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Current effects and consequences of tracking

Beverly A. Oppold Blessman
University of Northern Iowa

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Abstract

Tracking and ability grouping have long been controversial topics in American education. Researchers have been collecting data on their effects for almost three quarters of a century and still disagree about their merits (Kulik and Kulik, 1987). Educators and policy makers have argued about the effects of ability grouping and tracking for an even longer time. Reviewers of research cannot reach an agreement about the value of homogeneous grouping, yet in 1985 it was determined that in 77 percent of all American schools, ability grouping and tracking were practiced to some degree (Dawson, 1987).

CURRENT EFFECTS AND CONSEQUENCES OF TRACKING

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Beverly A. Oppold Blessman

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Director of Research Paper
Charles Dedrick

Co-Reader of Research Paper
Lawrence L. Kavich

Graduate Faculty Advisor
Charles Dedrick

Head, Department of Educational Psychology & Foundations
Lawrence L. Kavich

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Date Approved

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CHAPTER 1

Introduction

Tracking and ability grouping have long been controversial topics in American education. Researchers have been collecting data on their effects for almost three quarters of a century and still disagree about their merits (Kulik and Kulik, 1987). Educators and policy makers have argued about the effects of ability grouping and tracking for an even longer time. Reviewers of research cannot reach an agreement about the value of homogeneous grouping, yet in 1985 it was determined that in 77 percent of all American schools, ability grouping and tracking were practiced to some degree (Dawson, 1987).

Supporters of tracking and ability grouping firmly believe that the differences among students cannot be accommodated within a common schooling experience and insist that ability grouping and tracking are necessary for successful teaching. Critics of this position argue that separating students to better accommodate individual differences appears neither necessary, effective, or appropriate. The critics, in fact, denounce ability grouping and tracking as an undemocratic practice with negative effects on children.

Some observers say that the history of education is the history of ability grouping (Oakes, 1986). Tracking began the first time an enterprising young teacher in a one-room school in

the 1880's divided his or her class into those who knew how to read and those who did not. Ability grouping apparently became standard practice in the United States shortly after the turn of the century. It came in response to the spread of compulsory schooling laws, the proliferation of publicly supported high schools, and the influx of immigrants and newly freed blacks into northern cities. In the three decades from 1909 to 1939, secondary school enrollment increased so as to constitute 73 percent of school age children (Goodlad, 1987). The Great Depression, beginning in 1929, brought large numbers of young people into the secondary schools who had not planned to be there and who had no plans for continuing into higher education. The compulsory school leaving age was moved up to 16 in most states and there were no positions in the work place for 14-year-olds. Up until 1907, there was little disagreement over the curriculum offered: the classics, Greek and Latin composition, rhetoric, natural philosophy, French, ancient history, astronomy, and trigonometry. With a change in the schools' populations, there was a debate among high school leaders on how to reorganize schools to meet the needs of the new student body.

The core curriculum of that time period was resistant to change at the beginning of this enrollment surge. However, it was only a matter of time before changes in studies created tracks for higher education for some and vocational education for others.

What occurred was a student body that was increasing in size and diversity as well as being influenced by a unique combination of new ideology and changing circumstances in the workplace. It was difficult to interest students (not college bound) in a curriculum designed to prepare them for where they didn't intend to go. The curriculum previously mentioned soon gave way to what the Boston Globe defined in 1907 as "the training of ordinary boys and girls to do the ordinary work of life" (Goodlad, 1987).

Introduction to a trade on school time and at no cost to the individual provided youths a vocational education while biding their school time. Many educators claimed that by providing both vocational and academic programs, they would develop a new form of democratic schooling. A superintendent of schools wrote, "Until very recently, the schools have offered opportunity for all to receive one kind of education, but what will make them (the schools) democratic is to provide opportunity for all to receive education as will fit them equally well for their particular life work" (Oakes, 1986, p. 150). Thus, it seemed as if the problem of educating diverse groups of students had been met with a solution that relied on a new view linking schools and work. Today, however, the events and assumptions that led educators to split the secondary school curriculum into academic and vocational tracks are seen as the root of today's schooling troubles.

Statement of the Problem

This is a comparative study to examine selected favorable and unfavorable aspects of tracking in today's schools. The investigation was researched through pertinent literature to determine tracking practices and effects. It was anticipated that tracking practices in today's schools would create unequal school opportunities by employing such practices.

The following four questions were examined:

1. What are the current perceptions of school tracking?
2. What are the effects of school tracking?
3. Why does student tracking persist?
4. What are possible alternatives to educational tracking?

Definition of Terms

The following terms will be used throughout the study in the context defined below:

Ability Grouping: The organizing of classrooms according to students' abilities; dividing academic subjects into classes geared to different levels for students of different abilities (Oakes, 1986).

Tracking: The practice of dividing students into separate classes for high, average, and low achievers; it lays out different curriculum paths for students headed for college as opposed to those who are bound directly for the workplace. In

many schools, the two procedures of ability grouping and tracking overlap (Oakes, 1986).

