" and replace it with new vocabulary and conceptions (Snaza et. al., 2014, p. 49). A posthumanist curriculum would be dehumanized and stripped of anthropocentricism, and would reconceptualize "our norms, presuppositions, platitudes, and morals with regard to life and what is living" (Snaza et. al., 2014, p. 49). In essence, a posthumanist curriculum would approach knowledge from a relativistic standpoint:

posthumanist education needs to consider the critical differences between contexts in which knowing occurs and relativity, which would be a comparison of the various potential forms of knowing that might occur in specific contexts. Meaning would replace knowing for education since meaning, understood as the interactions among patterns of information creation and the randomness of unperceived patterns, has implications for action, choice, and social/cultural life. (Snaza et. al., 2014, p. 51)

Information would be presented as temporary and situational instead of universal and fixed, and curriculum would be grounded in meaning-making.

Embedded in this theory is the notion that many answers are better than one answer. After all, there are many stories to tell—not just one—as we share our existence with many forms of life. Fundamentally, "Posthumanism is, first of all, about realizing the democratic possibilities and limits of humanism in a new globalized age" (Snaza et. al., 2014, p. 48). Learning through different, non-human perspectives has a wealth of creative, egalitarian potential, which can only be unlocked through co-consciousness: "co-consciousness arises out of differences, and much learning happens when we recognize this" (Morris, 2002, p. 580). A plurality of knowledge is not strictly a posthumanist ideal. In fact, this concept was evident in holistic principles and will be in dialogism as well.

Dialogic. Dialogism, in this context, refers to a theory of logic characterized by disjunctive conclusions. In a few words, dialogism in education seeks to expose the contradicting, co-related, and co-dependent nature of reality..."a differentiated universal" Means, 2016, p. 970). It is in direct opposition to monologism, which, for the purposes of this discussion, refers to a theory of logic characterized by converging conclusions. Dialogism, in the context of curricular design, is a field antithetical to that of the current neoliberalism that has inundated public school curricula. The neoliberal curricular design is emblematic of monologism, as it tends to "reproduce stratified forms of behavior, ideology, and consciousness to perpetuate the elitist norm" (Means, 2016, p. 972). Dialogism in education shares semblances with the foundational philosophies and implementation of both holistic and posthumanist ideals, as well as transnationalism (discussed in a previous section). It is an approach that would necessitate an emancipation from the current curricular design.

Proponents of a dialogic approach argue that the current monologic approach to curriculum simulates traditional power structures and the "continuation of historical western colonialization in the present" (Jupp, 2017, p. 4). Alexander Means expanded

upon this notion: "Neoliberalism represents a reformulation of elite rule whereby the operating historical tendencies and racial dynamics of capitalism are rearticulated and intensified, broadly colonizing all aspects of the state, civil society, everyday life, and even our most intimate desires" (Means, 2016, p. 971). This has been made possible through centralization, education consumerism, and accountability regimes. Consequently, this undemocratic design has effectively violated the capacities of the human being and divested individuals' inalienable rights. Specifically, "the freedom to think, to make, to create, to exist, and to know differently and in reciprocity with others" (Means, 2016, p. 972). Means understands the current monologic curriculum and its "embodied practices and rituals of subjection" as an "enclosure of creativity and imagination" that ultimately "obscure the inherent creativity and potentialities of the human being" (Means, 2016, p. 972). Essentially, the singularity of the prescribed curriculum is inculcating a predetermined and one-sided disposition in students. To combat this indoctrination, proponents of dialogism propose an egalitarian curriculum that simulates democratic living.

An egalitarian curriculum, in this context, would subsume both the structure and content of prescribed learning. Student and teacher input would be accounted for with the most attention granted to the "centrality and agency of students" (Freire, 1998, p. 104). In this model, students and teachers would be collegial investigators in the search for meaning, "foregrounding the intellectual autonomy of students" instead of divesting student agency (Matus & McCarthy, 2003, p. 82). This design would revitalize learning and perspective by fusing the "mininarratives that every student and teacher brings to the curriculum and pedagogical context, reinforcing their particularities without allowing the

dominant worldviews to fix their identities into structurally enforced categories" (Matus & McCarthy, 2003, p. 81). The written curriculum would be less detailed and embrace vagueness as an opportunity for student-centric and differentiated learning. Regarding the content of curriculum, this egalitarianism would translate through dialogue that acknowledges "insights from non-English sources...other places, races, languages, cultures, socio-economic classes, value systems, and levels of oppression (Schubert, 2017, p. 2). Content would assume a "kaleidoscopic character" that glorifies difference instead of curtailing it (De Lissovoy, 2017, p. 3). The singular historical narrative of knowledge would be usurped by the integration of narratives "from a broader range of traditions" (Schubert, 2017, p. 1). The knowledges of diverse groups, cultures, and societies would be explored as a "complex flow of humanity across presumptive borders" (Matus & McCarthy, 2003, p. 79). In essence, dialogism would internationalize the curriculum.

Similar to the holistic paradigm, a dialogic curriculum would be organized around broad themes that emphasize tensions, conflicts, and contradictions. Content would be grounded in diversity and pluralism, cultivating relativistic and relational thinking. Instead of the currently US-centric multiculturalism that can be traced throughout curricula, a dialogic curriculum would elaborate upon the "ancestral essence of particular groups" and the transposed relationship between groups (Matus & McCarthy, 2003, p. 77). This approach would stress the importance of unanswerability and "the vital porosity that exists between and among human groups in the modern world…incorporating openmindedness and inquiry that comes from letting traditions debate with each other...rethinking across disciplinary boundaries" (Matus & McCarthy, 2003, p. 82). This transaction of authentic dialogue—discourse driven by a desire to broaden understanding instead of resolving a singular answer—would "cultivate ever more complex networks of relationships and processes" (De Lissovoy, 2017, p. 3). Students would develop a dynamic worldview and a wealth of perspective.

Inherent in certain strands of dialogism is the necessity for decolonializing and decanonizing the current standards-based curriculum. In other words, minority and third-world knowledge would replace of the Euro-centric content of the curriculum. Yet, this logic was the very cause of the atavism and monologism that these proponents wish to attenuate. Inverting the current "homogeniz[ed] focus around Western Eurocentric culture" in the curriculum would only reproduce the same flaws (Matus & McCarthy, 2003, p. 76). Matus and McCarthy elaborated upon this paradox: "a simple inversion of the Eurocentric dominance of the curriculum [would] effectively displace the Eurocentric core of the curriculum," but it would also "merely lead us down the path of cultural illiteracy of the other" once again (2003, p. 81). Dialogism must be cautionary of this tendency. Instead of inverting the current curricular approach, a dialogic approach must integrate content from both approaches. In other words, it must incorporate both Western and non-western knowledges.

A dialogic curriculum would essentially foreground diverse and plural knowledges. It would be a loosely defined curriculum confronting the dialectic of Western modernity and "encouraging critical, historical, and transnational readings," yet without blueprints detailing exactly how to implement or approach content (Jupp, 2017, p. 4). Students and teachers alike would be encouraged to think within and against social constructions of knowledge and power, as well as across disciplines. Dialogism would (theoretically) dispose of the monologic grounded content and structure of contemporary curriculum, and instead, implement a more democratic form of education.

Each of these alternative approaches to curriculum aims to broaden individuals" conception of knowledge, develop ethical visions of diversity and plurality, cultivate worldviews, and generate new ways of "thinking, seeing, and acting in the world" (Means, 2016, p. 974). Acknowledging plurality in this way promotes higher order thinking skills by complicating the knowledge that students are exposed to and engaging with. In doing so, a more democratic learning experience is ultimately cultivated. As De Lissovoy explained, "democracy...is located in the social and ontological power of the multitude" (De Lissovoy, 2017, p. 3). Each alternative is also weary of the "death of knowledges" that the current monologic approach to curriculum inevitably results in:

the death diverse realities...diverse values...ways of being...the death of ideas of good and evil...the death of diversity of beauty...the death of modes of reason...the death of diverse ways of living together...the death of ways of spiritually connecting with the essence or ground of existence. (Schubert, 2017, p. 12-13)

In an effort to unseat this ontological and epistemological approach, dialogism instead situates knowledge as an ecology of perspectives. Ultimately, each of these approaches proposes a curriculum grounded in broadening perspectives.

Chapter 3: Methodologies

Purpose

The purpose of this research is to examine the types of thinking that varying formats of standards-based curricula inherently promote. Preliminary research questions focus on the history of curriculum in American Education, the types of thinking that different formats of standards-based curricula promote, and alternative approaches to curriculum design.

Design

The proposed research is essentially qualitative in nature, but there are quantitative elements. A largely qualitative approach was chosen based on the research questions #1 and #3, while quantitative elements were integrated to examine research question #2. The research questions are provided below, with justification for the selected methodologies.

Research Questions

- How has curriculum evolved into the standards-based frameworks that dominate public schooling?
 - a. What economic, social, and political factors have contributed to the design of curriculum?
 - b. Which learning and curriculum theories have contributed to the design of the curriculum?

- 2. What types of thinking do different formats of standards-based curriculum promote?
- 3. How can curriculum be better designed and implemented to cultivate higher order thinking skills?

The first research question is historical in nature, which lends itself to a qualitative methodological approach. Investigating the components of this question will involve the review of documents, records, statements, and relics from the past in order to identify the major factors that contribute to the formation of a curriculum. Learning from past trends regarding the design of curriculum will provide insight into the creation and nuances of the current standards-based curriculum.

Research question number two also requires a qualitative methodology, seeing as I am interested in examining the relationships between different formats of standardsbased curriculum and the respective learning that is promoted. The quantitative element regarding the collected data for this question is in the data analysis. A coding instrument was used to classify the types of thinking prompted within the adopted curricula, unit documents, and classroom observations.

Coding Instrument. I designed a standardized coding instrument to examine unit documents, classroom observations, and the adopted standards-based curricula. The coding instrument was entirely based on Benjamin Bloom's *Taxonomy of Educational Objectives* (1956). This was a decision based on the credence that Bloom's work has gained and maintained over the years, as well as the relevance of its practice in education today. Derivations and revised versions of Bloom's original framework were consulted

and reconciled into one comprehensive coding device. This instrument was designed to deconstruct the adopted written curricula and unit documents, as well as quantify classroom observations. The coding instrument classified the domains of learning, the types of questioning, and the questioning prompts outlined. The final coding instrument can be found in Appendix A.

The percent of each type of learning promoted was numerically derived based on the instrument, and empirically compared to the other two content areas using categorical statistics. While this component of the study has quantitative elements, it is still largely qualitative, seeing as I will not be manipulating any variable, continually drawing conclusions, and only observing natural environments.

Qualitative research is an appropriate method for answering research question number three because I will be using grounded theory based on the literature review. Although the majority of the research conducted throughout this study was qualitative in nature, coding offered another way to visualize the data quantitatively.

Sample

I used a purposive sample to compare the adopted curriculum, unit documents, and classroom observations of three different content areas. Because I examined my own former adopted curriculum and unit documents, it was necessary to use two other participants from the same school who instructed the same grade-level. I selected the 8th grade WHI teacher and the 8th grade English teacher from my former school of employment. For this study, these participants will be referred to as Melissa and Mark, respectively, and the school will be referred to as Mountainview Middle School (MMS). This controlled for the demographic of students whom the teachers theoretically designed their curriculum around, as well as school-wide curriculum mandates. In addition, a former student of all three participants, who completed these courses in 2015, and is now in the tenth grade, was interviewed. He will be referred to as EH Tucker.

Institutional Review Board Approval

First and foremost, my obligation as a researcher is to protect the participants in my study and the professional arenas in which they work or learn. A proposal was submitted to the university's IRB outlining the intentions, processes, and potential products of the study. I made clear that deception would not be used in this study, and that I anticipated no more than minimal risk (outside the risks of everyday life) for the teacher and student participants.

At the onset of the study, each participant was informed of the potential risks/benefits of participation, and then signed a consent form agreeing to participate. They were informed of their guaranteed privacy and anonymity, as well as their opportunity to review the final document before publication. The consent form also informed participants of the anticipated benefits and risks.

Risks. I anticipated that teacher participants would feel initial discomfort in sharing personal opinions regarding the adopted curricula, as well as commenting on their own pedagogical practices, and sharing instructional documents. It was assumed that the student participant might also feel initial discomfort assessing his learning experiences in each of the selected classes. These feelings, if experienced, were expected to dissipate over the course of the research project. To alleviate these risks, each participant and site was given a pseudonym to assure anonymity. All collected data was coded in such a way that the participant's identity was not recognized in the final form of this study. All data was stored on an encrypted desktop and back-up hard drives. Upon completion of the study, all information that matched individual respondents with their answers, including audio recordings, were destroyed. Audio recordings of interviews were used only for transcription purposes to ensure I accurately understood the encounters.

Benefits. Teacher participants may gain insight about their respective adopted curriculum and the types of thinking that it promotes. The teacher participants may also gain insight in reflecting upon their own practices and pedagogy. The student participant may gain insight regarding his particular learning modalities. The research as a whole may present useful information in identifying the types of thinking that are emphasized in the Virginia Standards of Learning. It may also illuminate the richness of the art curriculum, and advocate for art education in general.

Procedure

Research Initiation & Interview #1. Invitations to participate, along with Consent to Conduct Research forms, were sent to the teacher and student participants and the school administration (see Appendices B-E). Once approval and consent forms were received, I contacted each participant to arrange for an introductory interview. I also asked each of the teacher participants to select a curricular unit that they would be implementing in the spring of 2018. During the initial interview, the teacher participants exchanged the selected unit documents (lesson plans, instructional activities, and assessment templates) with myself and the I clarified any questions she had regarding the documents. At this time, the teacher participants were asked questions related to his/her experiences with different formats of written curricula. Teacher participants also had an opportunity to ask questions about their role in the study. Finally, times for observing the implementation of two lessons within the unit of study were coordinated.

Unit Documents. A coding instrument based on Bloom's Taxonomy was designed to analyze the unit documents in each content area. Each document was carefully read, highlighted, and each learning prompt was assigned a domain of learning. These codes were tallied and totaled, and then visually represented in pie charts. They were also compared to the unit documents of the other content areas.

Classroom Observations. During the classroom observations, field notes were made to better understand the ways in which the written curriculum manifested in the classroom. A template for taking field-notes during classroom observations was also designed and can be found in the Appendices (F). Questioning strategies of the teacher were catalogued according to the language used, the nature of their intent, and the domain of learning the question concerned. Field notes were subsequently transcribed using the same coding instrument in order to understand the different types of thinking that were prompted and ultimately transpired during classroom observations. I specifically recorded teacher-initiated questions, the nature of the question, and the respective domain of learning that the question beckoned. The data was analyzed and compared across all three content areas. **Final Interview.** Once data was aggregated and interpreted, the findings were shared with teacher participants in a final interview. Teacher participants were also asked to reflect on the findings of the study as well as their perspectives related to the impact of standards-based curriculum during this time in the final interview.

Student Participant. An invitation to participate in the study was also sent to the parents of a former student. The parents and student consented, and I arranged an initial interview with the student participant. During this initial interview, the student was asked to reflect on his experiences in each of the courses completed during the 2015-16 schoolyear. In the second and final interview, the student participant was asked to examine the coding instrument that I used to analyze the three content areas. He was then asked to comment again on his perspective related to his learning experiences with different formats of standards-based curricula at this time. The student participant's responses were helpful in providing another understanding of the curriculum. Analyses of adopted curricula, unit documents, interviews, and observations comprised my data for answering research question #2.

Data Analysis

With the ample amount of data collected regarding the standards-based curricula for each content area, i.e., how it influenced lesson planning, the way it translated into the classrooms, and a student's perception of it, I proceeded to analyze the artifacts.

Adopted Curricula. Coded and compiled, I studied the distribution of types of thinking promoted within each content area's adopted curriculum. I first considered what knowledge, comprehension, application, analysis, evaluation, and synthesis looked like in

each content area's SOLs using specific learning objectives as evidence. The gaps in representation within and across the three content areas were then considered. Through the use of charts and diagrams, I examined the types of thinking that the language of each content area's respective curriculum invited.

Teacher Interviews. Interviews with teacher participants elicited various experiences with multiple formats of curricula, different applications of the adopted curriculum in instruction, and multiple perspectives regarding the current standards-based curricula. Teacher participant interviews provided reflections about their experiences with varying curricular formats, how curriculum has influenced teaching and learning, and the advantages and disadvantages of the current standards-based curricula. These interviews were transcribed manually with the aid of field notes, and further reviewed for recurrent themes and concepts. Larger themes were cross-referenced with the respective adopted curricula as well as compared across content areas.

Unit Documents. I studied the distribution of types of thinking represented within each content area's associated unit documents based on the coded and compiled data. Examples of directives and questioning strategies associated with each level of learning were first considered, and then reflected upon regarding the overall allocation of the different levels of learning. I examined both congruencies and disconnects between the unit documents and the content area's adopted curricula, as well as the respective teacher's reflections.

Classroom Observations. Classroom observations provided insights regarding the climate of each classroom and the range of teaching strategies as dictated by the respective curriculums. Classroom observations were coded based on field notes, and I

then aggregated the types of thinking in pie chart form. The distribution of thinking skills extrapolated from the classroom observations were compared to one another, and successively to their respective adopted curricula, unit documents, and teacher interviews.

Student interviews. The interviews with the student were analyzed for corroboration/divergences from what I observed. The student's reflections offered another perspective for considering curricular structure, content, and overall learning experiences. These interviews were transcribed with the aid of a recording as well as field notes, and further reviewed for recurrent themes and concepts. The student's reflections were crossreferenced with each preceding element of data.

Validity & Reliability

Role of the Researcher. I gathered data in the form of documents, observations, field notes, interviews, and transcriptions. As an observer in the WHI and English 8 classrooms, I did not engage with students nor participate in the lessons. For these observations, my intention was to only collect raw data of real-time instruction. As a researcher also participating in the study, I gathered similar documents (lesson plans, activities, assessments) for a unit that I taught in 2016. I compared and analyzed these documents with the same standards as the collected documents from the other teacher-participants. Regarding the data collected from my own lesson plans, I did not incorporate any discussions or unplanned lesson tangents that may have transpired during class. Because I could not prove any of the *in-situ* evidence of learning during classes

taught two years prior, I omitted them for the study and focused only on documented data.

Validity. Having the general end goals of this study in mind will be beneficial in minimizing threats to validity. The coding instrument I have designed for the phenomenon I will be researching is based on a prevalent and highly substantiated theory—Bloom's taxonomy—which will also help mitigate threats to validity. The same coding instrument will be used to analyze all data this is to be coded. I will be as transparent as possible with the study...specifically with data analysis. Every document of data that is collected will be included in the appendices of the final report. That being said, having an idea of what I hope to gain at the end of this study can also pose a problem of researcher bias. The coding instrument designed and provided above will help to ameliorate this, as I will be identifying the same criteria across all three disciplines.

Reliability. To ensure reliability, I will code each artifact two times to ensure that each learning prompt is coded accurately. For interviews, the same questions will be posed to each participant. I will also use the same field notes template for classroom observations to ensure validity of observations and reliability between classes. I will be sure to analyze the most current curricula for each course to also ensure validity. All data analysis of unit documents, written curricula, and classroom observations will be converted to percentages. Given that this study is small in scope, yet very specific regarding the three content areas, generalizations will be less likely. The results of this study are limited to the content areas of WHI, English 8, and Art 8, yet I hope to demonstrate how curricula impacts the types of thinking that are promoted across the content areas.

Chapter Four: Data Analysis

The Adopted Curricula

For analysis of the three selected formats of the current standards-based curricula, I first examined the adopted standards of learning (SOLs) prescribed by the Virginia Department of Education (VDOE) in each content area. Because these documents are uniform across public schools in Virginia, it was a logical place to start. I coded the SOLs according to the designed coding instrument, which can be referenced in Appendix A. The hierarchy of learning objectives in my coding instrument is reflective of Bloom's revised framework, *A Taxonomy for Teaching, Learning, and Assessing* (2001). The original and revised hierarchies differ in the ordering of the highest two categories: evaluation and synthesis. Because the revised hierarchy was determined by a consortium of cognitive psychologists, curriculum theorists, and instructional researchers communities with incredible relevance to this study —I decided to utilize this most recently accepted understanding of Bloom's Taxonomy.

Using this instrument, I read each standard thoroughly, and classified the types of thinking prompted by the language according to the classifications of the instrument. For each standard, the domain of knowledge, nature of the question, and questioning prompt was determined for each standard. In certain cases, multiple domains of knowledge, types of questioning, and questioning prompts were prompted, and thus had more than one code for each of the criteria. For instance, WHI.1 reads as follows, "The student will demonstrate skills for historical thinking, geographical analysis, economic decision making, and responsible citizenship by..." (VDOE, 2015, p. 1). In this particular objective, three different types of thinking are revealed: demonstration (application),

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analysis, and decision making (evaluation). Thus, three A codes, three B codes, and three C codes were determined appropriate for this one standard.

It is important to note the unit of measurement that I deemed appropriate for comparing data. Because the raw number of standards of learning composing each of the content areas' curriculum were not equal, I resolved that data would be analyzed and compared in the form of percentages. In an effort to be as transparent as possible with data analysis, I thought it necessary to disclose the discrepancy between the number of standards included in each content area. For example, English 8 incorporated the highest number of prescribed learning objectives (eighty-eight), WHI (eighty-seven), and Art 8 (twenty-two).

The effect that this discrepancy has on the data could be understood as deceiving, however, I do not perceive it in this way. First and foremost, the standards of learning do not encompass the entirety of learning that occurs within a classroom. Thus, to assume that more learning occurs in content classes with more standards would be an impulsive mistake. If this assumption was made, it would imply that after the standards were

History and Social Science Standards of Learning for Virginia Public Schools - March 2015

WHI.12 The student will apply social science skills to understand the civilizations and empires of Africa, with emphasis on the African kingdoms of Axum and Zimbabwe and the West African civilizations of Ghana, Mali, and Songhai, by

- a) locating early civilizations and kingdoms in time and place and describing major geographic features;
- b) explaining the development of social, political, economic, religious, and cultural patterns in each region; and
- c) evaluating and explaining the European interactions with these societies, with emphasis on trading and economic interdependence.
- WHI.13 The student will apply social science skills to understand the major civilizations of the Western Hemisphere, including the Mayan, Aztec, and Incan, by
 - a) locating early civilizations in time and place and describing major geographic features;
 - explaining the development of social, political, economic, religious, and cultural patterns in the civilizations of the Americas; and
 - c) evaluating and explaining the European interactions with these societies, with emphasis on trading and economic interdependence.