Importance of Tracking

Tracking is a pervasive feature of school organization in the majority of American schools. The net effect of tracking is to exaggerate the differences among students rather than to provide the educational means to better accommodate them. School personnel support tracking because they are convinced that, considering the options, it is best for students. Because tracking enables schools to provide differentiated curriculum and instruction, educators are convinced that if students are placed in the "right" track, they will have the best opportunity for school success. However, tracking appears to influence not only learning and other characteristics of student life but also adult outcomes (Van Fossen, Jones, and Spade, 1987).

In order to explore the characteristics, methods, assumptions, and consequences of tracking, a thorough investigation of the literature was conducted. An emphasis was placed on reports that were published in the 1980's.

Significance of the Literature

Research in this study indicates that tracking and ability grouping are widely accepted as a means of adapting curriculum and instruction to individual differences among students. Furthermore, research indicates that the effects and consequences of tracking

may obstruct educational efforts to achieve two highly valued goals of schooling: helping students reach high levels of academic excellence and providing equal opportunity for all students. There is evidence indicating that the curriculum and instructional inequalities that accompany tracking may actually create mediocre classroom experiences for most students and erect various barriers to the educational success of poor, black, and Hispanic students (Oakes, 1986). There is a well established link between track placement and student background. Poor and minority youngsters are disproportionately placed in tracks for low ability or non-college studies. On the other hand, minority and poor students are under-represented in the talented and gifted tracks.

There is also another combination associated with tracking and that is the link between the tracks and adult careers. Students in high tracks enjoy the option of entering higher education and choosing among high status careers, while students in low level tracks, with a few exceptions, do not enjoy the option of entering into higher education which may lead to high status careers.

Inevitably, the use of tracking forces schools to play an active role in perpetuating social and economic inequalities. Within the educational system, schools contribute to the class system apparent in America. Therefore, the literature of the study will review the basic questions to be answered in this study.

Procedures and Limitations in Obtaining Literature

A thorough and systematic search of all related literature was conducted. The data was collected by a research card system of identifying and synthesizing the basic information from each related source. The cards were coded according to the questions and then coded by the subtopics within each question. The order of references used in the literature was developed and organized according to continuity and transitions.

This study focused on recent tracking practices; therefore, the articles selected were recent in nature and were not dated later than 1980. The study did not incorporate unpublished research. Initially source words, such as ability grouping, heterogeneous grouping, homogeneous grouping, mainstreaming, and tracking, were used to locate relevant information. Some articles were dated later than 1980 and offered historical as well empirical documentation.

Summary

Assumptions, characteristics, methods, and consequences of tracking were gained through the study of the literature. The effects of tracking and its relationship to educational opportunites and equality was scrutinized through the literature. The following chapter will examine the data concerning the basic information pertaining to tracking and its consequences. An analysis of the information will then be conducted in chapter

three with a summarization of the material and a conclusion to follow in chapter four.

CHAPTER 2

Review of the Literature

The review of literature will investigate and highlight the information pertaining to questions raised in chapter one (perceptions of tracking, its effects, rationale supporting its use, and possible alternatives). A close examination of tracking and its relationship to educational opportunities and consequences will take place. Alternate methods of instruction will then be explored.

What are the Current Perceptions of School Tracking?

Tracking is the practice of dividing students into separate instructional groups for high, average, and low achievers. Tracking is believed to promote higher achievement for all students having equal educational opportunities.

Though students are equal under the law, they are not equal in abilities. Students do not enter the educational system with exactly the same kinds of interests, abilities, and aptitudes. Students, of course, vary widely. The differences may be in their socio-economic backgrounds, learning abilities and disabilities, intelligence levels, and ranges of personal experiences. Schools do not create these differences, but they must accommodate them. Tracking is seen as an attempt to structure educational situations in which students' special needs and abilities can be recognized and considered. Teachers and administrators generally assume that

academic needs will be better met when students learn in groups with similar capabilities.

A second assumption supporting the use of tracking is that less capable students will suffer emotional as well as educational damage from daily classroom contact and competition with their brighter peers. Lowered self concepts and negative attitudes toward learning are considered to be consequences of mixed-ability grouping for slower learners. It is also widely assumed that students can be placed in tracks both fairly and accurately. Lastly, most teachers contend that tracking greatly eases the teaching task and is possibly the only way to manage student differences.

Tracking placements are often made in the early weeks of first grade. Initial and relatively small aptitude differences among students may be exaggerated to determine placement according to ability in the elementary school. (Oakes, 1986) At the elementary level, placement is often based on the kindergarten teacher's recommendation. The majority of secondary schools use a combination of demographic information, teacher report, student performance, and diagnostic test information to classify, sort, and place students in different ability groups or tracks.

Overall, the three most common methods of assigning students to ability groups are intelligence test results, achievement test results, and teacher recommendations. Perhaps the most widely

used tool for track placement is the IQ test. Advocates say the IQ score is the best representation of an individual's innate abilities and is a good predictor of future academic success (Riccio, 1985). Others say, however, that IQ tests are crude screening devices, at best, and are ineffective when dealing with people very much above or below average. Other considerations concerning the use of IQ tests include the following:

1. Intelligence tests aren't infallible because they test only narrow ranges of ability that lend themselves to standardized methods (Mahan and Mahan, 1981).

2. Most intelligence tests have been standardized for a normative population. Children from low socio-economic homes predictably score lower than students from average and above average homes (Hobson v. Hansen, 1967).

3. Because standardized intelligence tests are not "culture free," they measure present rather than potential ability (Hobbs, 1975).

4. A student score on a particular test is affected by many variables including the physical environment of the testing room, the examiner's attitude, and the student's physical and emotional health and motivation (Tractenberg, 1977).

5. Excessive reliance on test scores can result in labeling children incorrectly, and the labels can last for life (Leinhardt and Palley, 1982).

Like IQ tests, achievement test results attempt to identify students' academic strengths and weaknesses by assessing reading, arithmetic, and language skills. There are two basic types of standardized achievement tests used to group students according to ability:

1. Norm-referenced tests are used more often than any other objective standard in public education (Mahan and Mahan, 1981). Regularly administered to all students in a particular age group, these tests are regarded as an overall measure of academic progress (Gerry, 1978).

2. Criterion-referenced tests, which assess what students can do, are much less frequently used than the norm-referenced variety (Mahan and Mahan, 1981). Proponents say that they provide a useful basis for assessing individual students' strengths, weaknesses, and growth in specific areas; as such, they are especially valuable as individualized intervention strategies (Popham, 1978).

Because of their similarity to IQ tests, achievement tests are subject to many of the same cautions (Kamin, 1974; Salvia and Ysseldyke, 1978). Also, the correlation between achievement and IQ scores generally is lower among minority students, indicating that such tests may be less reliable indications of the academic strengths and weaknesses of these students compared to other students.

Teacher recommendations, the third most common method used in the assignment of students to ability groups, are sometimes the sole criterion for assignments (Findley, 1974; Findley and Bryan, 1970; Oakes, 1983; Rist, 1970). But recommendations are highly subjective. A study of Harlem schools noted that placement in high ability groups depended on acceptable behavior as reported by teachers (Mackler and Giddings, 1965). Another study indicated that teachers' judgments were the basis for assignment to ability groups after only eight days of kindergarten (Rist, 1970).

Differences in track assignment by race and social class often appear regardless of whether test scores or teacher recommendations are used as a basis for placement (Oakes, 1986). Because of this, the practice of tracking is seen as playing an active role in perpetuating social and economic inequalities.

There are a wide variety of labels used and assumptions made about students as schools attempt to sort and classify its youth. Once placed in a particular ability group or track, the students receive educational experiences that differ from students placed in other tracks. These variances in classroom experiences tend to increase differences among students in their achievements, attitudes, and interests and have a cumulative effect. By middle or junior high school, track placement is more or less fixed (Oakes, 1985).

Since little movement between ability groups or tracks is

experienced from grade to grade, what develops is two distinctly different student career lines or trajectories. Once track placement has occurred, increasing differences in achievement and future occupations become obvious. One curriculum track is formed for those students headed for college (high track) and another is formed for those bound directly for employment (low track). Thus career options are seemingly governed by tracking that may occur at the first grade level.

What Are the Effects of School Tracking?

In the majority of schools, the idea is firmly entrenched that separate and differential curricula are needed to prepare and certify students for their appropriate roles as adults. According to Goodlad (1987), there is in the culture of this and other countries the belief that people fall naturally into one or two categories--those who can learn and should work with their heads, and those who can learn and should work with their hands. Schools generally favor those thought to be in the former category. Little encouragement and few rewards are offered to the latter who, at the intermediate and the higher grade levels, frequently find themselves in programs deliberately designed to prepare them for vocations not considered to require much academic ability.

Curriculum tracking and ability grouping vary from school to school in the multiplicity of subjects, the numbers of levels, and the ways students are placed. In most senior high schools, the

curriculum provides sequences of courses for a college preparatory, a vocational, or a general track. Schools may also divide their academic subjects into classes geared to different levels for different abilities. Many times the two systems will overlap. However, students who aren't in the top tracks (60 percent of senior high students) suffer disadvantages from their track placement (Oakes, 1986). In his studies, Hargreaves (1967) found two distinctly different youth cultures operative in the schools, i.e., the "academic" and the "delinquescent." Hargreaves argued that these cultures are the result of a combination of track location, teacher and peer expectations for performance and behavior, and the organizational logic of the school which tended to keep high and low track students separated throughout the day. Oakes (1986) also found in her research gross track differences in the curriculum, the instructional quality of classes, and the classroom climate with all findings favoring the upper tracks.