Fig. 2: WHI Standards of Learning

covered in an art class, no learning would occur. The students would sit passively and do nothing for the remainder of the year. This is not the case. In fact, the standards of learning are to be understood as a floor, not a ceiling, for the learning that takes place within the classroom. In an 8th grade World History class, every single class within the schoolyear might be occupied with meeting the prescribed learning objectives. In an art classroom, students are able to revisit concepts in different contexts throughout the year, and more often than not, extend their learning far beyond the standards. I would argue that the same opportunity for learning occurs across each content area, given that the allotted time for students to learn within each environment is equal. The difference is in the types of thinking that occur.

A second reason that I chose to exclude the raw number of standards in the data analysis was due to the language format within the more heavily prescribed curricula. For instance, in WHI the standards are repeated throughout each subcategory of information. In short, the standards of WH1 incorporate nine subsections, asking the students to learn the same knowledge but for different civilizations. Essentially, the curriculum encourages students to know the location, development, and impact of eleven different civilizations, as well as evaluate an aspect of their culture (referenced in fig. 2). Rewritten, these sixtysix standards of learning could be collapsed into a list of four—thus reducing the number of prescribed learning objectives in WH1 to twenty-five. This considered, the amount of *different* learning objectives across each content area is comparable.

The third justification that I considered was the divergent nature of the three content areas. A major aspect of art education entails artistic production, so the lower number of prescribed standards of learning most likely account for the time necessary for thoughtful studio work. Thus, is it implied that no learning occurs while students are creating? This is absolutely not the case. In fact, the polar opposite can be strongly substantiated. Time spent artistically creating is often believed to cultivate the most effective learning. The information covered in a World History class is largely understood as fixed knowledge, while there is greater room for interpretation in an Art class. Hence, the more room found for discussion and synthesis. Therefore, I correlated the number of standards per content area with the time available for different types of thinking. Because there are certain irreconcilable variables between the nature of the three disciplines, I could best control these variables by using percentage-based comparisons. That being said, the following sections will provide my in-depth analysis of the types of thinking promoted by the adopted curriculum of the selected content areas.

WHI

The WHI curriculum covers from the beginning of documented civilization to 1500 A.D./C.E. The standards are divided into five larger sections: 1) Skills, 2) Human Origins and Early Civilizations, 3) Classical Civilizations and Rise of Religious Traditions, 4) Postclassical Civilizations, and 5) Regional Interactions. Within the second, third, fourth, and fifth categories are subcategories of various civilizations, with an almost identical list of sub-standards as referenced in figure 2. The first category of learning objectives and skills identifies blanket objectives that are specified within the bullet point standards in subcategories.

As explained above, I combed through the language of each individual standard to determine the types of thinking promoted, and often times, more than one type of

learning was prompted. I then aggregated the data from each criterion (domain of knowledge, type of questioning, and questioning prompt) in order to better understand the curriculum as a coherent entity. I compiled the number of instances that each of the six

classifications of learning objectives was promoted, and then divided by the total number of instances of learning in order to calculate the percent of emphasis of each

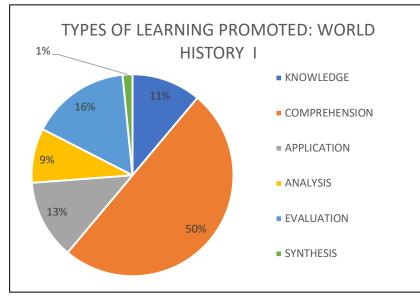


Fig. 3: Distribution of thinking skills in WHI Curriculum

domain of knowledge. The results are organized in figure 3.

Illustrated in the chart, the majority of learning promoted by the WHI curriculum resides within Bloom's second classification; comprehension or understanding. In this format of learning, the student is asked to translate, comprehend, or interpret information—in the form of explanation, summarization, paraphrasing, description, or illustration (Huitt, 2001, table 1). Learning for comprehension is the logical step beyond recalling information, which is emphasized in the lowest domain of learning. Throughout this curriculum, students are asked to consider new information and summarize it in their own words to show an understanding of the new knowledge. While there is an overwhelming emphasis on learning for comprehension, learning for synthesis is, for the

most part, neglected. Application and evaluation are emphasized about the same amount, as are knowledge and analysis.

The data indicates that the WHI curriculum chiefly promotes the knowledge, memory, and comprehension of information. The information presented throughout course is meant to be accepted for its fixedness and committed to memory. Accordingly, the most used verb within the learning objectives is "explaining," which is repeated twenty-three times. Word frequency for the entire document is illustrated in figure 4.

What this curriculum doesn't promote is the analysis and synthesis of knowledge. The students are infrequently prompted to analyze the events of history, evaluate their implications, apply new understandings, or synthesize their own



Fig. 4: Distribution of Questioning Prompts in WHI Curriculum

understandings. In fact, there are only six instances within the adopted standards that prompt the highest order of thinking—synthesis. The language of this curriculum is promoting, whether consciously or not, lower-level and less complex thinking.

English 8

The English 8 curriculum encompasses learning objectives in the domains of both reading and writing. In addition, the curriculum covers communication and multimodal literacies and builds upon research skills. Throughout the duration of this course, students are expected to develop stronger reading comprehension skills, more complex

understandings of language, and more critical literacy skills, as well as broaden their proficiencies in writing using different styles, grammar mechanics, and

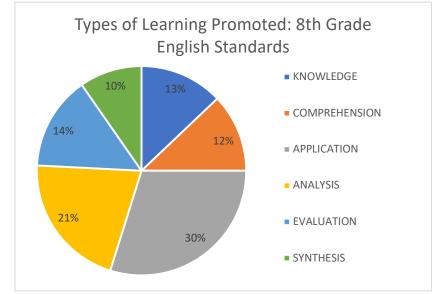
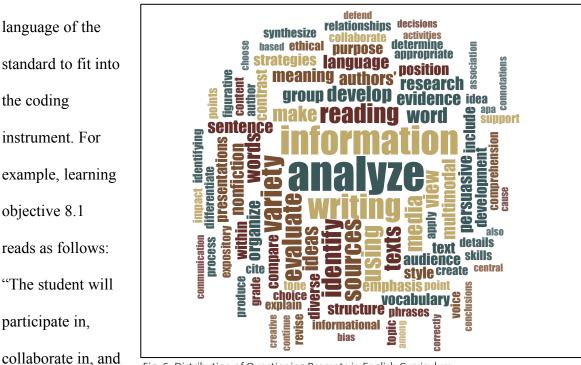


Fig. 5: Distribution of thinking skills in English Curriculum

formats. In addition, it is intended that students become more adept in presenting their thoughts and findings. There are nine focal standards that compose these four categories with related subsets. The focus of the curriculum is on communication and multimodal literacies and readings, whose standards comprise nearly two-thirds of the entire curriculum.

The types of thinking that are promoted through these standards are more evenly dispersed that those of the WHI curriculum, with each level of thinking represented at least 10%. Similar to WHI, synthesis is the least represented level of learning promoted within the English 8 learning objectives. Although, unlike the WHI curriculum, the English 8 curriculum's main emphasis is on the application of knowledge. As seen in

figure 5, 30% of the learning objectives target the students' application of knowledge. In fact, the most frequent active verb, "use," is repeated eighteen times throughout the learning objectives, eliciting the development, application, demonstration, selection, and implementation of knowledge. The word distribution of the curriculum is represented in figure 6. Analysis of knowledge appears to also be of utmost importance, occupying 21% of the targeting learning in the objectives.



There were a few places within the English curriculum where I had to adapt the

Fig. 6: Distribution of Questioning Prompts in English Curriculum

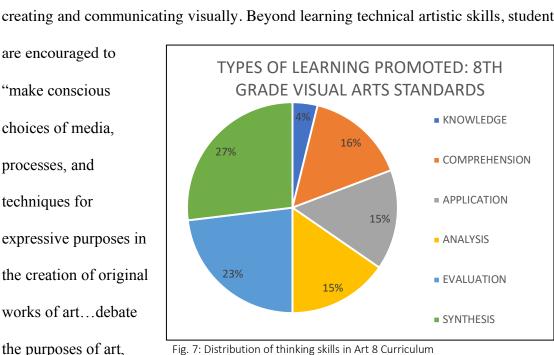
report on small-group learning activities" (VDOE, 2017, p. 30). 'Participate,' in this context, was understood as the act of discussing, and therefore categorized under Bloom's second level of learning: comprehension. Objective 8.1.a) states that the students will "assume responsibility for specific group tasks and share responsibility for collaborative work within diverse teams" (VDOE, 2017, p. 30). The word 'assume' was interpreted to denote the demonstration of responsibility regarding group work, and thus

fell under the domain of application. In objective 8.1d), students are asked to "include all group members, and value individual contributions made by each group member" (VDOE, 2017, p. 30). 'Include,' within the context of this objective, was understood to denote engaging with each member of the group and was coded under comprehension. The last objective that was adapted to fit the coding device was 8.7: "The student will write in a variety of forms to include narrative, expository, persuasive, and reflective with an emphasis on expository and persuasive writing" (VDOE, 2017, p. 32). 'Write' in this sense, was interpreted as 'do' or 'demonstrate' the ability to write in the aforementioned styles and was therefore coded under application.

Overall, the data illustrates the English curriculum's emphasis on students' actual use and analysis of knowledge. Not only are they encouraged to apply their knowledge, they are encouraged to examine literature, writing, research, and presentations based on this knowledge. More than half of the curriculum focuses on the harnessing of these skills, although, the curriculum does not exclude any of the levels of thinking (based on the fairly even distribution of emphasis regarding the remaining four classifications). The English 8 curriculum ultimately suggests that the analysis and transfer of new knowledge are of primary importance regarding levels of thinking.

Art 8

The visual arts standards of learning for 8th grade in Virginia are separated into four categories: 1) visual communication and production, 2) art history and cultural context, 3) analysis, evaluation, and critique, and 4) aesthetics. These categories are closely tied to the discipline-based art education (DBAE) approach established in the 1980. The emphasis of the curriculum, based on the distribution of standards in each category, is on

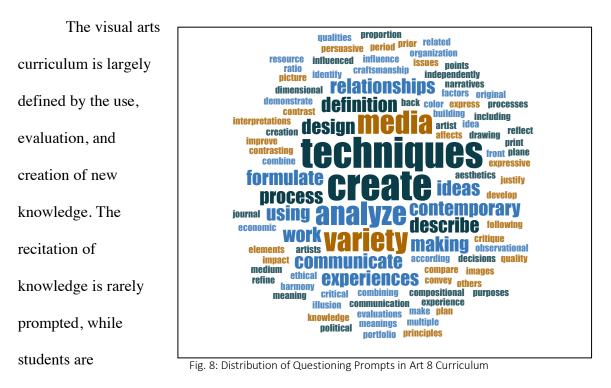


visual communication and production. In other words, students spend the most time creating and communicating visually. Beyond learning technical artistic skills, students

Fig. 7: Distribution of thinking skills in Art 8 Curriculum

formulate reasoned responses to meaningful art questions, develop their own criteria for making art judgments, and develop a personal philosophy of art" (SOLs, 2013, p. 16). Furthermore, students are encouraged to make interdisciplinary connections with other areas of knowledge.

The coded curriculum also supports this emphasis on creation, with 27% of the learning promoted falling under the domain of synthesis (Fig. 7). The second highest level of learning is evaluation, totaling 23%. Together, the two highest levels of thinking comprise half of the curriculum's focus. Comprehension, analysis, and application are all comparable, and rudimentary recall of knowledge occupies a miniscule 4% of the targeting learning. The language of the curriculum as a whole is represented visually in figure 8.



continually invited to analyze, critically examine, and synthesize information. Ultimately, this format of curriculum places emphasis on the more complex levels of learning.

Compared Data

As aggregated and compared, the data collected on the adopted standards-based curricula is represented in figure 9. As illustrated, the trajectory of emphasis in the English curriculum fluctuates slightly upward from knowledge to comprehension, with its high point at application Then there is a gradual decrease for analysis, evaluation, and synthesis. In the WHI curriculum, the trajectory of emphasis is less regular. The distribution fluctuates slightly between knowledge, application, analysis, evaluation, with its low point at synthesis. There is a huge spike at comprehension, which towers over the other categories of learning. The distribution of targeted learning in the art curriculum is more level—like that of the English curriculum, although leans more towards the higher levels of thinking.

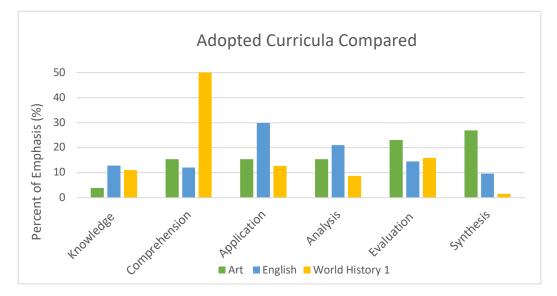


Fig. 9: Compared Distribution of thinking skills in Adopted

The data collected from the three content areas' adopted curricula indicates two critical pieces of information regarding the types of thinking promoted. The first piece of evidence is the unequal distribution of levels of learning elicited, particularly regarding the WHI standards of learning. Learning in the form of knowledge, application, analysis, evaluation, and synthesis makes up half of the overall learning prompted within the standards. The other half of the learning resides solely in information comprehension. While the types of thinking promoted in the English and Art curricula are more evenly dispersed, there are still shortcomings in certain categories. For example, the Art standards focus only trivially on the recall and regurgitation of information.

The data also pinpoints areas of bias and neglect regarding the types of thinking promoted though each curriculum. The WHI standards evidently intend for students to simply understand the information put forth to them. Less frequently are the students actually prompted to extend their understandings through application, analysis, evaluation, and very rarely, synthesis—they are expected to absorb the information, and accept it as is. The English curriculum stresses the application of information, though not drastically. Students are prompted to apply the information learned through reading, writing, and speaking. The English curriculum appreciates all levels of learning, granting passable attention to all six categories. The Art curriculum is partial to the synthesizing of information—creating new understandings with what is given. Students are encouraged to construct their own meanings from information presented. Recall and remembering of information is given minimal attention within the standards. Ostensibly, these three varying formats of curriculum prioritize different types of thinking and learning.

Interview One

Interviews were conducted with teacher participants as a way to ascertain a better understanding of their experience with the current and past adopted curriculums, how curricula affect their approach to lesson planning and instruction, and any direct influences of the curriculum on their students. The same interview questions were used with both teacher participants for consistency purposes. Given the qualitative nature of the study in general, I embraced tangential questioning and informal modes of conversation during the interviews. The first interview with participants was conducted prior to the first classroom observation. The questions prompted in the first interview for both teacher participants can be found in Appendix G.

The interview was recorded and transcribed, and all identifying information was converted to pseudonyms. I then analyzed the transcribed interviews and synthesized responses into overarching themes, which are discussed in the following sections. Note that there is no interview/discussion with the art teacher. Given that I was the art teacher in this study, I that responding to my own interview questions would cause inconsistencies and bias in this element of data collection.

Melissa (WHI)

The initial interview with Melissa, the WHI teacher, was direct and focused. The interview took place on January 26, 2018 in her classroom at Mountainview Middle School. Her insights regarding the evolution of curriculum within her content area, as well as the trajectory of curricula in English and Civics were valuable. She offered invaluable anecdotal information regarding education in America, not only from her thirty years of teaching experience, but also from her own experiences as a student, and her unique background as an immigrant. Recurring topics throughout the interview include: the transformation of curriculum, the influence that the current curriculum has on teaching, and the standards-based type learners that it has created.

In her experience, Melissa has noted that roughly every ten years, the format of the prescribed curriculum dramatically transforms—and in somewhat of a predictable manner. The reason for this, she explains, is that there isn't one fixed answer regarding the *right* curriculum:

these cycles keep repeating themselves because there's not one answer. It has to be a group of things... We tried this for 10 years, we were like, 'Well, we're still failing the students.' Then we'd try something else, and then after 10, like with the SOLs. (personal communication, January 26, 2018)

Melissa also mentions the many factors that have implications regarding the curriculum, and that this "group of things" is often subject to change. Her resolution for this is the reflection of the zeitgeist of society on the formation of curriculum. This was referenced in relation to the trend towards a more pluralistic understanding of history within the context of the current standards-based curriculum in Virginia;

I think we as a society are hopefully growing and even though we were always pluralistic, I think starting with the civil rights movement, because our history books of America were, when I was a student, my history books of American history had only white faces in it. It's the way we saw the world at the time. (personal communication, January 26, 2018)

The character of society has a huge influence when it comes to the aims of education, and the format and content of prescribed curriculums. Given that society is always in flux; always evolving, it only makes sense that the approach to curriculum mimics that of society.

Specifically regarding the infrastructure of the WHI curriculum and its evolution, Melissa noted that learning has become significantly more conscripted and detailed, and the curriculum's emphasis on factual knowledge has increased. She was careful to clarify the nature of the WHI course—an introductory survey course for students—when speaking about this development, "Again, since this is the first history class they have, it's heavy on factual knowledge" (personal communication, January 26, 2018). Yet, Melissa doesn't lament on the emphasis of factual knowledge in this particular course. In fact, she understands both the utility and applicability of it in life:

I truly believe that alternative assessments where everybody passes and everybody feels good about themselves, does not lead to anything good for society. Because we do live by rules, and standards, and expectations. (personal communication, January 26, 2018)

Her logic in this sense, is that the format of a heavily prescribed curriculum can act as a functional simulation of society at large. With this approach to curriculum, students are normalized to the infrastructure and nuances of life regulated by laws, principles, and societal norms.

Although she understands the functionality of a standards-based curriculum, Melissa simultaneously laments the one-sidedness of the learning promoted through the adopted curriculum. In her opinion, this format of curriculum doesn't "attack the multifaceted needs of a human being" (personal communication, January 26, 2018). In essence, soft skills like emotional, cognitive, inter-, and intrapersonal intelligences are forfeited to create a higher volume of objective, quantitative information.

Melissa has recognized multiple approaches to curriculum based on the varying demands of society, as well as the trend towards more narrowly defined, fact-based, and objective standards specific to the WHI curriculum. Although Melissa seems to envision a more comprehensive, holistic, and child-centered curriculum, she isn't whole-heartedly opposed to these transformations. She notes that through the curriculum specifically, and education in general, "we're grinding out the needs of society," and historically speaking, "education wasn't made for the individual. It was made to have a developed society and have a workforce" (personal communication, January 26, 2018). Ultimately, the nature of the curriculum is a product of the demands of society, which traditionally and presently has taken precedence over the needs of the individual.

With a more tightly designed curriculum, Melissa often feels that space for her own pedagogical instinct and input is marginalized. She expressed that:

especially in this area, there less, I don't want to say input, but teacher deviation allowed. The amount of material covered is so fast paced that I can allow myself maybe three or four days each quarter to do something individual and unique that would express me and my children. (personal communication, January 26, 2018)

This is largely the result of the current era of accountability, consistency, and transferability of the curriculum: "Everybody across the state has to have the same amount of knowledge, or the same types of knowledge" (personal communication, January 26, 2018). Homogenized education has been the solution, for decades now, to discrepancies of equality in education, and teacher intuition has essentially been dismissed. The real tragedy of this is that the three or four days in each quarter that Melissa can deviate from the adopted curriculum are the days that she and her students enjoy the most (personal communication, January 26, 2018). The other (roughly) one-hundred and sixty-five days of school are predominantly dictated by the written curriculum.

Melissa consults the standards of learning for WHI first when planning a lesson. Standards provide a strict schedule, benchmarks, and a scope and sequence for teaching and "serves as the basis of what [Melissa] does and guides [her] throughout the year" (personal communication, January 26, 2018). The learning objectives detailed in the curriculum serve as the objectives of her lessons as well as her schedule. As discussed above, Melissa finds minimal luxury and leeway for deviating from the SOLs, as she feels obligated to her students and profession to adhere to them. Although there is rarely space to incorporate contemporary applications of new information or student experiences, Melissa won't extinguish a topic- relevant discussion even if it is not based on the standards:

I wouldn't stop a lively discussion today and say, 'Okay, we don't have time for this. It's not in my lesson plan,' but I will say that if there is something that has been going on like this and it's very exciting, I will definitely give it time, but I will have to take from something else... I have to make up for it. There's no leeway in the scope and sequence of this class. (personal communication, January 26, 2018)

Evidently, the adopted curriculum has a major influence on the teaching and learning that transpires within the WHI course.

The overwhelming amount of information that Melissa is obligated to teach ultimately takes away from less-structured and alternative ways of learning. This reality can be partially attributed to the nature of the course: "whether or not they're ready for it, they have to cover 15,000 years of history in 7 months" (personal communication, January 26, 2018). Even still, the strictly structured format of the standards has taken away from both the art of teaching and the agency of the teacher.

The current standards-based format of curriculum has implications for students as well. Because the curriculum and education in general has become extremely data- and grade-driven, students have adopted this mindset accordingly— "Bottom line is because education is geared to the 80% in this class, that 80% is very, very much data driven in the sense that they need to know the data" (personal communication, January 26, 2018). Grades have taken precedence over learning in the same way that quantifiable learning

has usurped qualitative learning. Melissa reflected further on this phenomenon by expressing:

This wouldn't be just for this class, this would be for society and what we're doing in general, yeah definitely. We had that discussion in class today. What do I need for an A? What do I need to do to get an A? Not, what did I learn, what can I do? (personal communication, January 26, 2018)

In essence, there is no more learning for the sake of learning in this model of WHI. Students have become just as linear-minded as the respective standards-based curricula, which has essentially resulted in standards-based learners.