Students who aren't in the top tracks are likely to suffer because of their placements--their education is of a considerably lower quality. In 500 English and math classes, Oakes (1986) examined the three areas of educational importances (curriculum content, instructional quality, and classroom climate). In the findings reported, Oakes discussed "disturbing differences" in the different types of knowledge and opportunities accessible to differently tracked students. High track students had

opportunities to think critically and to solve interesting problems: they were exposed to content that can be called "high status knowledge" (Oakes, 1986) that focused on concepts, processes, and higher-order skills (California State Department of Education, 1984; Davis, 1986; Hargreaves, 1967; Metz, 1978; Oakes, 1985; Powell et al, 1985; Squires, 1966). Rarely, if ever, did the low track encounter similar types of knowledge (Oakes, 1986). The emphasis in the low track classes was found to be on low level comprehension.

Since so much of importance is omitted from their curriculum, students in these low ability classes were likely to have little contact with the knowledge and skills that would allow them to move into higher classes or to be successful if they got there (Oakes, 1986). Those students in lower tracks who were able to enter college soon learned that they had been shortchanged in access to knowledge while in high school (Goodlad, 1984). Oakes (1986) concluded that the curriculum of low track classes was likely to lock students into continuing a series of bottom-level placement because important concepts and skills were neglected; thus, these students were denied the knowledge that would enable them to move successfully into higher track classes.

Instructional time and teaching quality, two classroom conditions known to influence how much students will learn, were found to vary between the two tracks. According to Oakes (1986),

data consistently showed that students in the higher tracks had better classroom opportunities. Teachers of the high track classes set aside more class time for learning and more class time was spent on learning activities. High track students were also expected to spend more time doing homework. Fewer high track students were off task during class activities, as learning absorbed most of the class period, rather than discipline problems, socializing, or class routines as found in the low tracks.

Instruction in higher track classes more often included a whole range of teacher behaviors. High track teachers were found to be clearer, more enthusiastic, less likely to use strong criticism, and better organized with learning tasks of greater variety. Further, teacher-student relationships in high track classes were more often characterized by warmth and supportiveness.

Classes' climate differences included greater student disruption, hostility, and alienation in low track classes. In classes where mixed abilities occurred, many teachers were found to treat the low achievers differently. Teachers paid less attention to low ability students by calling on them less often, rewarding them for correct responses less often, waiting less time for them to answer questions, providing them with less accurate and detailed feedback about their responses and requiring less

work and effort (Dawson, 1987). In short, students in high tracks received more; students in low tracks received less. Those students who needed more time to learn appeared to be getting less; those students who had the most difficulty learning were being exposed least to the sort of teaching that best facilitates learning. Those who most needed support from a positive, nurturing environment received the least.

Some research suggests that low-track classes are often assigned to new teachers or to those with lower qualifications; while teachers judged to be the most competent, most experienced, or with the highest status at the school are assigned to the top tracks (Davis, 1986; Findley, 1984; Hargreaves, 1967; Rosenbaum, 1976). Also, some work has found that when teachers teach more than one track level, their upper track classes capture most of their attention and energy (Rosenbaum, 1976).

Tracking can and often does work well for the top students. By providing the best teachers to a group of the most successful students, often with low class size, combined with special resources and a sense of superior ability, these students will receive a superior education. However, for those students identified as average or slow, tracking often appears to retard academic progress by teaching and reinforcing the notion that those not labeled as the best are expected to do less well; thus

creating a failure syndrome which results in poor performance that few can defy (Rist, 1970).

A closer examination of this syndrome showed that students placed in low ability groups developed poor academic skills and behaviors. Rist (1970) demonstrated that students placed in the lowest ability groups in kindergarten, with placement based on nonacademic criteria, not only had poor academic performance in the kindergarten class, but fell progressively further behind their better placed peers. Indeed, the basic features of the majority of schools may lock low track students into patterns that make it difficult to achieve equality or excellence in education.

Tracks are composed of competent students (high track) versus incompetent (low track students). Schools have a tendency to define a competent youth as one who does well academically, conforms to the rules of the building, and shows respect to adults. By contrast, an incompetent youth is one who demonstrates academic or behavior problems (Pink, 1984). For the incompetents, school has little meaning or relevance either for their immediate or long-range lives (Pink, 1984). Hargreaves (1967), in a study of secondary schools in England, found students in low tracks had poor academic performance, more negative perceptions of themselves, disliked schools more frequently, and engaged in more rebellious and delinquent behaviors when compared with their high track peers. Rather than helping students feel more comfortable

about themselves, tracking was found to reduce self esteem, lower aspirations, and foster apathetic, negative attitudes towards school. These attitudes can prompt some students to engage in withdrawal that may lead to dropping out of the system.

Tracking location has a significant relationship to the disciplinary climate of the classroom (Van Fossen, Jones, and Spade, 1987). According to Goodlad's study (1984), teachers in high tracks spent less time on student misbehavior and more time on instruction. In low track classes teachers were seen as more punitive and emphasized matters of discipline. Students in high track classes reported fewer incidents of students cutting classes, talking back to teachers, and refusing to be obey instructions; the low track students reported more of these problem behaviors (Van Fossen, Jones, and Spade, 1987). Nearly 26 percent of the students in the low classes said daily routines or getting students to behave took up more class time than did learning (Trimble and Sinclair, 1986). They stated that their classes were frequently interrupted by problems and arguing in class.