In addition to grade-incentivized learners, the standards-based curriculum has depleted the thinking from learning. Students have been trained to believe knowledge is black and white, boxed-up, and timeless. Melissa explains,

You can see that because you have learners who have learned from first grade that they have to memorize everything, and then you ask them a, 'What do you think,' question, and they don't know. They come up and say, 'What should I think? I don't know what I think.' (personal communication, January 26, 2018)

Particularly in the WHI curriculum, which places emphasis on lower levels of learning, students are infrequently asked to actually process the information presented to them. The prerogative of the standards is to ensure that students understand the information in the specific way that it is presented to them. This isn't exclusively the case in WHI, but it is exacerbated in the approach that this curriculum assumes. As Melissa articulated, "literally I've been asked, 'What do I need to get an A in this class?' When I answer,

'Think,' they have no idea what I'm talking about" (personal communication, January 26, 2018). The rote memorization and regurgitation of knowledge has become the model.

While the focus of the WHI curriculum is the recall and remembering of information, Melissa perceives this format as justified: "This is a survey course and they have no knowledge, so I am aware that I'm teaching foundation. I don't think that I'm doing them a disservice by teaching foundation" (personal communication, January 26, 2018). Foundational knowledge is absolutely imperative, especially when introducing new units of study. Melissa continued to explain why the focus on fact-based knowledge wasn't detrimental to student learning:

Hopefully, if I do this well enough as they go on, they will be able to do more and more interpretation on their own...Because they're not going to be historians, but without my foundation they won't go on to study history and be the Gibbons' and write the books, and change the world. (personal communication, January 26, 2018)

Her logic in this sense, is that thinking comes after knowledge. In order for students to be able to think critically about phenomena, they must have the relevant factual knowledge.

Mark (English)

I interviewed Mark, the English 8 teacher participant, on January 26, 2018 in his classroom at Mountainview Middle School as well. Although the interview was formatted and delivered in the same way as Melissa's, the structure of the conversation took on a different nature. His responses were more descriptive and less linear, and he was able to provide responses to questions with specific moments in his teaching. Mark's perspective was especially valuable because of his unique approach to the standards, his expertise of English as a discipline, and his understanding of the successes and failures of

the standards-based curriculum. His background includes teaching English at the college level, high school level, and (currently) middle school level, both in private and (currently) public schools. Three larger themes were extracted from the interview that will be discussed in the following sections: the influence of the standards, the nature of the English curriculum, and the triumphs and fallouts of the current adopted curricula.

Mark's approach to the standards of learning provided in the adopted Virginia English 8 curriculum was particularly insightful because of its variance from Melissa's approach. I appreciated the juxtaposition of pedagogy, as it deepened my knowledge and added more color to my research. Mark estimated that the curriculum had an influence on his lesson planning and teaching 35% of the time: "I'm mindful, but I think I drive my lesson plan, and then come back and sort of see where that is and tighten that up and shift that" (personal communication, January 26, 2018). In this sense, the prescribed curriculum is more of a second or afterthought in his lesson planning and teaching. Because of his loose adherence to the standards, Mark had less knowledge of the evolution and transformation of the standards over the years. In his words,

I don't consult the curriculum regularly, shall we say. I've more or less done it at the beginning of the year, every other year, to be honest. When I've periodically gone back, I haven't seen big things jumping out at me like 'whoa, that whole thing dropped out.' (personal communication, January 26, 2018)

Given that there weren't any noticeable or drastic changes within the standards, he thought it safe to say that they had been generally consistent over the years regarding reading and writing. Mark did mention that there wasn't always a demonstrated writing assessment within the state-issued Standards of Learning assessments at the end of the year. Even though English teachers "have always been teaching writing and assessing that in ways," there wasn't always a "demonstrated writing capacity as a test" (personal communication, January 26, 2018). Regarding the evaluation of the demonstrated writing, the "model of what counts in the essay is consistent" (personal communication, January 26, 2018), which makes sense if the writing learning objectives have remained more or less the same.

Mark's more laissez-faire approach to the adopted curriculum is influential regarding the content and organization of his teaching. He doesn't feel stressed by the standards, nor that the curriculum is indoctrinating with regard to his pedagogy:

So, I feel fairly enabled to move pieces around.... I feel like, ok March 20th and 21st we've got the writing SOL. And more to the point—that means for the three weeks before that we're doing a lot of practice essays and it's going to be a mix of technical grammar and voice, organization and mapping, so I've got to get those threads together... But if their going over here and we delay that, as long as we're getting there I feel pretty comfortable about that. Now, other teachers approach it differently. Other teachers I admire and kind of envy at times. They know they're going to get to the same place at the beginning and the end of class every day...like April 23rd this year and maybe April 16th next year—buts it's in those sequences. I just don't stick to that model as well, but I don't think I forget. (personal communication, January 26, 2018)

Besides the weeks leading up to the reading and writing SOL assessments, Mark has the freedom to arrange and rearrange the direction of his class. Because of this, he is able to

better cater to the students' needs, and bring in knowledge from outside of the curriculum:

In general, I am very willing to take the time to pursue [a] thread even if I'm not vetting it. And I can come back and say, "you know what we just did yesterday..." So, I don't feel pressed unless I've mis-planned, on a time level, to do stuff. On a day to day basis, within a week, I can be fluid enough to hit the marks. (personal communication, January 26, 2018)

Granted the luxury he is afforded with a less-structured approach to the standards, Mark is able to teach in a style that resonates with his own pedagogy and according to the needs of the students.

A lot of the luxury he is afforded in the organization of his curriculum can be largely attributed to the language of the standards, as well as the nature of the English discipline. A major contributing factor is the unfixed chronology of learning objectives:

The standards we have and the way our curriculum is structured is not as tied to a predictable sequence. I can do <u>Maus</u> in the spring and we could go after metaphor then and we can do grammar in the fall...In math you have to do addition before you can do multiplication and however they do that. You can teach it creatively and move some of that around, but I think there's more sequencing there. So, in terms of the adjustments that I make in the forecasting and planning or even in the run of things, I may just...like a couple of weeks ago we had all these snow days, it was around MLK day and I usually do that stuff here and we talk about theme and stuff, and I moved that and we added this grammar stuff in there in a relevant moment. And the occasion of a 30-minute class, I mean all those contingencies

which are very real. I mean the other way to do it, some people say 'oh, well we got screwed on time, we're not going to do semi-colons.' (personal communication, January 26, 2018)

Of course, there are certain benchmark in English that need to be met before others can be learned—but when you reach a level of writing that focuses more on writing mechanics and composition—the techniques, styles, and skills can be taught and learned in many sequences. Similarly, there are a multitude of ways for teachers to teach and students to master essentially all of the English standards of learning. As Mark explained, "it would be hard to say that a reflective paragraph about another writer isn't serving the standards" (personal communication, January 26, 2018). In essence, a lot learning that takes place undictated by the standards could, in fact, be supporting them still: "the English curriculum generally allows that kind of more mobile thing. I'd have to think that art did too. You can be a bit more opportunistic" (personal communication, January 26, 2018). In other words, there are many paths an English teacher can take to promote the learning of the standards based on their looser and more flexible structure.

In addition to the scope and sequence that Mark has leeway in delineating, he has flexibility regarding the particular content he brings in. For instance, the books and literature that students read within an 8th grade course are not prescribed by the adopted curriculum—this is for the teacher to decide (administration, community, and school culture aside): "according to the state there's no, 'You will read Huck Finn in 11th grade, you will read Great Gatsby'—everybody's more likely to have some variation there" (personal communication, January 26, 2018). With the freedom to decide which literature will be read, Mark can emphasize certain concepts and enduring ideas based on the personality of the class, the community, or current events. With this kind of structure, students are exposed to conversations with valence beyond the walls of an 8th grade English classroom. Learning goes beyond the rule-based and well-defined information of the standards, and extends into real-world and ill-defined contexts:

I make strong commitments on what happens in the world. You find ways to talk about it. Maybe its skill-tied, but a lot of it is just critical thinking, and what's the language you would use to describe your world. And that's a big thing. And because I have been kind of working across the humanities for kind of my whole career, there's plenty of that stuff that matters that isn't in the reading 8 standards. (personal communication, January 26, 2018)

This kind of learning afforded by the English 8 curriculum—committed to understandings beyond the technical reading, writing, and speaking skills prompted by the standards—encourages students to make personal and inter-subjective connections to knowledge.

The leeway Mark is afforded within the prescribed learning objectives is not only particular to the English discipline, but arguably even more so at the middle school level in a public-school setting. According to Mark,

there's more flexibility at the independent school level, but in a small school actually, we have a fair amount of flexibility too. My sense is that in a high school, there's a little less of that [because] There's more coordination between teachers of the same grade level. Also, we don't differentiate in English. If you differentiated, explicitly, rather than just 'let's have a lot of people in first period who could use support for the same curriculum,' then you functionally do that, you would need to state more clearly 'what's at this level and what's not.'

(personal communication, January 26, 2018)

In other words, because there isn't an honors English track for Virginia at the middle school level, the curricular map is based on a general level of education. In high school, the learning objectives might look more detailed because of the specified levels of education in varying English tracks (exceptional, general, honors, AP, etc.). It is important to remember this when considering the conscription of the WHI curriculum, which is a high school level course. In the case of a private school, the curriculum and therefore the learning could also be more conscripted based on the specifications of the school, the student body, as well as the community. In any case, Mark feels relatively lucky given the leeway that is afforded to him within the Virginia 8th grade Standards of Learning.

Speaking macrocosmically regarding the standards-based curriculum in Virginia, Mark lamented the lack of emphasis on broad associative thinking, relevant experiences, and topics of ethics. He also remarked disappointedly about the box-checking trend in students that has been bred by the standards-based approach to curriculum. In his opinion, the standards "don't target broad associative thinking. I don't think they ask student to take something that they see there and reach beyond" (personal communication, January 26, 2018). In other words, the standards stop short with learning—often with the memorization of facts, and rarely prompts students to extrapolate knowledge. The curricula also aren't emphasizing global learning despite the massive globalization of the post-millennium. While traces of this notion can be found in certain school mission statements like "'We want to develop global learners, we want to develop community engagement,' but they aren't referenced within the prescribed learning objectives. He also recognizes a deficit in the curricula regarding students' personal experiences or connections with information: "Associative thinking. Desire to sort of find cultural relevance of something that were doing—I feel like that's my job to bring in, or my mission maybe" (personal communication, January 26). In an effort to create equality across all public schools in America, community-specific knowledge is omitted from the curriculum. In Mark's opinion, "It would seem a fair idea that at that level—those matter" (personal communication, January 26, 2018). Although, he does suggest that a culturally-relevant approach to information is more the responsibility of an English curriculum than, say, math or science:

That's very central to the humanities. So, English bears some responsibility to do that. It's not just a history question. I don't see the standards asking people to do that. I don't see them, as I recall, craft comparisons that demonstrate cultural relevance. That would be the kind of language that you might expect but is not. (personal communication, January 26, 2018)

So, while a global perspective and cultural relevance might be more applicable in a more subjective and contemplative course like English, these concepts are missing from the curriculum entirely.

In addition to the aspects discussed above, Mark spoke about the absence of discussions on ethics in the humanities curricula:

Watching my daughter going through seventh grade...it's all structure, it's all architecture and there's not a lot of "what would you do? What is right?" Literature is really good at that so would it be worth taking out a little less stuff on semi-colons and getting that in? I do that a bit. I know we're not going to work on 'does the comma come before the quotation mark' here because ultimately, I think that's a less important skill in life and something that you'll pick up along the way. (personal communication, January 26, 2018)

Beyond a global and cultural awareness, ethical reflection is missing from the curriculum as well. Students aren't subjected to debates of righteousness regarding the information provided to them—they simply learn how events unraveled the way they did and move on to the next unit. In a sense, they learn 'what is' or 'what was,' and rarely explore 'what if.'

The nature of all that is included in the current standards-based curricula combined with the nature of all that isn't included has contributed to what Mark has called 'box-checkers.' This breed of students is particularly linear-minded and, as Melissa suggested, 'grade-driven.' Mark commented on this phenomenon specifically regarding his daughter: "I'm thinking more about that in terms of my seventh-grade daughter. She's kind of a box-checker kid. That's how she understands where she's at and what she's learning. More grades, and right and wrong, and the test" (personal communication, January 26, 2018). This approach to information and learning assumes a more *black and white* understanding of knowledge, when in reality, there is a whole lot of gray area. The learning objectives of the standards and the way they are intended to be dealt are very black and white, while the gray areas exist chiefly in the null curriculum. When the question was reworded in a manner that inquired whether this was the case with most students, Mark presumed:

I can't help but think it would tip that way... because the standards are boxed that is amping-up more box-checking. Which may not be the only thing they are. But I can't help think that is a more likely outcome. (personal communication, January 26, 2018)

While this approach to learning is not characteristic of how Mark conducts his class, the overwhelming nature of the SOLs have still managed to infiltrate his students' dispositions.

Although World History and English are both of the humanities, the two content areas have varying foundational ideologies regarding knowledge. Melissa and Mark's adherence to the prescribed curricula are also clashing in many aspects, as are their respective pedagogies. Still, similar themes regarding their perspectives of the nature of the standards and the impact they have had on student learning are evident. In the same way that Melissa excused the objectivity of the curriculum, Mark justified the standards: "I think it's more about managing schools and fairness and stuff than it is about students...it's a commitment to a certain kind of measure and it's an administrative system. I don't think teaching is administrative in that way... I think running a school system is administrative" (personal communication, January 26, 2018). So, despite their differences, both teachers understood the current standards-based curriculum to be regardless of the needs of the individual, concentrated with fact-driven learning, and producing of fact-driven students.

Unit Documents

The documents of an entire unit of study were chosen by the teacher participant and provided to me before classroom observations took place. The documents included lesson plans, worksheets, homework, study guides, quizzes, tests, essay and other tangible prompts. I did a cold read of all that was provided, and then coded the documents according to the same instrument that was used to analyze the adopted curricula, which can is in Appendix A. I used a unit of my own that was implemented in the fall of 2015 to a group of eighth graders. I refrained from altering the format or language of any of the documents I collected from my files in an effort to provide authentic data and to ensure reliability. The findings for each of the three content areas are discussed in the following sections.

WHI

The WHI teacher participant, Melissa, chose a unit on Islamic Civilizations to be analyzed and observed. This unit covered the beliefs and traditions of the Islamic people, the geographical spread of Islam, the contributions of Muhammad, the Sunni and Shi'a split, and the art and literature of Islamic culture. Students read the corresponding chapter in their textbook, completed study guides, worksheets, and maps, were quizzed, and then tested on the information. The scope and sequence of the unit is organized according to the textbook, Prentice Hall: World History, 2011, which delineates the SOLs covered in each section, as well as the time it will take to cover the information in each section. The analysis of these documents will be discussed in the following section. Within their unit on Islamic Civilization, students were asked to complete three different maps—one outlining the regions that Islam spread to, one illustrating the Muslim Empires in India, and the last, identifying the names and distances between regions using a legend provided. In each of these worksheets, the directions prompted students to locate and identify various regions and landmarks based on completed maps found in their textbook. For the most part, these map worksheets were classified as knowledge in the coding instrument, seeing as students were simply asked to find the

Muslim Empires in India

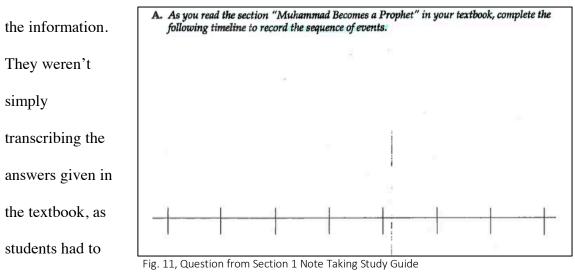
Directions: Locate and label the Himalayas, the Hindu Kush, the Deccan Plateau, the Bay of Bengal, the Arabian Sea, the Indian Ocean, the Indus River, and the Ganges River. Use different colors to shade the areas controlled by the Sultanate of Delhi about 1300 and by the Mughal empire at its greatest extent in 1707. In the blank box, create a key for your map. You may use any map in the textbook chapter, unit opener, or Atlas for reference.

Fig. 10, Directions for Muslim Empires Map

provided answer in their textbook (or according to the map's legend), and record it on their worksheet. The directions for these worksheets is shown in figure 10. The prompts were simple identification questions, asking students to locate the correct answer in their textbook, and transcribe it on the provided template. There were twenty-seven instances of knowledge recall or identification, and one analysis prompt in the three of worksheets combined.

The note taking study guides went beyond simple recall or the recitation of given knowledge. Each guide featured a focus question, one to two follow-up prompts, and a graphic organizer for their responses. For instance, the note taking guide for chapter 10: section 1 asks students to record a sequence of events using a blank timeline (as seen in figure 11). The format for the note taking varies for every prompt. In addition, there is a web outline to fill out, a Venn diagram, another timeline, a list of categories and bullet

points, and a table comparing aspects of two empires. As a whole, the four note-taking guides promote knowledge, comprehension, analysis, and evaluation. Students were not only prompted to identify the information in their textbook, but to also do something with



sequence, organize, compare and contrast, characterize or explain information. Specifically, the note taking study guides prompted seven knowledge questions, two comprehension, eight analysis, and two evaluation questions.

After each section of the chapter was read and notes taken, students then took a quiz. There were five section quizzes, each with two parts. The first component dealt with terms, people, and places, and the second component emphasized main ideas. Each

quiz

quiz	A. Terms, People, and Places
consisted of	Write a short definition for each term.
ten questions	1. hijra
ten questions	2. Kaaba
total, five per	3. hajj
part. In the	4. jihad
first part of	Fig. 12, Question from WHI Section 1 Quiz

quiz, five vocabulary terms were provided with a space for students to write the

definition. These questions prompted simple recall of terms, illustrated in figure 12. In the second part of the quiz, there were five multiple choice questions, which prompted

6. Which is a reason why Muslims were able to conquer northern India?

- a. Hindu princes battled one another instead of the Muslim invaders.
- b. Muslim war elephants smashed Hindu mounted archers.
- c. Tamerlane was a superior military strategist.
- d. Northern India was fragmented into rival Hindu and Muslim states.

Turk rulers were called

O minarets.

Fig. 14, Question from WHI quiz B

BO sultans.

Fig. 13, Question from WHI Section 4 Quiz

learning of all different domains. Specifically, there were seven knowledge questions,

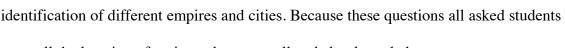
five comprehension questions, eleven analysis,

and two evaluation questions. An example of one

of the analysis questions is shown in figure 13.

The students also took a geography quiz, which

consisted of ten questions inciting the



to recall the location of regions, they were all coded as knowledge.

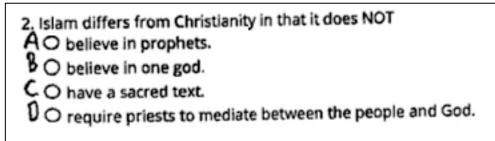


Fig. 15, Question from WHI quiz A

As a review for the unit test, students were given a crossword puzzle to complete.

This was comprised of thirty-five identification questions, all coded as knowledge recall.

The summative test consisted of fifty multiple choice questions derived from all five

sections of the unit. Of the fifty questions, forty-five of them prompted simple recall of

knowledge from the textbook. A lot of these questions looked like the one represented in

figure 14. Evidently, students are expected to have memorized the terms in order to identify the correct answer. There is little reasoning involved. The other five questions elicited either the comprehension or analysis of knowledge. An example of one of these questions is exhibited in figure 15. As you can see, there is more thinking involved in this prompt, specifically comparing and contrasting—or analysis.

Cumulatively, more than three quarters of the Islamic Civilizations unit documents elicited the recall or remembering of knowledge, leaving less than 20% of the

learning to be dispersed among the remaining five levels. Application of knowledge wasn't represented at all, and evaluation is infinitesimal. While the analysis of knowledge

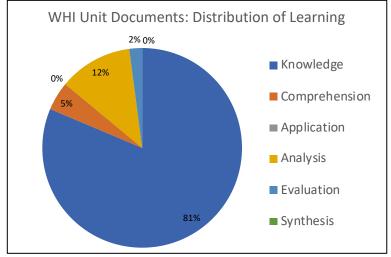


Fig. 16. Distribution of thinking skills in WHI unit documents

seemed to be fairly well touched upon comparatively, it still remained only 12% of the learning emphasized. The comprehensive pie chart illustrates the distribution of all the levels of learning in figure 16.

English 8

Mark chose a unit on writing mechanics to be analyzed and observed, which he implements each year before the 8th grade writing SOL. In this unit, students review grammar, structure and writing styles, practice composing essays, edit, revise, and critique their own and sample SOL essays, and, examine the scoring and rubrics used to

evaluate SOL essays. Over the course of the unit, students brainstormed and outlined responses to seven different prompts, composed introductory and body paragraphs for four of these prompts, and revised three of these. Writing prompts were broken up with grammar exercises, structural work, stylistic practice, revision exercises, and rubric evaluation, though there was no designated chronology for the instructional activities. The aggregated and analyzed data is discussed below.

Throughout the unit, students examined the essay scoring rubric for the 8th grade writing SOL, studied the types of multiple choice questions asked, critiqued sample essays, and considered the judge's comments. They were prompted to study and understand the criteria assessed within each of the rubric's components composition/written expression and usage/mechanics. They applied this knowledge in reviewing a sample essay and, (when critiquing it), considered aspects like audience, tone, idea, organization, fluency, and voice, when critiquing them. Overall, these documents elicited twenty-three instances of analysis, seven instances of knowledge and application, eleven evaluation prompts, and one comprehension prompt. Specific prompts for these activities are illustrated in the figures below.

Inderline Rhrases/Sentences you think Elaborate on Specific Details FOR FACH SET . 3 Separate Spots you think the author Virginia Standards of Learning Grade 8 Writi

Fig. 17: AnchorA-10 Worksheet

UNDERLINE PASSAGES RESCRIBING SCHOOL ALMS/GOALS

111

What patterns do you see??	Highlight
What types of Multiple Choice Questions focus on?	Key Phrases
Usage and Mechanics Write UM next to (Punctuation, Capitalization, Grammar, Spelling)? each item	Fig. 20: What SOL Readers Look For
(Pre-Writing, Central Idea, Organization, Details, Context, Syntax)? Write CW next to each item	
yes, some terms may apply to both	

Judge's Comments, and Circle) some of the Key Terny I've modeled a few to start For Underline Errors in Essay, then Correct in Margin

Overview

The Rubrics section contains a description of the criteria required for a paper to earn a particular score point for each of the scoring domains: Composing/Written Expression and Usage/Mechanics. These criteria are used to score all of the papers. You should become familiar with the description of each score point for the three domains. Study them in conjunction with the anchor papers to gain a full understanding of how the criteria are applied. All domains are assessed on a scale from 1 to 4.

Fig. 22: Essay Scoring Rubric

In order to practice writing in various styles, students were instructed to respond to various prompts using outlines and essays. They were provided a list of roughly forty previously used SOL writing prompts, in which they were to identify ones they would feel confident in responding to, outline potential arguments for, write introductory paragraphs for, and compose full responses to. These directions are illustrated in figure 23. Students were also presented three prompts that Mark devised, which they were to outline a response to, compose an introductory paragraph for, and carry out a certain number of body paragraphs. These practice prompts were all similar in nature to the one

Fig. 21: Anchor A-7

After you have done so, **CHOOSE** FOUR topics that you would feel most confident in supplying <u>specific</u> examples and evidence for, and would be most <u>convincing</u>, where invited, in explaining <u>WHY</u> you are taking and defending that position.

For **EACH** of these four prompts, take 5 minutes to brainstorm and **OUTLINE** a potential response, as if you were going to write this for your essay. You should be thinking on the scale of a 4-5 paragraph response, thinking not only about the examples or paragraph topics themselves, but the order and sequence you think will make for your most convincing narrative. How can you use transition words in thinking about the sequencing and development of your paragraphs?

Finally, for <u>ONE</u> of the four topics you have outlined, <u>WRITE AN INTRODUCTORY PARAG.</u> that will open the essay that you will script more fully in class.

Fig. 23: SOL Essay Prompts

A famous poet once wrote that "April is the cruelest month," a claim you may agree with, or strongly disagree with. In an essay of <u>at least four</u> <u>paragraphs</u>, write a response that argues for or against the idea that "Spring is the most satisfying season of the year."

1) Map an Outline below w/at least <u>3 LEVELS/TIERS OF SUBDIVISION</u> and that will prepare you to write <u>a <u>4+ PARAGRAPH ESSAY</u></u>

2) AFTER you have mapped out your response,

begin writing your FOUR SENTENCE INTRODUCTION

Fig. 24: SOL Writing Prompt—Mapping into Paragraph

presented in figure 24. Overall, these exercises accounted for one knowledge prompt, one comprehension, seventeen application prompts, five analysis, and five synthesis prompts.

Following writing exercises, students were given revision sets. Revision exercises

included practice with word choice, transitions, descriptors, complex sentences,

dependent clauses, adverbs, subordinating conjunctions, sequencing, and organization.

Students were asked to differentiate and enhance their language, add transitions,

conjunctions, and details where applicable, vary their syntax, and implement more

complex sentence structures. Because students were solicited with critiquing, refining,

and revising in a lot of these prompts, evaluation was the predominant domain of learning

emphasized. The distribution of levels of thinking that were prompted within these

1) <u>Underline</u> 2+ sentences that use <i>although/ even though/ or while</i> These sentences may be new, or already written, but using these	activities was broken
subordinating conjunctions helps make fluid contrasts.	down as follows: 2
 Add/<u>Underline</u> 3 new <u>dependent clauses</u> to previously existing sentences, using <i>subordinate conjunctions</i> 	knowledge acquisitions,
3) Include/BOLD 3+ three specific or proper nouns to elaborate w/vivid detail	2 comprehension, 15
4) Add/BOLD 3 new <u>Adverbs</u>	application, 1 analysis,
5) Add/BOLD 4 new <u>Transition Words</u>	17 evaluation, and 1
	synthesis acquisition.
6) Add/ BOLD 5 new <u>Adjectives</u>	
Fig. 25. Revision Exercise	

Examples of specific prompts directing these activities are

presented in figures 25 and 26.

Fig. 26: Revision Exercise

Vary ... and 'Upgrade' !!

Keplacement Words:

The last group of activities in this unit included a grammar packet, and two

practice SOL writing tests. The grammar packet was composed of 30 multiple choice

questions, all prompting students to apply their knowledge of verbs, pronouns, modifiers,

spelling, capitalization, and/or punctuation in order to demonstrate a particular rule's

correct use. For instance, refer to the figures below.

Directions: Read the passage and choose the word or group of words that belongs in	В.
ach underlined section. If the underlined section is correct, choose D for "as it is."	C.
Circle the letter of your answer choice.	D.
Fig. 27: Exercise 3: Verbs, Pronouns, and Modifiers	
	20. A.
Some scientists think that in the earth's surface temperature is rising and that polar	В.
temperatures could rise in the next one hundred years, causing the ice cap to melt	C.
	D.
more <u>rapid</u> . If this happens, the oceans will rise, <u>flooding</u> some low-lying coastal areas. (19) (20)	Fig. 29:
(10)	Fi

A. rapid
 B. rapidly
 C. rapidness
 D. as it is
 A. flood
 B. floods
 C. flooded
 D. as it is

Fig. 29: Exercise 3:

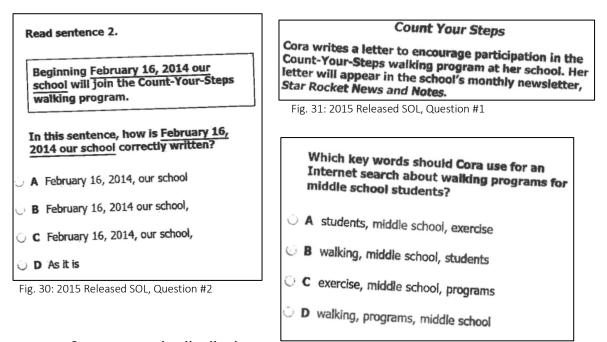
Fig. 28: Exercise 3: Passage

The question is testing for the correct application of adverbs in #19, and verb tense in

#20. The last two pages of the packet contain sentences and a passage for revision.

Students were prompted to proofread, assess, and critique the provided writing, and then

then rewrite it correctly. Correspondingly coded, these exercises reflected forty-five instances of application, and two instances of evaluation. These domains of learning were also emphasized in the practice exams. Each practice exam consisted of twenty-three multiple choice questions that either elicited application or evaluation. An example of each are provided in the figures below. Aggregated, the practice SOLs incited twentyseven application exercises, and nineteen evaluation exercises.



In summary, the distribution

Fig. 32: 2015 Released SOL Question #1

of types of thinking promoted for all of the English documents combined is found in figure 33. Evidently, application was the most prevalent form of learning elicited within this unit. Evaluation represented 27% of the learning, and analysis accounted for 13% of exercises. 7% of the learning incited was composed of knowledge, comprehension, and synthesis combined.

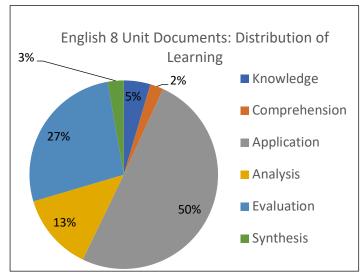


Fig. 33: Distribution of thinking skills in English Unit Documents

Art 8

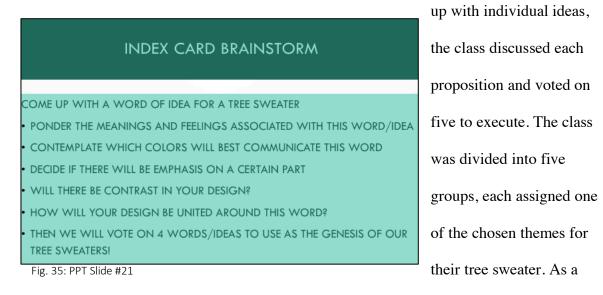
I chose a unit exploring Earth Art, Site-Specific Art, Ephemeral Art, and Public Art to analyze for this component of the research. Throughout this unit, students became familiar with different types of art, recognizing various artists, the criticism of related artworks, analyzing visual communication, and evaluating the purposes of different forms of art. The students themselves were challenged to design a tree sweater representing a concept voted on by the class. Students engaged with a PowerPoint, participated in discussions, brainstormed and evaluated ideas and designs, executed an artwork, justified the communication of their design, and defended the importance and ethicality of their work of art. They were first introduced to the different styles of art and respective artists, and then they drafted their own design for a potential tree sweater. As a class, they voted on which designs and themes to execute, and worked in groups to come up with a vision for their tree. They discussed the ethicality of different forms of art and the role that art and artists play in society and presented and justified the communication and importance of their trees. The analysis of the documents is presented in the following paragraphs.

Students were introduced to the unit with a classic "K-W-L" exercise, an acronym for "Know-Want to learn-Learned." Students were prompted to fill out the first two columns recalling what they already knew, and describing what they wanted to learn about earth, site-specific, ephemeral, and/or public art. Following this, the students were presented a PowerPoint with images of different styles of art, questions and points for discussion, a video clip, and a review of the elements of art and principles of design. The questions contained within the first few slides prompted knowledge recall and description, and progressively escalated to application, analysis, and evaluation. An example of this is presented in figure 34. Compiled, these two activities prompted eleven instances of knowledge, thirteen comprehension, thirteen application, eleven analysis, and three instances of evaluation.



Fig. 34: PPT Slide #4

After becoming familiarized with the different forms of art, students were prompted to brainstorm an idea for their own tree sweater project. The directions for this activity are represented in figure 35. This exercise elicited multiple levels of thinking including knowledge, comprehension, analysis, and evaluation. After everyone had come



group, they discussed the denotation and connotation of their word, brainstormed how they might go about visually communicating it, and analyzed how to manipulate elements to better communicate meaning. The prompt for this exercise is referenced in figure 36.

WHAT IS YOUR GROUP'S WORD?
WHAT DOES IT MEAN TO YOU/WHY IS IT IMPORTANT?
HOW WILL YOU COMMUNICATE THIS WORD IN YOUR TREE SWEATER?
HOW ARE YOUR COLORS, EMPHASIS, AND CONTRAST SYMBOLIC OF YOU WORD/IDEA?
HOW IS YOUR DESIGN UNITED ABOUT YOUR WORD/IDEA?
Fig. 36: PPT Slide #22

This activity built upon knowledge, comprehension, application, and analysis. Following these group discussions, students filled out an exit slip, which further elicited knowledge, comprehension, and analysis. In total, these exercises integrated three knowledge exercises, three comprehension, four application, and four analysis exercises.

About halfway through the students' execution of their tree sweaters, a

hypothetical scenario was presented to them to discuss. Questions were posed and discussed in groups, and then as a whole class. These questions challenged students to engage with a variety of levels of thinking included knowledge, comprehension, analysis, and evaluation, and are illustrated in figure 37.

una	e · ar	dation, and are mustrated in figure 57.	
Explore ethical aspect of art:			
((Students sitting with groups, question is brought up, discussed in group, then discussed as a class)		
	0	What potential collateral damage might the sweaters have on the trees?	
	0	How can we verify if these possibilities are realistic?	
	0	What potential positive effects might the sweaters have on the community?	
	0	What does ethical art entail?	
	0	What does unethical art entail?	
	0	Is our project ethical? Why/why not?	
	0	Do artists co-function as a voice of society?	
	0	How can artists be instrumental in reform?	
	0	What is the purpose of Public Art?	
	0	What is the purpose of Earth Art?	
	0	How does the purpose of Earth Art merge with the purpose of Public Art?	
	0	Do the ends justify the means?	
Eia	37· Hv	nothetical Scenario	

Fig. 37: Hypothetical Scenario

After these concepts were fleshed out, students responded to another exit slip, eliciting

knowledge and evaluative thinking. Compiled, this activity challenged students to recall

knowledge three times, comprehend information twice, analyze seven times, and evaluate

information three times. The final assessment for the unit was a justification blurb, in

which students wrote up responses to a set of questions electronically. The justification

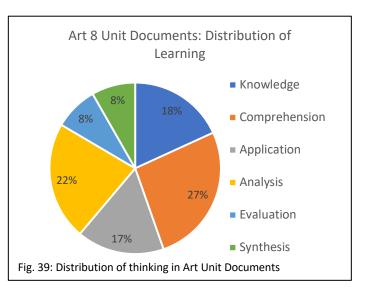
blurb elicited a number of levels of thinking, specifically, knowledge, comprehension,

analysis, and evaluation. These questions are shown in figure 38.

1.	What is Earth Art?
	a. What is the purpose of Earth Art?
	b. What are some examples of Earth Art that you have looked at?
	c. Which Earth Artists were you most interested in and why?
2.	Describe one other group's tree sweater
	a. What word/idea were they trying to represent?
	b. How does their design help represent this? (Discuss their use of color, contrast, emphasis,
	and unity)
3.	Describe your group's tree sweater
	a. What word/idea were you trying to represent?
	b. How does your design help represent this? (Discuss the use of color, contrast, emphasis,
	and unity)
4.	What is one way that artists and Public Art contribute to society?
	a. Do you believe that artists and Public art are important within a society? Why or why not?
	b. Describe an example of unethical art

Throughout the duration of the unit, students were creating and constructing their

tree sweaters. Thus, roughly half of their engagement in this unit was focused on synthesizing. Yet, the only documented instances of synthesis are found within the lesson plan because the students weren't given specific instruction for each work session. Although about 50%



of unit arguably prompted students to synthesize information, I only coded the instances found within the lesson plan. The lesson plan itself accounted for four knowledge recall exercises, ten comprehension, seven application, five analysis, two evaluation, and ten synthesis exercises. Comprehensively, the types of thinking prompted within the art unit documents were distributed fairly evenly. Comprehension is the most represented, followed by analysis, knowledge, application, and a tie between evaluation and synthesis. The data is represented visually in figure 39.

Juxtaposed, the distribution of thinking skills for each of the three units appears as follows:

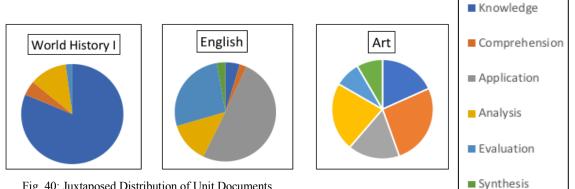


Fig. 40: Juxtaposed Distribution of Unit Documents

As indicated, the WHI unit elicited the most knowledge recall, the English unit prompted the most knowledge application, and the art unit promotes the most knowledge comprehension. The English unit elicits the most evaluation, and the art unit prompts the most analysis and synthesis. The art unit promotes each level of thinking the most evenly, while WHIs partial to knowledge, and English favors application. The elaboration of learning transcribed within the unit documents will be further explored in the following discussion regarding classroom observations.

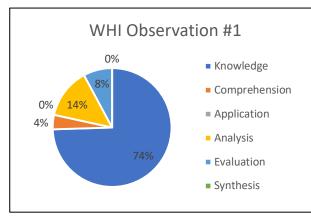
Classroom Observations

I observed two class periods in WHI and English 8. The purpose of these observations was to help me understand how the adopted curriculum manifested itself in teaching. Since I was not currently teaching and analyzed a unit implemented three years prior, art classroom observations were not part of the data collection or analysis. The coding instrument used to analyze classroom observation was the same one used to examine both the adopted curricula, as well as the unit documents. Discrepancies arose using this instrument during classroom observations because of the inherent varying nature of live instruction versus formally written learning objectives. Much more research discretion was used, as questions were not prompted in the way the coding instrument envisioned. While objectives included within the adopted curricula and unit documents were posed in such a way that fit into the instrument, live questioning was often posed with who, what, when, where, why, and how. Thus, I had to interpret the function of the prompt and record it accordingly. Questioning prompt, type of questioning, and domain of knowledge were recorded with respective A, B, and C codes in 5-minute intervals.

Classes were roughly 50 minutes, so 10 five-minute intervals were transcribed. I also took note of the nature of the activity happening during each of the 5-minute intervals. The time component template can be found in Appendix F. Following these are discussions of the data collected for both World History, and English observations, and a comparison of the two.

World History

The first World History classroom observation took place on Friday, February 16. This was the first class of the new unit, so it began with a lot of recap and recall of historical events leading up to Islamic civilizations. Melissa told a story of brief story of her own experience visiting an Islamic civilization, and then the class began to read section one of the chapter in their textbooks together, taking turns reading paragraphs out loud. Melissa would interject every so often recapitulating a vocabulary term or reviewing the information. She often would add context to the events glossed over in the textbook or relate the information to historical events that they had talked about in other



parts of the world. She offered a few more personal experiences with the information presented, and they finished reading the section together. After this, Melissa drilled them on selected information from the reading, and then

Fig. 41: Distribution of thinking skills: WHI Obs. #1

the students set off to complete the Section 1 Map worksheet. The analysis of data collected during this first observation is represented in figure 41.

The introductory review of information leading up to Islamic civilizations was very knowledge and comprehension oriented. Students were asked, "Where are we going?" "What's Islam?" "What else do we know?" "Where are we in the world?" What's happening in 600?" (personal observation, Feb. 16, 2018) prompting student recitation and description of the previously learned information. As they read section 1 of the textbook together, Melissa asked questions intermittently, ranging from a simple recall of knowledge to more in-depth evaluation. Some of this inquiry had to do with connecting the new information with previously learned information. For instance, Melissa posed the questions, 'Who would we find in Jewish faith that would do the same?" "Why would Muhammad do this?" and "What unites America?" (personal observation, Feb. 16, 2018) eliciting student analysis of circumstances. When they completed the section, Melissa had the students repeat the five pillars of Islam back to her in an effort to stimulate memorization, as well as state certain information, e.g., two main cities of Islamic civilizations and vocabulary terms. The simple recall of knowledge took precedence over any other type of learning in this lesson, occupying nearly three quarters of the learning that was observed. Analysis and evaluation were sparingly elicited with a paucity of comprehension, while synthesis was left out completely. The same is true for the second classroom observation.

The second observation took place a week later. Because this was a rather short unit, it was important for that I observe the two classes within a week's time. The second class began with the teacher asking for some simple recall and a review of the textbook section that they had read for homework. Once the students were oriented, the class began reading the next section of the textbook together. Passages were interrupted intermittently with teacher-prompted questions, which were recorded on the coding instrument. After they completed the section, the teacher initiated a quick review of what they had just read, along with knowledge from the previous sections on Islamic civilizations. They watched a video clip after this, about 7 minutes long, exploring Islamic landmarks and artwork. While students were keenly watching the clip, Melissa stealthily cloaked herself in a burka in the back of the classroom. At the conclusion of the video, Melissa stood in front of the class, and led a discussion about gender construction in Islamic nations. The final 20 minutes of class were devoted to individual work time on the following section's note taking guide, and the passing back of the previous unit's test. A synthesis of the data collection and corresponding analysis is presented in the following review.

Figure 42 illustrates the distribution of thinking skills that was promoted throughout the second classroom observation. Similar to the first observation, the class began by identifying and describing information from previous readings. Determining the students' knowledge and comprehension was based on the questions, "Who can name the five pillars?" "What period have we covered?" "Where did we spread?" "What's the straight called that we crossed?" (personal observation, Feb. 23, 2018) and other specifics

from the chapter. After finishing the section, the students watched a video clip, and then discussed Islamic gender roles. Throughout this discussion, Melissa elicited student analysis and evaluation of

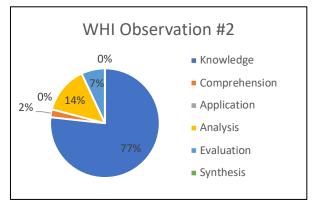


Fig. 42: Distribution of thinking skills, WHI Obs. #2

information with questions like, "What's wrong with this picture [referring to herself wearing a burka]?" "Why wouldn't I be teaching?" "You wouldn't be in the same room, why?" "How many of you act differently when you dress for church?" (personal observation, Feb. 23, 2018). During this conversation, students were encouraged to examine the situation and consider the nuances of the Islamic religion as well as reflect on and critique the way attire affects their own behavior. While this discussion decidedly emphasized higher order learning, the lesson as whole was still overwhelming commandeered by the raw recall of knowledge. Analysis, evaluation and comprehension employed roughly a quarter of the questioning strategies, almost identical as was the case in the first observation. Synthesis was, again, neglected, as facts took precedence over the incited learning. The distribution of types of thinking in the instruction were remarkably reflective of that comprised within the unit documents. This synchrony between planning and pedagogy was not the case with the English unit documents and the corresponding classroom observations.

English

The fist English classroom observation took place on Tuesday, February 27th, and the second on Thursday, March 15th. This unit was exceptionally long as compared to the World History unit observed. It lasted for nearly a month leading up to the 8th grade writing SOL assessment. The first observation took place in the first few days of the unit. This class was largely about familiarizing students with the expectations for their writing SOL. First, the class went over the homework that would be assigned for that night, and then reviewed a worksheet detailing the breakdown of multiple-choice questions that would be on the SOL test. After this, the class discussed the homework from the previous night regarding the 21 SOL essay prompts. From here, the class engaged further with the multiple-choice worksheet entitled "What your SOL readers look for," and then on to another packet explaining the SOL essay scoring rubric. Mark used the last few minutes of class to look at the first anchor set, which was the assigned homework for that night. The deconstruction of types of thinking promoted in this first observation is represented in figure 43, and an explanation of this data is provided below.