Oakes (1986) found a negative atmosphere also in relationships that students established with one another in the low track classes. Students in these classes agreed that "students in this class are unfriendly to me" or that they "often feel left out of class activities."

Hargreaves (1967) found few students develop cross track friendships. Rather, Hargreaves reported finding open hostility between students in high and low tracks. He concluded that the schools' practices of keeping the tracks separated throughout the school day, together with differential expectations of staff concerning performance and behaviors, function to create and maintain the existence of these different tracks.

Therefore, class environments also seemingly have troublesome patterns consisting of advantages for high tracks and disadvantages for low. When the lowest achieving and worst behaved students are grouped together for instruction, everyone in that class will suffer a distressing cycle throughout their schooling years--lower quality learning opportunities will interact with their increasingly lowered self perceptions, attitudes, interests, abilities, and behaviors to produce poor academic achievement and limited prospects beyond high school (Oakes, 1986).

In addition to being poorer academically and more involved in troublesome behavior, low tracks have disproportionate concentrations of minority students and low socio-economic students (Bryson and Bentley, 1980). Differentiation by race and class occurs within the tracking process, with blacks and Hispanics found to be more frequently enrolled in programs that train students for the lowest levels of occupations (Oakes, 1986).

Poor and minority students are typically lower in achievement by the time they reach secondary schools due to the cumulative effect of tracking. Secondary schools respond to these differences with well meant programs that they judge to be appropriate for these students. Data show that there is a disproportionate number of students from low socio-economic backgrounds who are, in turn many times, disproportionately from racial minorities, enrolled in that part of the curriculum designed to prepare them for specific jobs (Goodlad, 1987).

However, vocational programs are often detrimental to the students in them. Most studies find that tracking works to the academic detriment of students who are placed in a vocational track as opposed to a college preparatory track (Oakes, 1986). When schools assign students to vocational curricula, their chances of obtaining a solid general education are diminished.

Vocational students often experience a lower quality of curriculum content. Despite good intentions to impart specific job related knowledge, skills, and attitudes to those not considered to be college material (principally the poor and minority students), little evidence exists that the economic and social benefits claimed for secondary vocational education actually occur. Generally, program results are disappointing (Stern, 1985). Problems such as the use of obsolete equipment and methods, the teaching of skills unrelated to labor market trends,

and, in many schools, an emphasis on specific training for the lowest level of jobs--factory sewing, dry cleaning, building maintenance, and planting and picking in agricultural fields--frequently occur (Stern, 1985).

The failure of vocational education is the failure of a school structure that mirrors economic and social preconceptions of who is fit for particular life outcomes (Oakes, 1986). Studies show a direct link between the two tracks and adult careers: students in high tracks enjoy the option of entering higher education and choosing among high status careers, while students in low tracks, with a few exceptions, do not enjoy the option of entering higher education which leads to higher status careers (Kelly and Pink, 1971). Pink (1984) further stated that researchers have argued that early in a student's schooling, decisions about ability and subsequent educability are made that "fit" nicely with widely used tracking procedures that serve, over time, to solidify both in-and-out of school indentities for students that, in the end, govern both career and life options (p. 96). Schaefer and Olexa (1971) reached similar conclusions about the effects of the process of schooling on students. They found track location, specifically academic versus nonacademic tracks, social class, IQ, and previous performance, to best predict student attitudes and delinquent behavior. Schaefer and Olexa concluded that track location is so powerful a status indicator,

both for students and staff, that it operates in much the same way as a caste system by differentiating the "successful" from the "failing" student. Since little movement between these groups or tracks is experienced from grade to grade, what develops in schools are two distinctly different career lines or tracks (Jackson, 1964) that, in the long run if not the short, shape the social order (Goodlad, 1987). "The rich get richer from tracking and poor get poorer from tracking" (Oakes, 1988). It seems that tracking is both a response to differences among students and an ongoing contribution to those differences. Though tracking is believed to promote higher achievement for all students under conditions of equal educational opportunities, it's found that it actually places the greatest obstacles to achievement in the path of the least advantaged in American society, the poor and the minority (Oakes, 1986).

Why Does Student Tracking Persist?

Today many people, both in and out of school, believe that intellectual aptitude and capability for successful school performance are linked to race and class and, for all practical purposes, are unchangeable (Oakes, 1986). Although biology is less often blamed for these differences today than environmental factors, the commonly held judgements that poor blacks and Hispanics will characteristically face insurmountable learning difficulties and that Asians are by nature prone to achieve well

in school provide two examples of these beliefs. Coinciding with these beliefs is the notion that academic ability is fixed very early in a youth's life and is largely unchangeable.

Many people argue that the assumption of promoting excellence and providing equality is false, that one can't be achieved with the other. Attempts to "equalize" education in the sixties and seventies have been judged extravagant and naive.

Some educators believe it is not possible to have a common schooling experience for all and have excellence too (Goodlad, 1987). Critics warn that, given the precarious position of the U.S. in the global competition for economic, technical, and military superiority, society can no longer sacrifice the quality of our schools to social goals. This view promotes the judicious spending of educational resources that will produce the greatest return on the "human" capital (Oakes, 1986). In economic terms, special provisions for underachieving poor and minority students is a bad investment (Oakes, 1986).