As the class looked at the homework assignment that they would be doing that

night, Mark prompted some of the questions they would have to ponder: "What's sufficient detail?" and "Can you distinguish between resources?" (personal observation, Feb. 27, 2018). These prompts were analytical and

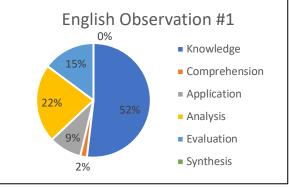


Fig. 43: Distribution of thinking skills, English Obs. #1

evaluative in nature, as were the prompts that transpired as they reviewed the multiplechoice questions that would be on the SOL. Students were asked to distinguish between the questions dealing with usage and mechanics and those dealing with composition and written expression. Mark challenged them to defend their classifications with the following questions: "Why should 'brainstorm' be considered composition and written expression?" and "Would 'tone' be composition and written expression?" (personal observation, Feb. 27, 2018). The class then discussed the previous night's homework, responding to the following reporting prompts: "What topics did you choose?", "What was one that you mapped?", "Has anybody considered this prompt in their life?", and, "Could you do this [respond to this on the SOL]?" (personal observation, Feb. 27, 2018). Mark continued with the higher order thinking prompts while they revisited the expectations of SOL readers worksheet. He asked locating questions such as, "is 'vividness' on the other side?" and analytical questions such as: "Is audience about grammar? Is organization?" (personal observation, Feb. 27, 2018). The students were also prompted to analyze the SOL scoring rubric, but more emphasis was placed on familiarizing themselves with the criteria for different scores (personal observation, Feb. 27, 2018). This activity contributed to the lower-level type learning contained within this class. Mark ended class with higher-level thinking regarding the anchor sets based on the questions: "What is the feature they [the scorers] are looking for?" (personal observation, Feb. 27, 2018). While the majority of this lesson was assumed by the identification of knowledge, evaluation, analysis, application, and comprehension did not go unrepresented. Synthesis was not represented at all, nor was it found in the second classroom observation.

The second class that I observed in English resulted in a much different distribution of thinking skills challenges, which is represented in figure 44. Mark began this class with a check and review of the previous night's homework. This review extended for a third of the period, followed by an activity to be done in groups. The class then discussed their groups', which triggered a tangential discussion about a recent student-led protest. The remaining minutes of class were spent reviewing the multiplehomework.

Throughout the initial homework review, which considered previously written SOL essays, students were challenged to think both simply and complexly. Mark posed questions such as, "What was

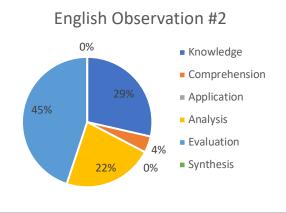


Fig. 44: Distribution of thinking skills, English Obs. #2

something you credited?" "What made this sentence stick out?" "What feels true?" and "What else is effective [in this sentence]?" (personal observation, Mar. 15, 2018). He elicited students to report on places they had marked, and then had them analyze and evaluate the specific elements within those places that they felt deserved credit. Mark pushed students' reflections even farther by asking them to assess what he would appreciate about certain sentences (personal observation, Mar. 15, 2018). After this, the students were directed to "share with their group details [they] identified and things [they] credited" and he made sure to prompt students to "explain why...if you think something can be improved, explain how" (personal observation, Mar. 15, 2018). They shared their groups' findings, and then began a discussion about the student-led walk out, which took place the day before. Mark related this event, and the speeches that took place after it, to the roles of persuasive versus editorial writing. He had students describe what a persuasive essay should include in order to be effective (personal observation, Mar. 15, 2018), they then quickly shifted back to the homework review. This review dealt with the multiple-choice section of a previous SOL test. Although reviewing multiple-choice

answers can be a simple recitation of information, Mark tested students' judgement on each individual question. Students were prompted to justify their answers with empirical evidence. For instance, Mark asked, "What is the problem word in this answer choice?", "What is the keyword in this question?", "Which answer can we eliminate?", and "[In] writing an editorial, what are you trying to do?" (personal observation, Mar. 15, 2018). This questioning promoted student recall, analyzation, and evaluation of knowledge. Unlike what was observed during the SOL scoring rubric activity in the first classroom observation, Mark instigated more challenging thinking through his questioning strategies during this activity—which explains the disconnect between the emphasis of knowledge and evaluation between the two observations.

Although I did not witness any use of synthesis in the four classroom observations, these classes were only a part of the entire unit, and not necessarily exact representations of each lesson that comprised the unit. That being said, students were using synthesis throughout the English unit while composing essay responses (as documented in the unit artifacts)—but this occurred largely outside of class. So, it is understandable why I did not pick up on any synthesis during class. This was not the case in the World History unit—students were not prompted to synthesize either in or outside of class (also documented in the unit artifacts). The distribution of thinking skills in the observed World History classes were objectively predictable, while that of English class

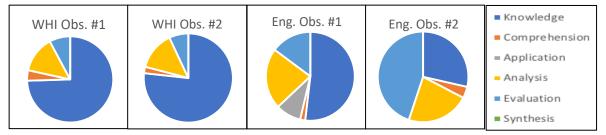


Fig. 45: Juxtaposed Data, Classroom Observations

seemed to vary day-to-day. The analysis of the four classroom observations are juxtaposed in figure 45.

Interview Two

While the purpose of the first interview was to better understand the teachers' experiences with curricula, the purpose of the second interview was to understand their perspective regarding the current curriculum, areas of strengths and weaknesses, as well as their thoughts on an alternative approach to curriculum. This round of interviews occurred after both class observations had taken place, and I was also able to share findings of my research up until that point. The questions posed in the final interview with Melissa and Mark are included in Appendix H.

As was the case in the first interview, the second interview was recorded and transcribed, and all identifying information was concealed with pseudonyms. I analyzed the transcribed interviews and synthesized responses into overarching themes, which are discussed in the following sections. The reader will notice that there is no discussion for an interview with an art teacher. Given that I was the art teacher in this study, I felt that responding to my own interview questions would cause inconsistencies and bias in this element of data collection.

Melissa (WHI)

I interviewed Melissa for the second time on Friday, March 23rd. This conversation further revealed her discontent with the volume of the current WHI curriculum that admittedly reviews monumental historical events too hastily. In replace of this ill-designed curriculum, Melissa envisions one that spans across a period of three years to extenuate the topical nature of historical information. The conception of said curriculum would be approached differently, with reverence given to the contributions of practicing public school teachers, and opportunities for student-led learning. The following analysis is organized into two major sections—a discussion of Melissa's grievances with the current standards-based curriculum followed by a discussion of her ideal approach to a standards-based format.

In Melissa's opinion, the WHI curriculum is supersaturated with information. The volume of knowledge that is expected of 8th grade students to absorb is improbable, especially as it is their first encounter with this subject. In her words,

The ill-designed part is the fact that they try to cover too much in too short of a span. You have 500 years of Roman Republic in four pages and 500 years of Roman Empire in four pages, and yet when they finish this we expect them to have quite an ability to synthesize, analyze, which they can't, because you can't cram 500 years into four pages in two days and then expect them to do the kind of things that we hope—I would hope them to do. (personal communication, Mar. 23, 2018)

Given the amount of learning points that the adopted curriculum prescribes—a few of them stress higher levels of thinking. It is hard to imagine students having the capacity to do much beyond memorizing the substantial cache of new information.

In addition to the sheer amount of data that teachers are responsible for delivering and students are accountable for knowing, the students' actual engagement with the information they are given is superficial at best. As Melissa articulated, "What we're doing is we're taking the highlights of 1,500 years" (personal communication, Mar. 23, 2018). Although she defends that the information covered in the SOLs and the textbook is authentic, Melissa admits that the curriculum fails to emphasize the context, impact, and seriousness of historical events (personal communication, Mar. 23, 2018). For instance, she described a specific moment in the curriculum:

Let's say the Black Death, they mention it, they say, "This is what happened. A half to a third of Europe died." Then, here are the repercussions and these are the repercussions of the Black Death. Oh wait, this caused the whole set of other things to happen. We don't do that. We don't talk about the value of a human life, when the fact that the whole manorial system had to disappear because half of the serfs died. The fact that we started it and it coincided with manufacturing and all this other. That would be a great topic to go into depth of ... anytime we have a major historical issue like that, this would be a great time if we had more time to go into the repercussions and the synthesis analysis stuff, which we can't do. We just don't have it. (personal communication, Mar. 23, 2018)

Instead of focusing on said concepts like the context, impact, and seriousness of historical phenomenon, the curriculum stresses names, dates, and places.

The combination of information overload and superficial engagement are the main contributors to what Melissa understands to be the ill-design of the WHI curriculum. She laments, "I have a curriculum that's packed in seven months, and I think it's too much for them...I think we just try to do too much" (personal communication, Mar. 23, 2018). This reality is largely responsible for the depthless nature of knowledge that is covered, and the superficial learning cultivated within this course. Melissa attributes some of this ill-design to the makeup of a survey course: "Survey courses

emphasize basic knowledge. You're asking kids in seven months to go through 1,500 years on four different continents. You don't have time for anything but knowledge" (personal communication, Mar. 23, 2018). Even so, she admits that the information is "just skimming the top. And yet, the understanding of it is not conducive to skimming the top" (personal communication, Mar. 23, 2018). In an effort to avoid criticizing the curriculum for criticism's sake, Melissa and I explored what possible solutions to said shortcomings might look like as well. A discussion of this conversation is presented in the following sections.

Melissa's panacea for the WHI curriculum hinges on lengthening the duration of the course three-fold: "they should start teaching ancient, middle, and new, instead of trying 1,500 to ... It's just too much... Yes, in my perfect world, it would three years" (personal communication, Mar. 23, 2018). With more time to cover the information of 1500 years of history, students could interact with and examine the information on a deeper level. For teachers, this extension would allow for more differentiated learning, and child-centered learning. As Melissa contended,

...because that's the only way that you can allow for differentiation. Otherwise, you're doing those standard things, which mean nothing here. You only answer three questions and you get to answer six. How does that help us? Our kids? It doesn't, but we do that all the time because that's how we differentiate in a class that's going this fast. (personal communication, Mar. 23, 2018)

Over the course of three years, Melissa imagines students engaging in more analysis, evaluation, and synthesis with their more complex and dynamic understanding of world history. She elaborated on her vision: Let's say, even if we could do this. Pick one society in each one of those, if we had three that we were going to do in depth, then as we go on—compare others to what we've learned in depth. If we learned about seven characteristics of civilization, let's say we do that in the first civilization of—then we can compare all of those seven, even if we're going faster, with the rest up to Rome. Then from Rome to the other one. (personal communication, Mar. 23, 2018)

With this format, the information covered wouldn't be so flat in nature, and students would be able to make the connections, understand the impact, and recognize the seriousness of the history they are learning about. It would promote a more comprehensive and complex understanding of historical events.

Although Melissa has alternatives in mind for the current standards-based curriculum, she firmly believes in the advantages of having a standards-based curriculum. Her vision for a three-year world history curriculum would utilize the standards-based approach:

I definitely wouldn't get rid of standards. I sincerely, truly believe that there has to be a standard, because I truly sincerely believe that every classroom is dependent on the personality of the teacher. Therefore, that teacher has to have a guideline of this is what you have to cover, however you've got to cover it. (personal communication, Mar. 23, 2018)

The difference with Melissa's approach to a standards-based curriculum is in the conception of the learning objectives. She envisions collaborative curriculum planning with practicing teachers as integral players:

I'm envisioning the people who actually write those standards, which I've envisioned all my life, of actually sitting down and not with their nose in the air because they were educators and intellectuals, but sitting down with classroom teachers and saying, "Hey. This is what we have. Tell us where we're right, tell us where we're wrong, tell us what's doable and what's not." I definitely envision that any standard has to be not just written philosophically, but actually discussed. (personal communication, Mar. 23, 2018)

Teacher-input would be an essential part of Melissa's WHI curriculum, as public-school teachers have an unmatched grasp on what realistic goals look like in the classroom. Student's would also have a voice in the curriculum Melissa envisions—although less directly. The curriculum would be designed by policy-makers, theorists, and teachers with less detail and more room for student-directed learning. Melissa ruminated in this way:

...student input, yes if I had more time. If I didn't have to cover this material in as quick a time. Yes, because they would be more interested, they would remember more, they would take more ownership. Yes. All of that yes. It would be involved and it wouldn't just be a bunch of dead people. (personal communication, Mar. 23, 2018)

This sort of student-input would be integrated after the curriculum had been designed and set in stone, so students wouldn't have a say in the actual information comprising the curriculum. However, they would have the ability to explore areas of interest to them and make personal connections relating to and beyond the information prescribed within the standards.

In a few words, Melissa's proposal calls for a slow-down of the WHI curriculum. She trusts that if the information currently prescribed in the WHI standards were stretched across the duration of three years, that students would gain more valuable knowledge. In her words, "Not just for the sake of slow down, but for the sake of getting something more out of the dates and places and dead people" (personal communication, Mar. 23, 2018). While she does voice grievances with the structure of the curriculum, there are aspects that Melissa finds well-designed. Specifically, she appreciates the deference that the content gives to non-Western cultures compared to when she was learning World History (personal communication, Mar. 23, 2018). She generally finds the content to be well-thought out, but the amount and pace of the curriculum to be problematic. While I believe Melissa's suggestions for the curriculum seem sound, she isn't particularly optimistic regarding their coming to fruition. She considers her contributions,

Yes, I think there should be three different ... And I know that that doesn't fit the pretty little picture, but yeah, definitely. Or at least, and again that won't fit the pretty little picture, have some sort of introduction to world history and/or geography, which is totally missing in their world, prior to this class. (personal communication, Mar. 23, 2018)

Realistically, it takes a forceful movement to make any sort of curricular adjustment especially one that would make a ripple reaching across three years. The potential for this sort of change, however, is born out of critical reflection like what Melissa offers.

Mark (English)

The final interview with Mark also took place on Friday, March 23rd. This conversation took on an entirely different energy than the one had with Melissa, as Mark was predominantly adulatory of the English curriculum. Some of the elements that he appreciates about the curriculum were mentioned in the first interview (and are reaffirmed in the following dialogue), but this conversation also revealed new places of praise. He particularly references the developmental cues, expectations, emphasis on writing, and clarity of the standards as strong points. Nonetheless, these praises did not go without suggestions for improvement. Mark specifies areas for content enhancement, as well as potential places for diverging from the standards-based approach. An analysis of the interview is presented in the following sections in the format outlined above.

The conversation with Mark started out with a discussion of aspects he thought to be well-designed in the curriculum. Included in this list was a provided guide of developmental cues and what to expect of incoming students. He especially appreciates this guide when it comes to teacher-turnover and ever-changing constructs of ageappropriateness. With the standards, Mark is able to think, "Okay, they're up to adjectives but not adverbs or, they're expected to have main ideas but not transitions" (personal communication, Mar. 23, 2018). So, he is better informed of the level of teaching he can deliver. Mark was expressly grateful for the standards considering the recent inconsistency of 7th grade English teachers. Teaching philosophy, pedagogy, and experience aside, Mark can plan his curriculum based on the benchmark learning objectives outlined in the seventh grade SOLs. He reflected, "I've gotten a little better or more attentive to looking at the seventh-grade standards the past couple years just because of how things line up here" (personal communication, Mar. 23, 2018). In familiarizing himself with the gains of a 7th grade English course, Mark can figure out

is it reasonable to expect that they've done this? Can I start the year saying, 'I'm not sure whether you've done this or not but I'm going to assume you have and we're going to do a quick triage and then get onto it?' (personal communication, Mar. 23, 2018)

Not only are the standards insightful for the novice teacher without first-hand experience regarding what to expect, the standards are also helpful indicators for seasoned teachers. While these are both elements of the curriculum that Mark appreciates for teacher-orienting, he speaks on elements of content that he appreciates regarding student learning as well.

In addition to the aforementioned strong points of the English curriculum, Mark respects the quality of content prescribed within the curriculum. The learning objectives within the English 8 SOLs emphasize higher order thinking and dynamic learning. In his words,

This writing standard is not about rote memorization. It's not a whole lot about content recall. The transition words are probably the closest I come there. I'd love to think that if I asked students to name 15 transition words in two minutes they could do that. That would be one way of doing that. The standards don't ask you to do it that way. They say, 'Can you use them?' They say things like, 'Vary your sentence structure.' (personal communication, Mar. 23, 2018)

Mark admires this application, evaluation, and synthesis-centric emphasis in the writing standards. As discussed in the first interview, he also really appreciates the room for

teacher-input within the English curriculum. Mark recognizes this especially when it comes to choosing the literature that the class will examine. This allows for him to cater towards the interest of his students as well as his own strong teaching suits. Mark explained,

I pick spots of content, topics, and genre that I think the kids will like on balance and that serve the skill well. Maus serves the skill well. I think they like the illustrated novel. The fact that it happens to be about the Holocaust ... Kind of incidental. I have a lot to do with that. That's part of why I keep teaching it and liking it. (personal communication, Mar. 23, 2018)

This aspect of the English curriculum is well-designed for the teacher and students alike. He also mentions the user-accessibility of the curriculum: "They're clear and they're pretty measurable" (personal communication, Mar. 23, 2018), which contribute to his overall positive feelings towards the curriculum.

The developmental indications and general expectations that the English curriculum provides, coupled with the strong content and clarity make for a competitive standards-based model. These components help set teachers up for success and also encourage student growth. However, Mark doesn't think the current English curriculum is iron-clad in design or composition. The improvements Mark suggested for the curriculum included modifications within the current standards-based framework as well as potential alternative approaches to the standards-based curriculum. In the following text, I will review Mark's proposals and considerations for curriculum enrichment. Mark had a lot of concerns regarding the media and research component in the English SOLs. He regretted that they were included in somewhat of a perfunctory fashion. He explained,

Well, I will say the whole bit about research, media, that's pretty ... I guess it's in there. It's not real clear to me that that's evaluated by the state. I haven't felt very inclined or compelled to approach those skills through those standards...The way they set it up it just seems very worksheet-driven kind of thing. Like, 'Can you find three websites that do this' or an .edu and a .org. It's like check, check, check. (personal communication, Mar. 23, 2018)

In lieu of the way the standards stage the use of media and research, Mark envisions these skills being more application-driven. For example,

A lot of times I've noticed this year there's a prompt like, 'Describe a place you'd want to go on a trip.' The students—in order to get their head around it, in order to get writing, particularly for students who are a bit more visual or they're just not abstract thinkers or verbal—they would want to go to the internet and see a picture of the Bahamas before they start writing about the Bahamas. Then they say, 'Let's see this beach' or this food and do this, that, and the other. It struck me that that's a place to think about how you use research...Like, 'Okay. You get two hours and the internet.' To see how somebody problem solves with the tool that all of us use every day for almost every single question that we have. (personal communication, Mar. 23, 2018)

Given that technology has become so ubiquitous in the way individuals think, learn, and act—especially the X generation—it is only logical that media usage and research skills

have an integral place somewhere within the curriculum. Mark also criticized some of the outdated terms included in the standards with regard to media and research. For instance,

There are these terms for rhetoric like bandwagon and glittering generalities. That's the one that always threw me. I don't know if you've found it. I was like, 'I can't actually bring up glittering generalities and take that class seriously.'

(personal communication, Mar. 23, 2018).

While these terms do seem antiquated, I checked the Virginia Department of Education website and found that they were included in the 2017 curriculum framework, but not specifically referenced in the standards. Nonetheless, the research and media skills could benefit from more student-engagement.

In addition to revising the media and research component of the SOLs, Mark had designs on enhancing the reading standards. Although he finds the writing-related learning objectives to be of high quality, Mark doesn't feel the same about the reading-related objectives. In fact, he finds the reading comprehension skill promoted to be somewhat basic: "Things about narration, first person, characterization, theme. That's in there" (personal communication, Mar. 23, 2018). In terms of rejuvenating the reading component, Mark articulated:

I'd like to see something a little more about how to read a novel. In terms of strategies for long-term reading, broader sense of evolution of character or theme, I think these kids are ready for that...Can you see contrast in character? Irony?" (personal communication, Mar. 23, 2018)

So, in a sense, reading for more complex and abstract ideas—beyond plot and character. If the writing standards are eliciting this kind of evaluation, it seems developmentally appropriate to also encourage complex reading comprehension. Were these two elements of the 8th grade English curriculum augmented—media and research and reading comprehension—Mark would arguably have few recommendations.

The only other suggestions he proposed were a more prominent performancebased approach within the standards-based approach, and intermittent places throughout the year specified for inter-disciplinary learning. He perceived the project-based approach to be up and coming, as well as a compromise between teacher-input and prescribed learning:

I think the move towards performance-based things is in line with that. It's a compromise, right? It's not totally clear what that means. We're not giving up our standards but how you evaluate it, and therefore how you structure it leading up to that, is more up to you. (personal communication, Mar. 23, 2018)

Performance-based learning has ostensibly become more prevalent in the past decade likely as a way to mitigate the direct-instruction that is cultivated by a standards-based curriculum. In this model, students have the opportunity to present their knowledge in multiple forms other than a traditional test, and the learning is more project-centric. In addition to the integration of performance-based learning, Mark is confident in the benefits of inter-disciplinary units. While he admits that an entire inter-disciplinary curriculum is unrealistic, Mark does think it is sustainable for short periods of time: "I think you could get a week out of it. I've done day long seminars. Full school. Like grade one to twelve interdisciplinary across groups where we're doing dance and science and history. Those are pretty memorable and meaningful" (personal communication, Mar. 23, 2018). Mark envisions interdisciplinary moments happening as explorations of broad themes. He elaborates, "Let's take a skill, a very broad thing like interpretation, either as a team-taught unit or concurrently within the school, how is the process of interpreting a work of art like or unlike interpreting a light spectrum something?" (personal communication, Mar. 23, 2018). This would be one way of incorporating cross-curricular learning, but he also considers "if every teacher had almost a minor that they were ready to draw on" as a way of connecting disciplines (personal communication, Mar. 23, 2018). If this were the case, teachers could regularly relate information from different subjects and encourage this in students as well. Either way, the incorporation of performancebased learning and inter-disciplinary lessons within the current standards-based curriculum would satisfy Mark's qualms with the current SOLs.

Overall, I believe Mark's two cents about the curriculum seem manageable to implement. Integrating higher order reading comprehension skills into the standards, revising some of the terms used in regard to media, and allowing for acute areas of performance-based and interdisciplinary learning wouldn't necessarily cause huge disturbances in the curriculum. For the most part, he considers the curriculum welldesigned in structure and content. The standards are advantageous for both the teacher and the students alike, and he appreciates their guidance.

While Melissa and Mark's thoughts about the curriculum are fairly contrasting, they are reflective of their respective curricula. As discussed in the section analyzing the adopted curriculum, Melissa is working with very comprehension-centric and specific learning objectives, of which there are many. The curriculum that Mark is obligated to is much more application and analysis-driven, with standards that are less detailed and not tied to a specific chronology. Thus, Melissa and Mark's varying dispositions can be explained by their respective curriculum. The nature of the World History content relative to the nature of the English content is incredibly teacher-centric and conducive to direct-instruction, while the English content allows for more teacher-input and adds a lot less stress to the scope and sequence of the year. So, while Melissa and Mark have totally different perspectives regarding the current standards-based curriculum, their perspectives are rooted in the quality of the documents they are obligated to teach.

Interviews with EH Tucker

The final element of this study involved conversations with EH Tucker, a former student who completed each of the three courses featured in this study. Initially, I had intended to re-administer the unit assessment for each of the units analyzed in an effort to ascertain the long-term learning associated with each course. This step however, was omitted when I decided to focus on the inputs of education rather than the outputs. As the overarching goal of the study re-oriented towards the inputs of education, this part of the study became less central, as students are typically disconnected with curriculum design (especially in a public-school setting). With this adapted end goal in mind, I restructured this element of the study to include two interviews with the student-participant. Interview questions in these interviews were designed to ascertain the student's perception of each course's structure, content, and intention. These questions are included in Appendices I and J.

The first and second interviews took place on March 30th, 2018 and April 7th, respectively. The first interview's questions gleaned insightful descriptions of each class's structure, as well as the course's end goals as perceived by the student. There was some overlap of discussion between the first and the second interview, although the

second conversation with EH emphasized the nature of the content in each course. In an effort to analyze these conversations efficiently, I combined the analysis into larger themes that integrate the dialogue of both interviews. For each course, I discuss the student's description of the structure, his evaluation of the content, and his understanding of the curricular intentions. Following this, I built upon the student's comparing and contrasting of the three courses, as well as the meaningful and long-term learning outcomes he associated with each class.

WHI

It became evident during the first interview that EH's memory of each course was selective. However, he was able to describe certain aspects with certainty. His recollection of WHI was that it was fairly systematic. The structure of each class was largely predictable, with few exceptions. He recalled, "We would typically do in-class activities, like in-class sheets, and bookwork, and there's some questions at the end of the chapter. It was very ... It was kind of structured off the book" (personal communication, Mar. 30, 2018). He also mentioned that there was regularly assigned homework and homework checks at the beginning of class (personal communication, Mar. 30, 2018). After reviewing the previous night's homework, the class would "read straight out of the book," and "people would take notes" (personal communication, Mar. 30, 2018). The last portion of class was often allocated for students to work individually or in pairs on the questions at the end of the chapter, or the associated homework. Although he admitted that book-directed courses can often be "poorly done," EH commended Melissa in that "she did a good job of not using [the textbook] as a crutch" (personal communication, Mar. 30, 2018).

After recalling the climate and structure of the classroom, EH was asked to evaluate the content the of the course, and what students were asked to do with the information they were taught. In response the course's promotion of synthesis, EH reported,

I'd say it was not very much, if any at all. There may have been specific times where we were asked for things, like, if we were to do projects then we would have to use that. But otherwise I think it was more knowledge and comprehension. (personal communication, Apr. 8, 2018)

He recalled evaluation as similarly less-emphasized, "Maybe even less stressed than synthesis. There wasn't a lot of, like, using what you've learned to support ideas. It was more of 'here's what you need to learn,' and you just had to know it" (personal communication, Apr. 8, 2018). According to EH, most of the learning they were asked to participate in resided in the lower levels of Bloom's Taxonomy. In his words,

I think it was a lot of applying with a good bit of memorizing ...But I think [Melissa] did work on using application throughout the course. But I don't think there was much analyzing at all. I don't think it was ... It was usually just finding the information and applying it somewhere or using it. But I don't think it was much of thinking about it. (personal communication, Mar. 30, 2018)

In response to the question, "how often were you challenged to memorize information," EH recalled, "A lot. I'd say that's the majority of what we did along with comprehension. Just a lot of regurgitation of material" (personal communication, Apr. 8, 2018). In order, EH's perception of the learning that was promoted throughout WHI prioritized knowledge first, followed by comprehension, then application, analysis, synthesis, and lastly, evaluation.

Considering the structure and the nature of the content in WHI, EH contemplated what the course's goals were. Specifically, what students were expected to know and be able to do by the end of the year. He reasoned that the intentions of the class were for students to be able to apply historical information in different contexts and to prepare students for the workload that would be their reality in high school. EH was adamant that Melissa succeeded in these goals,

She did prepare us for high school. I think that was effective. And I think I kind of took that out of that course. At the end of 8th grade I was like, 'Okay, I'm in a place now where I feel like I'm going to be fine next year.' (personal communication, Mar. 30, 2018)

He also affirmed that this course was successful in teaching him how to apply historical information, although he wasn't convinced that the application skills and workload preparation were developed only throughout WHI:

I mean, along with everything else. I don't think she alone could have prepared, like, could have taken on the whole burden of, 'This is how it's going to be.' I think it was that mixed with the other classes... I could attribute some of that to her and some of that to lots of other subject areas. But, for sure... I find myself using [application] a lot, whether consciously or subconsciously. (personal communication, Mar. 30, 2018)

This was an incredibly profound reflection, and insightful in more than one way. This will be elaborated upon in the following chapter, but, in short, learning is more of an

accumulation than an isolated moment. Nonetheless, the takeaway's that EH gleaned from WHI are specific to the course and reflective of its structure and content.

English

EH's recollection of English class in 8th grade was distinctively different than his experience in WHI. Unlike WHI, the structure of English class was rather unpredictable, and "loosely structured" (personal communication, Mar. 30, 2018). He recounted,

typically, we'd read a section or a part of work, and then we'd go back, and we'd talk about it. We'd discuss what certain things mean and what that significance is...we did some analytical individual work... And we did a lot of writing in there, too. (personal communication, Mar. 30, 2018)

So, students could generally expect some reading, discussion, and writing. He didn't mention a rigid homework regiment, nor in-class worksheets or synchronized bookwork. EH didn't remember much grammatical review, "But it was definitely a lot of reading. And then a lot of analyzing," and he also mentioned that there was "A lot of discussion in there for sure" (personal communication, Mar. 30, 2018). In addition to the broadly characterized structure of the class, EH remembered—as a general directive—that "Mark really stressed independent thought" (personal communication, Apr. 8, 2018). Similar to WHI, EH had fond memories of English class.

Looking at the coding instrument that I used to analyze the adopted curricula, unit documents, and classroom observations, EH considered the content that was covered throughout 8th grade English. With regard to synthesis, EH remembered doing a lot of composition—relating to independent thought as well as written composition. In his

words, "That [synthesis] was a lot of that in this course. It was building a base, and then going off from it...Especially because Mark was very focused on synthesis—using what you know to understand" (personal communication, Apr. 8, 2018). He also remembered doing a lot of evaluation throughout the course: "we did argumentative papers. There was a lot of critique. The majority of the course was not just reading for comprehension but going back and trying to understand what the text was saying and how that applied elsewhere" (personal communication, Apr. 8, 2018). In the first interview, EH reckoned that "analyze was a big thing," that it was "really stressed in that class" (personal communication, Mar. 30, 2018), but looking at the coding instrument, he reasoned that they did less analyzing than evaluation and synthesis (personal communication, Apr. 8, 2018). Regarding comprehension, EH reported that this was also integral throughout the course seeing as

in order to be able to analyze and to evaluate and to synthesize you have to understand the core content of text. But it went further than that—we didn't just read for comprehension and then stop. You read for comprehension and then read into that further. (personal communication, Apr. 8, 2018)

This was another thoughtful point, and one that I ruminated on. When higher levels of learning are achieved it is the result of mastery in each of the subordinate categories. Even so, the distinction is whether or not information is regularly pushed beyond more topical levels of learning. Simple identification of information was not emphasized much at all in this class, according to EH. Chronologically, EH's recount of the learning promoted in 8th grade English class emphasized synthesis and evaluation the most, followed by comprehension and analysis, then application, and knowledge.

After familiarizing himself with the structure and content of 8th grade English, EH reconciled that the intended takeaway of English 8 involved a growth in writing skills and reading comprehension. He resolved,

it was a lot about developing writing skills and developing skills relating to, like, the analytical side of literature, rather than just reading. Because a lot of what English was in the past was just reading to read, and, like, just pick up the content. But in 8th grade it was more, like, it introduced more ... You had to actually think about what you were reading. (personal communication, Mar. 30, 2018)

He was confident that these goals were met, as were other—perhaps unintentional—ones. English in 8th grade was different than any other English he had taken before. Not just the structure and content, but the way that it was taught too. EH said that the nature of his 8th grade English class "opened up different levels of—it was almost like an experience of a different kind of education, which was nice. It was like a mix of higher-ed and standard school education, like, public school education" (personal communication, Mar. 30, 2018). I understood this description as learning in a differentiated atmosphere. EH later elaborated, "Yeah, new perspectives, and it mixed with kind of, like, rather than just going down a standard route and letting everyone follow that, Mark would kind of teach to each person" (personal communication, Mar. 30, 2018). As was the case with WHI (and arguably all courses), the takeaways EH obtained from English 8 are definitively correlated with the structure and content of the course. Art

explore on their own.

Answering the questions regarding EH's experience in Art 8 was unique because I was the Art teacher at the time. Regardless, his reflections about the course were insightful. On an average day, EH remembered "You would teach us skills and historical context, and then we'd apply it...I think a typical day, like, we usually did projects...that was typically what we'd be working on" (personal communication, Mar. 30, 2018). He recalled doing "a lot of independent work," "some group projects," and "discussion" (personal communication, Mar. 30, 2018). Even though the format of each class varied, you could expect to do some independent work, group work, and discussion. He remembered the structure of class as less rigid and more differentiated—similar to that of English 8. In EH's words,

Some people could go with very little guidance. Some people were artistic, and creative, and had that, so you could give them a general framework and they could work within that. Some people, you had to direct them more. So, I think it was kind of specific to the person. (personal communication, Mar. 30, 2018) So, according to EH the structure of Art class was loosely structured as a baseline, more directed for students who were looking for it, and less so for students who wanted to

As for the content of Art 8, EH recounted having to do a lot of application and synthesis, frequent evaluation and analysis, some knowledge, and less comprehension:

It was definitely synthesis but using application to do synthesis. So, it was using what you...using what you've learned...and not in...not in a boxed-up...it wasn't like, 'Okay, make this now.' It was very, like, 'Okay, here's what you need to

understand before you do this. Use what you've learned, use what you know, use what you think you know to synthesize that.' So, I think it was definitely application and synthesis. (personal communication, Mar. 30, 2018)

In other words, "it was more using what you've been given and what you're learning and applying that to your own individual synthesis and projects" (personal communication, Apr. 8, 2018). EH remembered application and synthesis being used throughout each unit, while evaluation and synthesis were elicited in isolated activities. Describing the dependence of higher order learning objectives on mastery of lower order learning objectives in the discussion about English, EH stated that "we definitely interpreted what we were taught—we weren't without comprehension," but "it wasn't just bringing together information that you had been given directly" (personal communication, Apr. 8, 2018). Regarding recall of knowledge, EH believed they were challenged to memorize than comprehension, "but less than application, analysis, evaluation, and synthesis" (personal communication, Apr. 8, 2018). These conclusions seem reasonable considering the project-oriented essence of an art class.

The combination of the structure and the content of EH's Art 8 experience resulted in his application of themes and concepts, development of creative expression, expanding of perspectives, and garnering of an appreciation for the discipline. He explained,

It was kind of all working towards the student being able to use the information that they've learned, even if they don't remember the specifics of it, and applying that to the projects or challenges or whatever as kind of a broad framework. (personal communication, Mar. 30, 2018) When he refers to applying information, he clarified that he specifically meant "applying it in a way that's not as structured. So, you're applying it how you see fit" (personal communication, Mar. 30, 2018). In addition to application skills, EH talked about the emphasis on creative thinking:

I think it provided more perspective on, I think creativity as a concept. It was less just doing what you were told, and more using what you were interested in and what you liked and what you had been taught within that. (personal communication, Mar. 30, 2018)

While he couldn't quite pinpoint what he was trying to say regarding the thought processes that were stressed, he resolved, "I feel like perspective's the best word," and also that the course "made [him] appreciate things in ways that [he] didn't" (personal communication, Mar. 30, 2018). The intentions of Art 8, according to EH, were similar in nature to those of English 8—relating more towards the application of broad understandings—which is congruent with the similar format of the classes and approach to information.

Although each of these disciplines and their respective 8th grade course have distinctive identities, EH was able to draw some comparisons between the classes. His reflections were incredibly perceptive and illuminating for me. EH talked about WHI (and history in general) as somewhat of an outlier in the study. He disclosed, "I think history is not a very creative course typically, or, it doesn't allow for that sometimes. Less than in Art and English for sure" (personal communication, Apr. 8, 2018). EH also reconciled that this was, in part, due to that "history [being] such a time and place and people kind of oriented subject, I think it's ... I don't know. It's hard to have history without the memorizing" (personal communication, Mar. 30, 2018). As mentioned in previous sections of data analysis, WHI specifically is a survey course—likely the students' first encounter with this sort of information—which also can account for the emphasis on "raw information and the retaining of that" (personal communication, Mar. 30, 2018). EH reasoned that he could more easily compare the other two courses:

It was more about the meaning behind things. And I think that was another thing that I took away from your class, like, the significance of certain things within art or within the information that you were giving us. And that's the same with Mark...it was kind of like helping us find ... It was a broad range of meanings, and you could find something that applied to your life within those. (personal communication, Mar. 30, 2018)

So, while World History focused on the nuts and bolts of foundational information, English and Art considered information more abstractly. EH even touched upon the spectrum that the three courses reflected with regard to the structure and approach to information:

history [was], especially with Melissa, was very based off the book. It was application of raw information. I think art was definitely more exploratory...it was definitely more open-ended...English kind of hits a middle point between those... but most of it was using that information more than history and in a different way than art. It kind of hit a middle ground. It was definitely open-ended and allowed for creativity, but it also was, you know... one of those core classes. (personal communication, Mar. 30, 2018) This was an integral consideration for me in the nascence of the study, and was instrumental in the selection of the courses for the study. So, for EH to recognize this attested to his extraordinary level of awareness regarding educational constructs.

EH was also asked to consider the impact of long-term learning outcomes for each course. He resolved that he gleaned more meaningful learning from his experience in English and Art 8, while the long-term learning of information in WHI was more effective. If he were to re-take an assessment that he once took in WHI, he figured he would fare better than if he were to re-take an assessment from English or Art 8 (personal communication, Apr. 8, 2018). EH reasoned that this would be the case

because it was so focused on that you needed to remember—I don't think it was necessarily the information itself or the course itself, I think it was just—the stress in that course was regurgitation. You just need to remember this. So, I think that's why. (personal communication, Apr. 8, 2018)

This response is logical considering the formal structure, as well as the nature of the content that he described earlier. English and Art 8 impacted him in different ways. Particularly in English 8, EH reported that "the course in [and] of itself was fine, but I think that the way Mark taught it promoted things that I've actually used—like effective analysis" (personal communication, Apr. 8, 2018). With regard to Art, EH commented that "the long-term takeaway was more themes and concepts rather than specific information (personal communication, Apr. 8, 2018). Both of his reflections regarding English and Art are also congruent with the nature of the structure and content he described above. In essence, EH extracted specific information from his experience in WHI, and skills and concepts from English and Art 8.

As a final exercise at the end of the second interview, the researched asked EH to contemplate what could be done to the design of each course in order to improve the impact and long-term learning of information. Because he reported that WHI effectively promoted long-term learning, he discussed how to improve the impact of the information taught in WHI. EH was taking AP World History at the time of the interview and discussed how they were frequently analyzing historical events. If he could adjust the design of WHI, EH determined that he could experience more discussion and analyzing:

I like analyzing history—I think that pairs well with the subject of history. Applying broad general themes at the beginning of the existence of humans to like, the 19th century. I think that goes really well—and that's what the AP World History class does in the high school—it's a lot of analysis. You have to go back and think about what you learned. So, I think that would be good. (personal communication, Apr. 8, 2018)

In this approach, students would spend more time with the historical events they were learning about—and not just grazing the top for the names, dates, and places. Contrarily, EH perceived the impact of information in English 8 and Art 8 as more effective, and so he focused on how to enhance the long-term learning outcomes associated with these courses. As for English, EH provided that "a little more structure could help," although he didn't seem convinced of this: "I don't know, I don't want to take away from the course because the fact that it had so little structure is sometimes good" (personal communication, Apr. 8, 2018). EH considered Art 8, and suggested a similar adjustment to the design: "just enough [structure] to hold the course together" (personal communication, Apr. 8, 2018). Yet, he was reluctant to suggest this as well: "…Which I

think Art had. It was a cohesive—you could draw things from the beginning of the year to the end of the year" (personal communication, Apr. 8, 2018). After reflecting upon these thoughts a bit longer, EH clarified,

a little structure in any course can help. Not saying that they don't have structure, but I just think too much is what history was—maybe for the sake of the course a little bit of structure is good but too much can really be bad. (personal communication, Apr. 8, 2018).

In other words, a happy medium regarding structure could enhance the long-term learning outcomes in English and Art 8, and any course in general.

Overview of Data Analysis

Many forms of data in a variety of formats were collected throughout the study. Although each data point was analyzed and discussed separately, all the data is considered both interrelated and interdependent. In this concluding section of chapter four, I will compare all the data points within each content area for broader understanding of the data as a whole. The analysis of the standards of learning, unit documents, and classroom observations will be compared first, as each of these elements were coded in the same way. I will then consider the analysis of interviews, and the congruence or disconnect between interview data and coded data. The last point of comparison that will be discussed is the data from the interviews with EH Tucker. I will follow this organization for each of the three content areas, save for a discussion of interviews in Art 8, nor classroom observations. A comprehensive evaluation of all three content areas together will be elaborated upon in chapter five.

WHI

Looking at the data collected for WHI, there is a disconnect between the distribution of types of thinking in the SOLs compared to that of the unit documents and classroom observations. A visual comparison is represented in figure 46.

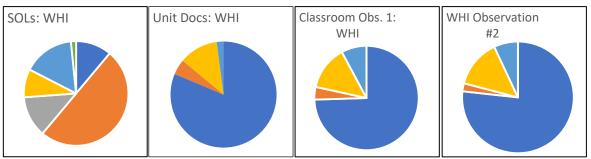


Fig. 46: Juxtaposed WHI Data

As depicted, the distribution of thinking skills characterizing the unit documents and the two classroom observations are strikingly similar, while the distribution constituting the SOLs is markedly different. In theory, the similarities between the unit documents and the classroom observations are to be expected, given that the classroom observations are dictated by the unit documents. Yet, the unit documents are generally dictated by the SOLs (in theory), so a similar distribution in all four data sets would be logically expected. This wasn't the case. The categories with the most discrepancy are knowledge, comprehension, application, and evaluation. Although knowledge is the fourth most represented type of learning within the standards, it accounts for about three quarters of the learning that was promoted in the unit documents and classroom observations. While comprehension represents half of the learning promoted within the SOLs, it only accounts for roughly 2-5% of the learning promoted within the other data collected. 13% of the standards are geared towards promoting student application of knowledge, yet application isn't prompted at all within the unit documents or the classroom observations.

And evaluation is steadily represented in the classroom observations, but it is promoted twice as much in the SOLs. Analysis is steadily represented throughout, and synthesis is consistently neglected.

So, why are the distributions so varied? In conversations with Melissa, she reiterated a number of times how over-packed the standards for WHI are. She also stressed the tightness of the scope and sequence, and how she has minimal room for deviation from the curriculum. Melissa resolved that "[the SOLs] try to cover too much in too short of a span" (personal communication, Mar. 23, 2018). I believe that the volume and pace of the adopted curriculum consequently emphasizes knowledge recall in the unit documents and in class observations because simple regurgitation of information is the most time-efficient. Because Melissa is held accountable for the delivery of an improbable amount of knowledge, the students end up "just skimming the top" of historical phenomena (personal communication, Mar. 23, 2018). In order to accomplish 1,500 years of information in seven months, it is imperative that they move quickly, and end up only "taking the highlights" (personal communication, Mar. 23, 2018). Application, analysis, evaluation, and synthesis can be especially time consuming, while the lower-levels of learning can be quickly accomplished. Thus, regurgitation of information in this course ends up being more valued than contemplating information.

EH picked up on these constructs during his experience in WHI. The structure that he described as typical in this course was also what I observed. EH remembered that the course was generally structured around the textbook. He recalled reading out of the book as a class, taking notes, engaging in class activities, doing book work, and completing regularly assigned homework. I observed these simulations exactly in both observations. EH was also cognizant of the nature of the information that was taught. He remembered the course emphasizing knowledge acquisition and comprehension, a good amount of application, and some analysis. Evaluation and synthesis were stressed minimally. This ordering is not identical to my coded data, although EH was spot on regarding knowledge, comprehension, evaluation, and synthesis. He also echoed Melissa's concern regarding the amount of structure that WHI requires, and the detrimental effect it can have on meaningful learning.

The translation of the distribution of thinking skills coded in the English SOLs to the distribution of thinking skills in the unit documents is a similar story to that of WHI. While the standards of learning emphasize application and analysis, the unit documents elicited application and evaluation the most. Knowledge, comprehension, and synthesis are also represented dissimilarly. These two elements of analyzed data are juxtaposed in figure 47.