Some supporters argue that the most able students require separate educational programs if their talents are to be fully developed (Oakes, 1987). This belief is supported, in part, by research findings that students in the highest-level classes, college preparatory tracks, talented and gifted programs, often benefit academically from these programs (Oakes, 1987). Tracking clearly has been found to offer educational and social advantages

to students in the top tracks. Many suspect that when the lowest achieving and worst behaved students are mixed in with the high track students, everyone in that class will perform below potential. However, research findings show that able students are likely to continue to do well even when placed in heterogeneous groups. But it is difficult to give up that "particular bird in hand" for assurances that top students would do "no worse" if tracking were stopped.

Teachers support ability grouping and tracking because homogenous clusters of students are easier to teach (Kulik and Kulik, 1982). Supposedly, fewer individual differences mean instruction can be focused more efficiently and learning thus enhanced. Students may be equal under the law, but not in ability. Appropriate tracking is seen to accommodate those individual differences and to provide the best possible match between the learner and the environment. Teachers using it can, supposedly, build a good instructional climate and motivate students toward attaining high-status knowledge (Nevi, 1987). However, there is abundant evidence, according to Oakes (1986), of the general ineffectiveness of tracking and the disproportionate harm it works on poor and minority students.

Another reason tracking persists may be embedded in an historical as well as educational purpose. Although tracking and differential curricula are generally regarded as educational

decisions, these conventional and little questioned responses stem from a tradition that has far less to do with education than it does with providing what society believes to be "appropriate" for different types of students. Tracking may stem more from what society perceives as its needs than from what would most benefit its students. Because of these important social meanings, evidence about the educational effects of tracking is only partly relevant to the ongoing operation of schools. School personnel, therefore, contend with socially influenced definitions of appropriate school practice when attempting to achieve academic excellence (Oakes, 1986).

There has been a failure to publicize the importance of schooling in opening and closing options that have life long, societal implications. In addition, there has been a failure to publicize the various handicaps given to low track students.

Edmonds (1979), a frequently cited exponent of effective schools, indicates emphatically that, for him, effective schools are schools which "bring children of the poor to those minimal masteries of basic school skills that describe minimally successful pupil performance for the children of the midddle class" (p. 16).

If schools attempt to implement what the current literature indicates are elements of instructionally effective schools without giving equal attention to dismantling the high and low

ability groups existent in most schools, the outcomes will continue to be both the failure of the intervention methods and continuing high rates of low academic performance and poor student behavior by the low ability group. What is perhaps the most disturbing about this repeated pattern of intervention failure is that it fuels widely held beliefs that the target population (e.g., minority groups, poor students) can't benefit from special assistance under any circumstances (Pink, 1984).

What Are Possible Alternatives to Educational Tracking?

Changing tracking practices is no trivial matter regardless of how gradual such a change might be. Oakes (1986) believed any change in the area of tracking will require an intensity not commonly seen in school reform. Genuine tracking reform will demand dramatically altered assumptions about students, about learning, and about the purpose of schooling.

One problem lies in the political nature of the tracking question. There are few professionals or parents without strong opinions about it, and often the most vocal and powerful opinions are voiced by those interested in maintaining advantages for top students. In multiracial schools, proposals for changing tracking are complicated by the same fears that desegregation raises. Arguments for more equal, democratic alternatives carry little weight in the tracking controversy.

Perhaps the most important and difficult task for those who can change tracking is to confront deeply held beliefs, such as the belief that academic ability is fixed very early and is largely unchangeable or that achievement differences can be largely accounted for by differences in ability (Oakes, 1988). These beliefs are supported by a long tradition of studying and measuring intelligence. Before tracking alternatives can succeed, educators need to re-examine conventional assumptions about ability and about how individual differences in ability affects school learning.

The schooling process should remove practices that tend to institutionalize measured differences in levels of competence tested in the early years of schooling. Schools should take a productive attitude toward students experiencing difficulties in learning, instead of writing off students on the basis of earlier assessments. Recent work of cognitive psychologists suggests, for example, that academic ability in not unchangeable but developmental--growing throughout childhood (Oakes, 1988). As children interact with their environment, they acquire cognitive abilities. Especially important are studies showing that cognitive abilities can be taught, and that even students who begin school with less developed abilities can learn. Other work suggests that what we usually consider low ability may not be as limited as we generally think. The achievement gaps we observe

among students of differing abilities are fed by the failure of classrooms to provide all students with the time, opportunities, and resources that they need to learn.

Prevailing beliefs about the limits of ability are critical. Unless teachers and administrators believe and expect all students to learn well, they will be unlikely to create school and classroom conditions where students have confidence in their abilities or exert the effort to succeed. Believing that all students are capable of and will learn is an important factor in any tracking intervention method. Teacher expectations have been shown to have a powerful effect on student outcomes (Good, 1981). To ensure that the expectations for both high and low ability students are the same, Good recommends that teachers:

1. Ensure that seating arrangements for high and low ability students are equitable. Often, low ability students are seated further away from the teacher than high ability students.

2. Pay as much attention, as shown by eye contact, smiles, etc., to high and low ability students.

3. Call on low ability students as much as high ability students.

4. Wait a sufficiently long time (at least 5 seconds) for low ability students to respond to questions.

5. Provide clues and follow up questions to low ability students when they have trouble answering questions.

6. Refrain from over criticizing low ability students. At the same time, praise should be specific and for appropriate responses.

7. Give feedback to low ability students that is equal in quantity and detail to that given to high ability students.

8. Demand equal levels of effort and work from low ability and high ability students.

To de-track, schools will need to place less emphasis on the identifying, labeling, and sorting of students. One alternative is to implement heterogeneous grouping. Calfee and Brown (1979) found that least able students can benefit from membership in heterogeneous classrooms without diminishing the education of more capable students. Beckerman and Good (1981) reported that both high and low ability students appear to do better in classes with a preponderance of high ability students. Slavin and Karweit (1985) concluded that schools can best deal with individual differences in ability by dividing into smaller groups within heterogeneous classes. Oakes (1986) stated that her research indicates that even under normal circumstances, nearly all students can learn as well as in heterogeneous groups as in tracked classrooms and that students identified as average or below average often do better in heterogeneous settings.

There are varying explanations as to why both high and low ability students appear to do better in a heterogeneous classroom.

It is possible that students model the behaviors of the majority of the class, and since higher ability students have been shown to have better study habits and more appropriate behavior, lower ability students will model these behaviors. Or teachers may teach to the norm, which could result in faster paced, relevant instruction in higher ability groupings. When students are exposed to more content and better instruction, they are likely to do better. Teachers devote less time to discipline and more time to direct instruction.

Rosenthal and Jacobson (1968) explored the effects of teacher expectations and low ability students. They claimed when random groups of students were presented as high achievers, teachers treated them differently than when equivalent groups were presented as low achievers. As a result of this differential treatment, achievement differences would result, favoring those students described as high achievers.

Oakes (1988) feels that, despite promising research findings about heterogeneous grouping, little is likely to be accomplished by simply mixing students up. She feels that there may be a need for changes in the types of knowledge that children are expected to acquire, in the social organizations of schools and classrooms, and in student evaluations.

Many curriculum experts argue that as long as curriculum is presented as a sequence of topics and skills that require

prerequisite knowledge and prior mastery of certain skills, teaching heterogeneous groups of students will remain a problem. Students do differ, and the most obvious differences among them seem to be in the speed with which they master sequentially presented skills. Sequentially arranged material is better suited for students who are grouped according to ability. For, unless students are similar in learning speed, such a curriculum raises terrific problems of pacing.

In the area of curriculum, Goodlad (1984) suggested that curriculum might better be organized around central ideas and themes and these be the focus of what students learn throughout their schooling. Students can acquire specific knowledge and skills as they are ready within a common conceptual framework. When curriculum is organized around central themes of a subject area rather than around disconnected topics and skills, all students stand the greatest chance of enhancing their intellectual development. Also, classroom knowledge that remains connected to its larger context is much easier for students to understand and use. In mathematics, for example, Romberg (1983) suggested a common curriculum organized around the major mathematical processes of abstracting, inventing, proving, and applying. With such a concept-based approach to curriculum, the range of skill differences becomes a far less formidable obstacle to teaching and

learning. These are seemingly sound approaches for all students and not just compromises in order to assist the disadvantaged.

Lessons will probably be most successful if they require active learning tasks rather than passive ones, and if instructors have students working together rather than alone. With cooperative learning strategies, students can exchange ideas and help in small groups. Frequently, they will work at separate but interrelated tasks. Teachers can function as conductors, getting things started and keeping them moving along, providing information and resources, and coordinating the activity taking place. Such classrooms present a variety of paths to success. According to Slavin (1983), cooperative learning leads not only to increased student achievement, but it also produces positive effects on attitudes and self-concept.

When teachers are skillful, there is considerable evidence that even the very best students make stronger intellectual gains while working with students of varying skill levels than when they work alone. Learning tasks are probably most helpful when they are full of complications and when they require multiple abilities--thinking, discussing, writing, visualizing--to accomplish. Learning tasks will benefit most students if they are modeled on complex and challenging real-world problem solving.

While difficult to implement, changes in beliefs, curriculum, and instruction are not impossible. De-tracking should begin at

the elementary level, when educators should be made aware of what they do to students in regards to the assignments they make to high and low tracks and the long term consequences of those assignments.

Typically low track high school students have been in low ability groups since elementary school. The gap between them and high track students grows wider each year. By the time the students reach secondary school, track-related achievement and attitude difference are often well established. Therefore, alternatives to tracking at this point are limited; thus, alternatives will be most effective if they begin early. Junior high is probably too late and first grade is probably not too early.