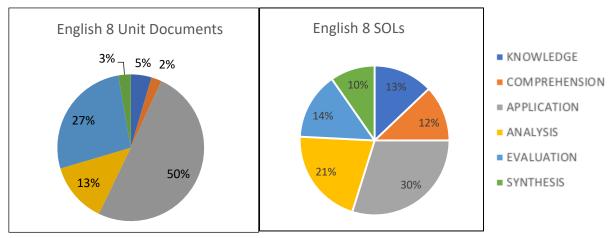


Fig. 47: Juxtaposed Unit Documents and SOLs

Although in each instance knowledge, synthesis and comprehension are represented pretty evenly, the percent that they represent in the SOLs is three times as much as in the unit documents. There is an even more significant disconnect between these elements of data and the English observations. Even though there is consistency among the more stressed types of thinking across both of the observations—knowledge, analysis, and evaluation—the observations demonstrated a much different learning experience than that prescribed by the standards and outlined by the unit documents. All four of these elements of data are juxtaposed in figure 48, and the key can be referenced in figure 47.

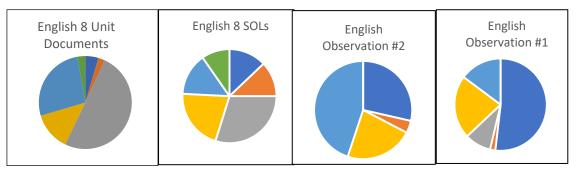


Fig. 48: Juxtaposed English

As the charts illustrate, there is a lot of variation between all four points of data. This variation can be explained by evidence from the interviews with Mark.

Throughout both conversations with Mark, he made note of the flexibility he felt was inherent in the English 8 curriculum. This flexibility was further supported by his unique situation as the only 8th grade English teacher at Mountainview Middle School. I believe this is one reason for the varying manifestations of learning in both the unit documents and classroom observations. Mark doesn't "consult the curriculum regularly," which can account for at least some of the disconnects in thinking distributions (personal communication, Jan. 28, 2018). While he is "mindful," of the prescribed learning objectives, he writes his lesson plans first, and then consults the SOLs (personal communication, Apr. 8, 2018). The variations can also be explained by the tractable nature of the learning objectives prescribed within the English SOLs, and the teacherinput that the SOLs account for. Because there isn't a specific chronology that the SOLs need to be accomplished in, Mark feels "fairly enabled to move pieces around" (personal communication, Jan. 28, 2018). For instance, Mark is able to choose how certain learning objectives are achieved through the novels he chooses, and the topics they discuss: "I pick spots of content, topics, and genre that I think the kids will like on balance and that serve the skill well" (personal communication, Mar. 23, 2018). In a sense, there are many ways that the standards can be accomplished, so Mark is able to deviate from the standards, while still attaining their end goals. Unlike the rigid structure of the WHI curriculum, Mark does not feel stressed or inconvenienced to cover all of the learning objectives within the English 8 curriculum. Therefore, he had the time and space to explore higher levels of thinking in class, as the classroom observation data shows.

EH's reflections of his experience in English 8 was also descriptive of what I observed. His recollection of the laid-back structure of the class was demonstrated in the classroom observations, as was the unpredictability of class in the data collected from those observations. As EH recalled, although the nuts and bolts of each day was different, he could always expect some reading, some discussion, some individual work, and some writing. In both classroom observations, these activities were present. EH reflections regarding the content of the course was resembled certain aspects of the distribution of thinking skills that I analyzed. He was particularly cognizant of the emphasis on evaluation and analysis. Even though his delineation of learning priorities doesn't match

the coded documents immaculately, there was a whole lot of verisimilitude in his overall portrayal of the course.

Examining the transference of the data collected for Art 8 was a different process than that of WHI and English 8 because, frankly, there was less data collected. Interviews were not conducted and nor were classroom observations, so the only two elements of data for apposition were the distributions of learning analyzed in the SOLs and the unit documents. In each of these cases, all types of thinking are represented—and in a more even fashion than the data in WHI and English 8. Application is the only category with significant correlation between the two distributions, while synthesis and evaluation are both represented nearly three times less in the unit documents than in the SOLs. Knowledge is represented in the unit more than fourfold the amount as the SOLs, and analysis and comprehension are both represented a sizeable amount more in the unit documents. The comparison of the distributions of types of thinking in these two elements of data is represented in figure 49.

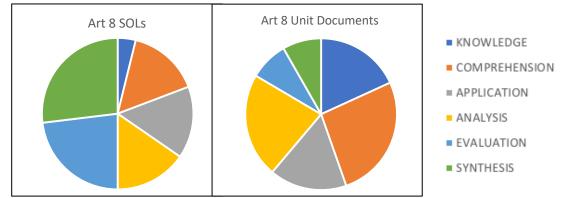


Fig. 49: Juxtaposed Art Data

Although I did not formally interview myself, my responses to the interview questions will help to understand the disconnects of these charts. For starters, I did adhere to the standards—probably more so than Mark, and definitely less so than Melissa—

which explains why there aren't drastic shifts in the distribution of thinking skills. Even still, the Art 8 curriculum allows for liberal teacher-input and deviation (even more so than the English 8 curriculum), so much of the disconnects in the distributions can be attributed to teacher-interpretation. Another likely explanation for the variance in the charts is that this unit was an introduction to a new topic for the students. Hence, it required an ample amount of new terms and understandings. In WHI, this is essentially the case for every unit. Yet in this Art 8 unit, the learning didn't stop after comprehension. Students were pushed to apply, analyze, evaluate and synthesize after accomplishing the identification and comprehension of the new information. Hypothetically, if classes were observed during this unit, the transcription of types of thinking would have looked similar to that of the unit documents, but EH's general description of Art class in 8th grade were found to be more reliable.

EH recounted the structure of Art 8 as similarly less structured like that of English 8. He recalled engaging in learning about art skills, history, context, and application, and experienced both independent and group-based projects. The unit that was analyzed involved each of these components. He also remembered more differentiated learning characterizing the class as a whole. His perception of the content covered in Art 8 prioritized application and synthesis, which is not far from what I coded in the SOLs. EH specifically described it as "applying [knowledge] to your own individual synthesis" (personal communication, Apr. 8, 2018). He recalled evaluation and analysis as secondary to application and synthesis, although still considerably emphasized. EH noted that knowledge and comprehension were the least stressed types of thinking, seeing as the intentions of the course were "all working towards the student being able to use the info

that they've learned, even if they don't remember the specifics of it, and applying that to the projects or challenges...as a kind of broad framework" (personal communication, Mar. 30, 2018). In this unit particularly, students were challenged to use their new knowledge of earth, site-specific, and ephemeral art, as well as certain elements and principles of design to create their own piece that represented a concept of their choosing. As someone who witnessed the accounts of this course alongside EH, I concur with his description of the class.

Conclusion

There are some commonalities between the disconnects within and across all three content areas. The data suggests that the levels of learning diminish as they are adapted from the standards for lesson plans and activities, and again as they are implemented in real time. Of course, these derivations could also be, in large part, the result of the specific unit of study that was chosen for review and observation. It is also important to consider the time spent accomplishing the tasks associated with each level of learning. For instance, synthesizing information take arguably the longest amount of time to procure, yet it documented as an instantaneous moment the same as the other types of thinking. In other words, students might be prompted to compose their own historical narrative, piece of writing, or piece of work once in a lesson plan—but the time spent completing said tasks could potentially occupy an entire class period. Thus, the types of thinking that are accounted for in the SOLs, the unit documents, and the classroom observations are all reflective of the number of times each were prompted on paper or orally. That being said, the time component of each learning prompt was not considered for any of the documents in any of the content areas, so the comparison of data across each discipline is still representative of the corresponding ratios. So, while the percentages of the types of thinking accounted may not be exact, I am confident that the priorities of learning are accurate and comparable.

Chapter Five: Conclusions

Research Question #1: How has curriculum evolved into the standards-based frameworks that dominate public schooling?

- a. What economic, social, and political factors have contributed to the design of curriculum?
- b. Which learning and curriculum theories have contributed to the design of the curriculum?

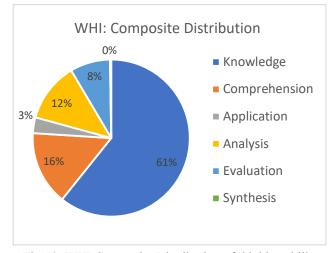
Through an extensive examination of various factors that play a role in the formation of curriculum, it has become clear that, ultimately, the curriculum is a product of the economic, political, and social needs of society. The welfare of the American economy, government, and security is paramount to the needs of the individual in the construction of curricula. The Cold War Era, the A Nation at Risk report, the Goals 2000 proposal, and NCLB have been particularly influential in the formation of curricula. The implications of these events are evident in the federalization, standardization, centralization, and scientization of curricula.

It has also become clear that there is a disconnect between theory and practice, and this has been true for decades. Up until around the mid-nineteenth century, educational aims, learning and curriculum theories, and the written curriculum all worked in concert. Behaviorism has been especially influential with regard to curriculum, and can be traced through the mechanistic, social efficiency-driven, teacher-centric nature of public school education. Yet, modern and contemporary learning and curriculum theory research has been poorly translated into the classroom: This trend is not unusual, as learning and curriculum theories have continued to progress, while "today's classroom is remarkably unchanged from the end of the 19th century" (Calfee, 2006, p. 35). In fact, current theory is decidedly at odds with the standardized, centralized, and federalized models of education that consume the history of American public education and are present in today's classrooms.

That being said, given the historical trend of curriculum design, it is my opinion that it is unlikely that the adopted curriculum will ever reflect especially progressive approaches unless a field of applicational research is established. Without suggestions for implementation, theory and practice will continue to be isolated domains. In reflecting upon this body of research, a mantra from Dr. Michael Apple has resonated with me deeply: "I always remember that I am a teacher" (personal communication, May 1, 2018). First and foremost, I am committed to providing a meaningful education for students. I will always strive for my research to reach beyond theory and into the realm of the classroom.

Research Question #2: What types of thinking do different formats of standards-based curriculum promote?

My responses to this question are based upon the analysis of the SOLs, the unit documents, and classroom observations combined. In each content area, I averaged the distributions of thinking and compiled the averages into a composite pie chart. Interviews with participants were also taken into consideration. When I refer to the curriculum in this section, I am referring to the compilation of all of these data points (SOLs, unit documents, classroom observations, interviews). objectives contained within the curriculum. This very first sentence explains that, "The study of history rests on knowledge of dates, names, places, events, and ideas." (VDOE, 2015, p. 1). In concert with this statement, the curriculum emphasize the memorization and comprehension

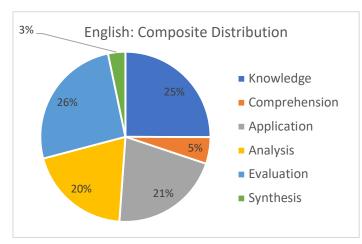


WH1. In the prelude to the WHI standards is a summary of the educational

Fig 50: WHI Composite Distribution of thinking skills

of the euro-centric histories of various civilizations. Essentially, WHI emphasizes lower levels of thinking skills. Knowledge is ostensibly prioritized, while comprehension and analysis are marginally stressed. Application, evaluation, and synthesis are hardly represented. Very infrequently are the students prompted to consider events of history, evaluate their implications, apply new understandings, or synthesize their own understandings. The distribution is visually represented in figure 50.

English. The English 8 curriculum promotes more analytical and applicational



thinking. The distribution of types of thinking is more even relative to that of WHI. Evaluation, knowledge, analysis and application are primarily promoted in this curriculum, while comprehension and

Fig. 51: English 8 Composite Distribution of Thinking Skills

synthesis are neglected. This model is more discussion-based, as students are ultimately challenged to analyze the significance of language, and be able to effectively communicate through writing. This distribution is visually represented in figure 51.

Art. The art curriculum emphasizes application, evaluation, and synthesis. The distribution of types thinking is the most evenly represented of the three selected content areas. Comprehension, synthesis, analysis, evaluation, and application are all emphasized notably more so than knowledge. With the exception of comprehension, emphasis gradually increases with each higher level of thinking. Ultimately, the art curriculum is grounded in themes and concepts, understanding and making meaning of ideas, and cultivating perspective and appreciation. This distribution is visually represented in figure 52.

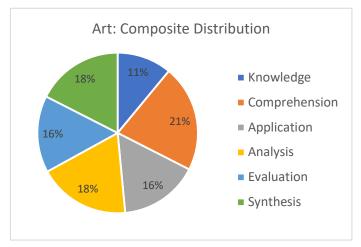


Fig. 52: Art 8 Composite Distribution of Thinking Skills

Research Question #3: How can curriculum be better designed and implemented to promote higher order thinking skills?

Data analysis, as well as scholarly literature, has informed my proposal for a curriculum more disposed to promoting higher order thinking. Ultimately, it is my opinion that the art curriculum can function as a model for other content areas. Characteristics of the art curriculum that are conducive in promoting higher order thinking skills include the level of descriptiveness, the volume of standards, and the constructivist approach to content delivery. Three larger concepts have been extrapolated from research regarding a curriculum for higher order thinking: democratic approaches, convoluted and relative topics of discussion, and student interpretation, discovery and reflection. Data analysis has illustrated how each of these considerations is already inherent of the current art SOLs, which has been the apex of this study.

The current standards-based curriculum suggested by the SOLs embedded in Virginia is considerably teacher-centric. It necessitates a heavy amount of teacher-led direct instruction and student passive learning even though the curriculum is "couched in democratic rhetoric" (Apple, 1998, p. 3). Teachers are expected to deliver the curriculum to the students in its prescribed format, and students are expected to essentially regurgitate the information exactly how it was given to them. This lock-step pedagogy and the simplification of complex knowledge is arguably resulting in an opinion-less student body, that is ideologically indifferent towards prominent issues. Consequently, this produces "a deferential citizenry whose role is reduced to 'ensuring through elections an orderly transfer of power among rival groups among the elite"" (Callan, 2008, p. 74). It is my belief that the curriculum should be promoting just the opposite—a curriculum that will "foster a citizenry that could exercise their civic freedom and decide their own individual and collective futures" (Callan, 2008, p. 74). Particularly in this day and age (seemingly characterized by a loss of faith in our democracy) students need to be familiar with how a democratic union should operate, and how to fully participate. Thus, a curriculum that fosters democracy is in order.

In this approach, students would be involved equally in the formation of curriculum. For this to happen, parts of the curriculum need to be left undetailed so that student need, interest, and experience could be woven in. Kent den Heyer, professor at the University of Alberta, described how this approach might look:

In this vision, schools do not prepare for a global workforce or even for future democratic participation, but rather sited for the enactment of a democratic life experienced through students and teachers listening to each other's work through profound questions about present social arrangements. (2008, p. 255)

The level of descriptiveness characterizing the learning objectives in the art curriculum is especially conducive to this approach. The SOLs are written in such a way that allows for student-input. For instance, objective 8.4 states, "students will synthesize prior knowledge and experience to create works of art" (VDOE, 2013, p. 28). While the objective requires that students synthesize experience to create works of art, it allows for each student to incorporate their own personal knowledge and experience. In the Art 8 unit that was examined, this structure allowed me to set the stage for the tree sweater project, but then allowed students to determine the direction and concepts. The curricular format in most other content areas doesn't allow for this kind of unplanned time and

space for student deliberation because "if it is not tested, it will be less likely to actually make a difference in teachers' practices" (Apple, 2003, p. 521).

Standardized testing has been instrumental in the construction of curriculum in core content areas. Although standardized testing was not formally investigated in this study, it was never excluded in my understanding of the differences between the selected subjects. Although I am grateful that there is not a mandated annual assessment in the visual arts in Virginia, it is a loss that the arts have been omitted from the evaluation of intellect. In foregoing a standardized test in the visual arts, a value judgement has been made. A likely reason that science, math, English, and history have been prioritized above other disciplines is because these are the subjects that are annually tested. While I do not believe standardized testing is an accurate assumption of intelligence, their measurements have been accepted as adequate, and used as references for institutions of higher education, jobs, etc. Hence, their respective curricula necessitate more specifications and teacher adherence than those disciplines without mandated annual tests. Because 8th graders in art in Virginia are not subjected to an annual test, I was able to create opportunities for higher order thinking in activities like dialogue.

Unfortunately, this explorative dialogue is crucial in enabling widespread participation in society: "democracy requires a deliberative and communicative capacity in which citizens argue over the material and social conditions in which they coexist," and teachers can "enhance democratic insight for students when they have opportunities to question and inquire into the political and social stakes" (den Heyer, 2008, p. 254-55). In determining the subject matter of the tree sweaters, students each came up with their own idea, and then voted on which ones to pursue as a class. This process simulated that of a participatory democracy. Ultimately, students need to be an equal factor in the formation of the curriculum, so that curriculum itself simulates democratic participation.

In addition to being included in conceiving the curriculum, students need to be introduced to complex, convoluted, and relevant issues in society. The standards-based curriculum in core content areas is loaded with well-defined issues for discussion, yet in reality, life is characterized by incredibly ill-defined problems. These are driven by textbook units packed with containable information, which are "developed around the search for facts" (Petrina, 2004, p. 109). Substantiated by Walker, "big ideas—broad, important human issues—are characterized by complexity, ambiguity, contradiction, and multiplicity" (2001, p. 1). For the most part, students are sheltered from conversations like these because schools have adopted an identity of neutrality. Instead of fleshing out topics of controversy from all angles (and still remaining neutral), the curriculum omits them entirely. Apple corroborates this feeling about curricula that have little relationship with the cultures and lives of the students in our schools (Apple, 2011).

Reflecting on dynamic controversies, considering the strengths and fallouts of various perspectives, and synthesizing new perceptions engages students in complex and higher order thinking. Unfortunately, these processes are not stressed in K-12 curricula. As den Heyer explains, "lessons about politics, power, culture and social participation remain for students unexamined" (2008, p. 257). In the art curriculum, there is space enough for incorporating contemporary conversations as they arise. This is largely due to the raw number of learning objectives included. While the curriculum in core content areas outline upwards of sixty learning objectives, the art curriculum prescribes around twenty. In the selected art 8 unit, students engaged in this sort of dialogue during the

hypothetical scenario. In doing so, they were challenged to consider controversy from multiple perspectives. Committing to the frustration and disruption characterized by conversations with more than one answer can be a catalyst for discovering critical and emancipatory potential (Kalin, 2014). Current discourse revolving around topics of gender, equality, citizenship, environmental issues, and more are characterized in this same way, which is why engaging students in complicated dialogue and cultivating these higher order thinking skills is critical for participation in society.

Positioning dialogue as the central aspect of education, as well as what Petrina (2004) coins *normative units* ("situations in which the ends are uncertain, confused, or in conflict") are fundamental aspects of a curriculum fostering higher order thinking capacities (p. 109). As Apple articulated, "we must make connections to people's daily lives if they are to be widely successful" (Apple, 1998, p. 16). These conversations would be applicable to students' daily lives and prepare them to engage in complex discourse. Ultimately, this deliberation can "engage students in deeper levels of thinking" (Walker, 2001, p. 1). In this approach, teachers are responsible for presenting relative concepts and asking questions to promote complex thinking about colloquial issues. In other words, "educators enhance the reflective quality of students' education by making visible the social and political stakes involved" (den Heyer, 2008, p. 253). If students can relate to information presented to them and understand it's applicability, then they will find more credence in learning and engage deeper with information. When life and learning become one in the same-the "integration of analysis and real-life drama"-learning becomes more meaningful (Beyerbach & Davis, 2011, p. 68). Ultimately, dialogue has intellectually transformative power if students can "enter into a more open-ended

epistemological equation, one that transcends the limitations of intellectual rigor" (Beyerbach & Davis, 2001, p. 63). A curriculum with fewer requisites, like that of the art curriculum, would lend itself better to this sort of dialogue.

Implementing a democratic approach to curriculum that emphasizes difficult Socratic dialogue lends itself nicely for promoting student construction of knowledge the third thread in achieving a curriculum marked by higher order thinking. Student construction of knowledge involves interpretation, discovery, and reflection of knowledge, "not simply reproduc[ing] it through memorization, recall, or routinized application" (Walker, 2001, p. iv). When students have the opportunity to interact with knowledge in this way, they establish more personalized connections to information and a deeper, more complex understanding of concepts. This is not the case with the current expedited scope and sequence of the History SOLs. Students are subjected to copious amounts of information and skills within the current curriculum, but "less commonplace are calls for students to apply these skills to investigate conditions shaping their own education" (den Heyer, 2008, p. 253). Students currently operate of the mindset, "I must have others explain to me what I should know; that I cannot claim to know unless I reproduce what was explained to me in a form recognizable to the 'explicator'" (den Heyer, 2009, p. 31). Having students engage in difficult questions through a process of interpretive discussion would catapult student learning not only towards contemporary consciousness but a cognition beyond surface the level.

Distraction of a certain kind can be incredibly sophisticated. Owen Ergas explores this idea in his article *Schooled in our own minds: mind-wandering and mindfulness in the makings of the curriculum*: "mind-wandering has been suggested to be a remarkable evolutionary achievement involving the maintenance of information for interpreting, responding to, and even predicting environmental demands, an achievement that allows people to learn, reason, plan, and build mental models" (2018, p. 81). Although distraction, in the traditional sense, shouldn't be the focus of a modern curriculum, learning should allow for the concentrated exploration of (and reveling in) information. Students should be encouraged to follow leads of information and opinions until they discover a fallout. This fallout should be pushed until they realize a perspective that resonates with them. The SOLs that compose the art curriculum allow for student construction of knowledge. For instance, students are challenged to "formulate a working definition of *art*" and "aesthetics as related to art" (VDOE, 2013, p. 29). Instead of having definitions handed to them, students are given the opportunity to construct their own understandings. In the examined art unit, students were ultimately evaluated based on the development of their own idiosyncratic perception of Earth Art.

In this reflective model, students are exposed to the fallible nature of knowledge, and are forced to examine the possibility for new possibilities—constructing selfevaluated opinion instead of inherited opinion. The mission of the curriculum then becomes "how best to arrange knowledge so as to increase the likelihood that a teacher and student can engage in truth-processes" (den Heyer, 2009, p. 29). Students and teachers alike would operate in the mindset of 'what if' instead of 'what is.' In short, a constructivist approach to content would encourage this sort of student inquiry and reflection.

In summary, it is my opinion that students, relevant controversies, and constructivist learning should be at the center of curriculum making. A semblance of "democratic power ought to be invested in curriculum and shared with students...students [ought to] be given freedom to choose and address problems through a form of purposive planning, reflective inquiry, and transformative action" (Petrina, 2004, p. 102-3). The curriculum shouldn't be driven by the memorization of information that no longer holds the same truth as it once did, nor relate to students' everyday experiences. A curriculum that promotes higher order thinking skills needs to embrace students' "inquiries and responses to the world" if students are to be prepared for participation in contemporary culture (Zabrinskie, 2004, p. 235). Although there is much research available regarding the necessity of these concepts in curriculum, research has not fully embraced how the art curriculum is already doing so.

In Virginia, problem-based learning (PBL) has been a topic of discussion for the last decade or so. This approach emphasizes learning based on the investigation of relevant problems in the form of projects. Sylvia Chard, Professor of Education at the University of Alberta, defines a project as "an in-depth investigation of a real-world topic worthy of children's attention and effort" (2001, definitions para. 1). In this model, discovery, interdisciplinary, and collaborative learning shape the way students engage with information. In the classroom, "students drive their own learning through inquiry, as well as work collaboratively to research and create projects that reflect their knowledge" (Bell, 2014, p.39). Art education is viably the epitome of PBL, and art teachers have careers worth of experiences in cultivating a discovery, interdisciplinary, and collaborative learning environment. The PBL approach is one way to implement a higher order thinking curriculum in other content areas. For instance, instead of memorizing the chain of events that characterize western histories, students could learn about historical

events through engaging with their associated controversies. Debates are one example of how this can be done, as are simulations, scenarios, and projects that encourage students to consider knowledge from many angles. Even still, I firmly believe that if the curricula of other content areas were reconstructed to reflect the descriptiveness, volume, and epistemological approach of the art curriculum, the opportunities for higher order thinking skills would be advantageously augmented.

Ultimately, if contemporary educational research is concerned with promoting a more democratic, thinking-centric, and reflective curriculum, the art curriculum is a fertile ground for examining how this model can be effectively implemented. By examining the inter-workings of a curriculum that is already promoting higher order thinking skills, I hope to have articulated a more cogent approach for revitalizing curriculum.

Recommendations

Should this thesis topic develop further, I believe it would be worthwhile to expand the sample of the study. A larger and more differentiated group of participants (both teacher and student) from a broader range of backgrounds would increase the transferability of the study. It would also be more generalizable if I had included participants in different states, and considered more formats of adopted curricula. In addition to examining the curricula of more than one state, I would consider expanding the study beyond WHI, English 8, and Art 8. All of these would result in a more comprehensive examination of standards-based curricula in American public schools, and the types of learning that each promote

Appendices

Α.

	A CODE	B CODE			C CODE				
DOMAIN OF									
	KNOWLEDGE	TYPE OF QUESTIONING		QUESTIONING PROMPT					
A1	KNOWLEDGE	B1	RECALL, RECOGNITION	C1	DEFINE, LIST, STATE, LOCATE, NAME, OBSERVE, NOTE, PUBLISH, RECALL, REMEMBER, FIND, RECITE, RECORD, TELL, CITE, REVIEW, IDENTIFY, GLANCE, SPECIFY, REPORT				
A2	COMPREHENSION	B2	TRANSLATION, COMPREHENSION, INTERPRETATION	C2	DESCRIBE, DISCUSS, EXPLAIN, SUMMARIZE, RESPOND, COMMUNICATE, INTERPRET, EMPHASIZE, PARTICIPATE, ILLUSTRATE, EXEMPLIFY, EXHIBIT, GIVE EXAMPLES, CLARIFY, REPRESENT, OUTLINE, TRANSLATE, CLARIFY, ENGAGE, BRAINSTORM, PRESENT, CHARACTERIZE*				
A3	APPLICATION	В3	SELECT AND TRANSFER	C3	SOLVE, IMPLEMENT, COLLECT, DEMONSTRATE, TEST, APPLY, USE, SELECT, PLAN, EXPRESS, PREPARE, ASK, EXTEND, MAINTAIN, COLLABORATE, COMPLETE, SHOW, TRANSFER, CARRY OUT, DELIVER, IMPLEMENT, CHOOSE, ESTABLISH, DRAFT, GATHER, VERIFY, PREDICT				
A4	ANALYSIS	В4	DISTINGUISH, CLASSIFY, RELATE	C4	DIFFERENTIATE, ORGANIZE, COMPARE, CONTRAST, RECOGNIZE, ANALYZE, EXAMINE, CONNECT, CLASSIFY, INFER, INTERPRET, DECONSTRUCT, SEPARATE, INTERROGATE, DISTINGUISH, INVESTIGATE, CHARACTERIZE*, DISCIMINATE, RESEARCH, CATEGORIZE, CONSIDER, SHOW EVIDENCE OF, CATEGORIZE, MEASURE				
A5	EVALUATION	В5	APPRAISE, ASSESS, CRITIQUE	C5	ARGUE, DEFEND, SUPPORT, CRITIQUE, EVALUATE, RECOMMEND, JUDGE, CONVEY A P.O.V., JUSTIFY, DECIDE, REFINE, REVISE, REFLECT ON, CONCLUDE, ASSESS, RANK, GRADE, PRIORITIZE, PROVE, DETERMINE, HYPOTHESIZE, PREDICT, EDIT, SEQUENCE, VOTE				
A6	SYNTHESIS	В6	ORIGINATE, INTEGRATE, COMBINE	C6	DESIGN, ASSEMBLE, COMPOSE, COMBINE, DEVELOP, FORMULATE, PREDICT, CREATE, SYNTHESIZE, INTEGRATE, MODIFY, INVENT, REWRITE, GENERATE, PRODUCE, IMAGINE, MAKE, PERFORM, PROPOSE, ADAPT, EXECUTE				

Coding Instrument

Β.

Teacher Consent to Participate in Research

Identification of Investigators & Purpose of Study

You are being asked to participate in a research study conducted by Nicole Ross from James Madison University. The purpose of this study is to understand the types of thinking skills promoted through varying formats of standards-based curricula. I will gather data by examining curricular documents posted by the Virginia Department of Education, as well as the teacher's documents from a unit of study he/she intends to implement in the spring of 2018. It also includes two interviews, and two classroom observations. The teacher's unit documents, including lessons plans, instructional documents, and assessments will be selected by the teacher participant. This study will contribute to my completion of my master's thesis.

Research Procedures

Should you decide to participate in this research study, you will be asked to sign this consent form once all your questions have been answered to your satisfaction. Your participation in this study involves three components: 1) an initial interview, 2) two classroom observations, and 3) a final interview. Each of these components will be arranged to accommodate your schedule.

In preparation for the initial interview, you will be asked to consider a unit of study that you plan to teach in the spring of 2018. Unit documents including lesson plans, instructional activities, and assessments will be exchanged with myself during the initial interview. In addition, you will be asked questions regarding your experience with different formats of written curricula. If permitted, I will audio-record the interview for transcription purposes only; you may opt out of the audio recordings and still answer the interview questions. At the conclusion of the initial interview, I will set up a time to observe two separate lessons implemented throughout the unit of study.

Classroom observations will help me better understand how the implementation of the specific unit is carried out as well as provide an opportunity to experience the ways in which the written curriculum is manifested in the classroom. During these observations, I will be taking field notes and coding dialogue in order to understand the different types of thinking that are prompted. I will not be interacting with students during classroom observations. At the conclusion of the second classroom observation, we will set up a time for a final interview.

Once data has been aggregated and interpreted, I will share my findings with you in a final interview. During this time, you will also be asked to reflect upon both the strengths and limitations that you feel exist within the current standards-based curricula.

Time Required

I estimate that your participation will require around 6 hours of your time, with roughly 1 hour allotted for each interview and each classroom observation. To gather data, I estimate that I will visit 2 times for classroom observations (roughly 1 hour each time) over the course of the unit you select. I would like to begin gathering data in January 2018 and conclude in May 2018. Should I wish to extend this time frame to gather data, I will ask permission of both the participating teacher and the school's principal.

Risks

I perceive minimal risk regarding participation in this study. Possible low-level stress might occur when being asked to share personal unit lesson plans, instructional documents, and student assessments. You may also feel discomfort when being observed during a lesson.

Benefits

While there are no direct benefits from participation in this study, indirect benefits could include a greater awareness of the effects of curriculum standards on lesson planning, the effectiveness of varying instructional activities, and ways to interpret student learning. You will have the opportunity to reflect on your own practices and experiences as well as recognize the worth in being involved in a study that focuses on the enterprise of teaching.

Confidentiality

All consent forms, e-mail correspondence, lesson plan and assessment documents, field notes, and interview audio recordings will be stored on an encrypted hard drive in my locked office in the Art Education Center in Duke Hall at James Madison University. Hard copies of any e-mails, consent forms, lesson plans, assessments, and field notes will be kept in a locked filing cabinet. Consent forms will be stored in my desk drawer, secured with a lock. Any identifiable information in these documents will be removed or changed if quoted in the final report. I will be the only individual with access to the data, and the data will be destroyed at the completion of the final thesis report in the shredder in the Art Education Center.

The results of this research will potentially be submitted for presentation purposes, i.e. the Virginia Art Education Association's annual conference, the National Art Education Association's annual conference, and various publications within the field of art education. The results of this project will be coded so that the participant's identity will not be attached in any way in the final form of this study. Audio recording of interviews will only be used for transcription purposes to ensure that I accurately understood the encounters. All data will be stored on an encrypted desktop and encrypted back-up hard drives. Upon completion of the study, all information that matches individual respondents with their answers, including audio recordings, will be destroyed. While individual responses are confidential, aggregate data will be presented representing averages or generalizations about the responses as a whole. I retain the right to use and publish non-identifiable data.

Participation & Withdrawal

Your participation in this study is entirely voluntary. Should you choose to participate, and then decide otherwise, you will have the option to withdraw without consequences of any kind, and all interview audio recordings will be immediately deleted.

Questions about the Study

If you have questions or concerns during the time of your participation in this study, or after its completion, or you would like to receive a copy of the study, please contact:

Nicole Ross
Art Education
James Madison University
ross2nd@dukes.jmu.edu

Dr. William Wightman Art Education James Madison University wightmanwh@jmu.edu 540/568-5144

Questions about Your Rights as a Research Subject:

Dr. David Cockley Chair, Institutional Review Board James Madison University 540/568-2834 cocklede@jmu.edu

Giving Consent

I have read this consent form and I understand what is being requested as a participant in this study. I have been given satisfactory answers to my questions. The investigator provided me with a copy of this form. I certify that I am at least 18 years of age.

I wish to participate in this study (initials)	
I give consent for the researcher to analyze my unit documents	s (initials)
I give consent to be audio recorded during my interviews.	(initials)
I give consent to be observed during two separate classes.	(initials)

Name of Participant (Printed)

Name of Participant (Signed)

Date

Name of Researcher (Signed)

Date

C.

Parent/Guardian Informed Consent

Identification of Investigators & Purpose of Study

Your child is being asked to participate in a research study conducted by Nicole Ross from James Madison University. The purpose of this study is to determine the types of thinking promoted through varying content applications of standards-based curricula (World History I, English 8, and Art 8). This study will contribute to the completion of my master's thesis.

Research Procedures

Your child's participation in this study involves 2 interviews. I will coordinate dates and times for both of these that best suit you and your child's schedule. All interviews and meetings will take place at the Rockbridge Regional Library. These interviews will help me better understand the types of thinking associated in each of the three content areas, from a student's perspective.

For the initial interview, I will be providing you and your child with a detailed overview of my proposed research methodologies. During this initial interview, your child will be asked a list of questions regarding his/her experiences in each of the three content areas. In the final interview, I will be informing you and your child of the progress of my research, as well as asking your child to reflect upon the impact of the three curriculums on his/her current education. If permitted, all interviews will be audio-recorded with subsequent transcription as a data set; no identifiable information will be shared in the final report.

Time Required

It is estimated that participation in this study will involve around 3 hours of your child's time spanned over a month. I anticipate the initial and final interviews to last roughly one hour each. To gather data, I estimate that I will visit with your child 2 times over the course of the study. All aspects of data collection will begin and end during the second half of your child's school year.

Risks

I perceive the following as a possible risk arising from your child's participation in this study: A low level of distress as your child is asked to share their learning experiences within the three content areas researched.

Benefits

While there are no direct benefits from participation in this study, indirect benefits may include an awareness of your child's academic and intellectual growth. Your child will have the opportunity to reflect on the relationship between different formats of curriculum and his/her learning, as well as potentially realizing that his/her participation in the study could contribute to a deeper understanding of teaching and learning.

Confidentiality

All collected data will be coded in such a way that your child's identity will not be recognized in the final form of this study. All data will be stored on an encrypted desktop and back-up hard drives. Upon completion of the study, all information that matches your child with his/her answers, including audio recordings, will be destroyed. Audio recording of interviews will only be used for transcription purposes to ensure that I accurately understood the encounters.

I recognize the ethical responsibility to report situations of child abuse, child neglect, or any life-threatening situation to appropriate authorities. I retain the right to use and publish non-identifiable data. While individual responses are confidential, aggregate data will be presented representing averages or generalizations about the responses as a whole. The results of this research will potentially be submitted as presentation proposals to the Virginia Art Education Association's annual conference, the National Art Education Association's annual conference, and various publications related to the field of art education.

Participation & Withdrawal

Your child's participation in this study in entirely voluntary. Should your child choose to participate, but then decide not to continue, he/she will have the option to withdraw without consequences of any kind, and any interview audio recordings will be immediately deleted.

Questions about the Study

If you or your child have questions or concerns during the time of your participation in this study, or after its completion, or would like to receive a copy of the study, please contact:

Nicole Ross Art Education James Madison University ross2nd@dukes.jmu.edu Dr. William Wightman Art Education James Madison University wightmanwh@jmu.edu 540/568-5144

Questions about Your Rights as a Research Subject

Dr. David Cockley Chair, Institutional Review Board James Madison University 540/568-2834 cocklede@jmu.edu

Giving Consent

I have read this consent form and I understand what is being requested of my child as a participant in this study. I freely consent for my child to participate. I have been given satisfactory answers to my questions. The investigator provided me with a copy of this form. I certify that I am at least 18 years of age.

 I give consent for my child to participate in this study. _____ (parent's initial)
 I give consent for my child to be audio recorded during an initial and final interview. (parent's initial)

Name of Child (Printed)

Name of Parent/Guardian (Printed)

Name of Parent/Guardian (Signed) Date

Name of Researcher (Signed) Date

D.

Youth Assent Form

Evaluating the Types of thinking Promoted Through Different Formats of Standards-Based Curriculum

I am inviting you to participate in this study because you completed World History I, English 8, and Art 8 in 2016. The primary reason for this study is to better understand the types of thinking that transpired in these three subject areas. Your involvement in this study will amount to roughly 3 hours of your time over the course of a month. The study will involve two interviews. In the first interview, you will be asked questions regarding your experiences in each of the content areas. Once the study is completed, I will share the findings of my research with you during a final interview. At this time, you will also be asked about your perspective of the effectiveness of the learning that transpired in these content areas. If permitted, I will audio-record both interviews for transcription purposes only. All interviews and meetings with you will take place at the Rockbridge Regional Library.

Confidentiality

Your responses and assessments will be completely confidential. The audio recordings will only be heard by the researcher and no individual responses will be identified in the final presentation. Your name will be replaced with a pseudonym, and no identifying information will be presented in my final report.

Participation & Withdrawal

Your participation in this study in entirely voluntary. Should you choose to participate, and later decide otherwise, you will have the option to withdraw without consequences of any kind, and any interview audio recordings will be immediately deleted.

Questions about the Study

If you have any questions at any time, please ask the researcher.

Giving Consent

If you check "yes," it means that you have decided to participate in this study and have read everything that is on this form. You and your parents will be given a copy of this form to keep.

_____ Yes, I would like to participate in the study.

	Date
Signature of Subject	
	Date

Signature of Investigator

E.

Site Consent Letter:

Institutional Review Board James Madison University MSC 5738]601 University Boulevard Harrisonburg, VA 22807

To whom it may concern,

I hereby agree to allow Nicole Ross, from James Madison University, to conduct her research at Mountainview Middle School in Summit, VA. I understand that the purpose of this study is to gather data on different formats of standards-based curriculum, through analyzing curricular standards, lesson plans, instructional documents, interviews, and classroom observations.

By signing this letter of permission, I am agreeing to the following:

JMU researcher has permission to be on Mountainview Middle School's premise in Summit, VA.

JMU researcher has access to the data collected to perform data analysis both for presentation and publication purposes.

Sincerely,

_____, Principal

Mountainview Middle School

F.

0	TIME	QUESTIONING PROMPTS	C CODE	TYPES OF QUESTIONING	B CODE	DOMAINS OF KNOWLEDGE	A CODE	NATURE OF ACTIVITY
1								
2								
3								
							-	
4								\$.)
СС	TIME	QUESTIONING PROMPTS	C CODE	TYPES OF QUESTIONING	B CODE	DOMAINS OF KNOWLEDGE	A CODE	NATURE OF ACTIVITY
5								
5								
5								
5								
6								
6								
5								
6								

TIME COMPONENT	QUESTIONING PROMPTS	C CODE	TYPES OF QUESTIONING	B CODE	DOMAINS OF KNOWLEDGE	A CODE	NATURE OF ACTIVITY
9							
- <u> -</u>							
10							

Classroom Observations Field Note Template

G.

Introductory Teacher Interview: (To be administered prior to initial classroom observations)

- 1. How has the written curriculum of your content area evolved during your experience as a teacher?
 - A. How were other curriculums characterized?
 - B. How did earlier curricula change over time?
 - C. When were these curriculums in place?
 - D. Why was one curriculum framework replaced by another?
- 2. In what ways has the (past and present) adopted curriculum influenced your teaching methods?
 - A. How influential is the prescribed curriculum in your lesson planning?
 - B. Do you conceive of lesson plans based on the adopted curriculum? Are they just a guide? An afterthought? Irrelevant?
 - C. How tightly do you adhere to the vernacular of the standards? Do the standards function as the objectives of your lessons?
 - D. How indicative are the standards of the information taught in your classroom? Do you find flexibility for bringing outside information into the classroom?
 - E. Does the prescribed curriculum impact the focus and length of class discussions?
- 3. How has the written curriculum influenced the types of thinking yielded in your classroom?
 - A. Has there been a difference in the quality of learning forged by different formats of curriculum?
 - B. Do the current standards favor certain types of thinking over others? Which types?
 - C. Have varying curriculum frameworks contributed to the development of different types of learners or students?
 - D. Has the prescribed curriculum had an impact on student engagement or autonomous learning?
 - E. What is the greatest impact that the current standards-based curriculum has had on students?

H.

Concluding Teacher Interview Questions:

- 1) What are the advantages of the current standards-based curriculum?
 - a) What aspects do you appreciate, find useful, on target, and/or well designed?
- 2) What are the disadvantages of the current standards-based curriculum?
 - a) Are there aspects that seem unnecessary, ill-designed, improbable, or irrelevant?
- 3) How effective is the current standards-based curriculum in yielding complex, higher order learning?
 - a) Do the standards emphasize certain types of thinking over others?
 - b) Consider Bloom's taxonomy: Knowledge, Comprehension, Application, Analysis, Evaluation, or Synthesis?
- 4) If you were to change aspects of the current standards-based curriculum, what would you change?
- 5) Do you see another approach to curriculum as more fit in yielding meaningful learning?
- 6) If so, how would you describe this approach?

I.

Introductory Student Interview:

- 1) Describe a typical day in your 8th grade WHI class?
 - a) How would you characterize the typical structure of class? What did the teacher do? What did students learn? *Teacher-directed learning, student-directed learning, a combination of both, etc.*
 - b) Were there certain activities that happened regularly? *Teacher lecture, review, discussions, group* work, independent work, etc.
 - (i) English?
 - (ii) Art?
- 2) What do you think the WHI course's end goal(s) for a student was?
 - a) What do you the teacher wanted students to know and be able to do at the end of the course?
 - b) Do you think these things were achieved?
 - c) For you to succeed with flying colors in WHI, what would be the most important skill for you to be able to do with the information being taught? *Remember, Understand, Apply, Analyze, Evaluate, or Synthesize*?
 - (i) English?
 - (ii) Art?
- 3) Can you think of any other ways the three courses were similar to one another?
- 4) Can you think of any other ways the three courses were different from one another?
- 5) What did you gain from your experience in WHI?
 - (i) English?
 - (ii) Art?

J.

Concluding Student Interview Questions:

- 1) Read and give coding instrument categories and descriptors to participant to use in responding to the following questions
- 2) How often were you invited to **synthesize**, or **construct your own understanding of information** that was taught in WHI? *Create, Reorganize, etc.*
 - a) English?
 - b) Art?
- 3) How often were you challenged to **evaluate** the information that was taught in World History? *Reflect* on Support, Argue, Defend, Justify, Critique, etc.
 - a) English?
 - b) Art?
- 4) How often were you prompted to **analyze** information that was taught in WHI? *Examine*, *Deconstruct*, *Interpret*, *Consider*, *Analyze*, *etc*.
 - a) English?
 - b) Art?
- 5) How often were you prompted to **apply** the information that was taught in WHI to new situations?
 - a) English? Solve, Implement, etc.
 - b) Art?
- 6) How often were you prompted to **comprehend** the information that was taught in WHI? *Explain, Describe, Summarize, etc.*
 - a) English?
 - b) Art?
- 7) How often were you challenged to **memorize** information that was taught in WHI? *Recall, Recite, Record, Define, State, List, etc.*
 - a) English?
 - b) Art?
- 8) How effective was each course in promoting impactful learning?
- 9) How effective was each course in cultivating long-term learning outcomes?
- 10) Can you imagine a way that WHI could be designed to more effectively promote meaningful and long-term learning?
 - a) English?
 - b) Art?

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