This doesn't mean that secondary schools can't do anything about tracking. Gradual changes can be initiated, even if some tracking is maintained. For example, instead of being dead ends, low track classes (i.e., "general" mathematics) might become "prep" courses for participation in high-track classes (for example, algebra). Some one-year college prep courses can be offered in two years for students without the necessary background, or stretched out over the summer. Combined classes composed of more than one track level can be team-taught. Counselors can recruit students for academic programs, rather than using strict placement criteria for keeping them out. Beckerman

and Good (1981) suggested heterogeneous classrooms consist of one third low ability students, which allows the mainstreaming of slower students into regular or more advanced classes, with after-school peer or adult tutoring programs helping students keep up with their classmates. The distinction between vocational and academic programs can be lessened by infusing the curriculum of vocational classes with academic concepts and that of academic classes with real-life, hands-on learning experiences.

Many of the alternatives to tracking require fundamental changes in the structure of schooling and teachers' work. As with most educational reforms, teachers' professionalism is central to successful tracking alternatives. Without changes in the way teachers evaluate, sort, label, and process students, tracking will continue. Working with their communities, school staffs can implement changes that are compatible with school goals and also politically manageable. But unless teachers have the time and professional autonomy to deliberate about, develop, and experiment with fundamental changes in school organization and classroom practices, alternatives to tracking are unlikely to be intelligently conceived, enthusiastically endorsed, or successfully implemented (Oakes, 1988).

Summary

Research in this chapter indicates that tracking is basically unfavorable, yet these studies suggest teachers are not adhering

to the literature. The Oakes study is an example of this development.

CHAPTER 3

Analysis of the Literature

This is a result of all the related literature pertaining to the questions. The questions will be analyzed individually as a final report of the findings of this study.

What Are the Current Perceptions of School Tracking?

Results of the study indicate that tracking is the practice of dividing students into separate classes for high, average, and low achievers. Classes and tracks are labeled in terms of the performance levels of the students in them (i.e., advanced, average, remedial) or according to students' expected post-secondary destination (i.e., college preparatory, vocational). Tracking promotes different curriculum paths for students headed for college as opposed to those who are entering the labor market.

The term "tracking" is often times used synonymously with the term "ability grouping." Ability grouping is similar to tracking, as ability grouping is the practice of dividing students according to ability into separate groups within a classroom. Many times the procedures of ability grouping and tracking overlap.

The placement decisions concerning ability groups and tracks are made very early in a child's school career. The decisions may be based on questionable data, and they are enduring. Furthermore, they often result in a separation of students along

ethnic and social class lines. Therefore, tracking may be discriminatory.

What Are the Effects of School Tracking?

Results of the study indicate that once a student is placed in a particular ability group or track, he or she will receive educational experiences that differ from students placed in other tracks. These variances in classroom experiences tend to increase the differences among students in their achievements, attitudes, and interests and have a cumulative effect.

The groups that are formed as a result of tracking are not equally valued instructional groups. They form a hierarchy within the school with the most academic or advanced tracks seen as the "top" or the "best." Tracking appears to consistently hinder those students not placed in the top groups. Tracking is most often found to work to the academic detriment of students who are placed in low ability classes or non-college preparatory groups.

Further, students in vocational tracks do not appear to benefit from their placements. Vocational students often experience a curriculum content of lower quality. Generally, vocational program results are disappointing in that little evidence exists that the economic and social benefits claimed for secondary vocational education actually occur. Many vocational programs provide training for the lowest level of jobs. Thus, tracking affects adult outcomes.

A study of the literature indicates that the bulk of the research does not appear to support the assumption that slow students will suffer emotionally when enrolled in heterogeneous classes. In fact, the opposite has often been found to result. Rather than helping students to feel more comfortable about themselves, the tracking process causes lowered self-esteem, lowered aspirations, and negative attitudes towards school.

Also found in the study of the literature was the fact that both low and high achieving students perform better in classes with a preponderance of high achieving students. High achieving students can benefit from heterogeneous groups as well as low achievers.

Why Does Student Tracking Persist?

The literature indicated primarily five reasons for the continued use of tracking. They are as follows:

1. School personnel generally assume that tracking promotes students' achievements, that all students will learn best when they are grouped with others of similar capabilities.

2. It is assumed that slow or less capable students will suffer emotional as well as educational damage from daily contact with brighter peers.

3. A widely held belief that allows tracking to persist is the assumption that tracking assignments can be made accurately and fairly.

4. Most teachers and administrators contend that homogeneous grouping greatly eases the teaching task.

5. Many people, both in and out of school, believe that intellectual aptitudes and capabilities are linked to race and class.

What Are Possible Alternatives to Educational Tracking?

The most popular alternative is to implement heterogeneous groupings. Research has found that least able students can benefit from membership in heterogeneous classrooms without negative repercussions for the more capable students.

The literature also suggests that teachers should exhibit positive expectations for students of all abilities. The study examined a variety of practices that could ensure equitable classroom experiences for both low and high ability students. It was suggested that schooling processes that tend to institutionalize measured differences in levels of competence should be eliminated.

A concept-based approach to curriculum is thought to be preferable when teaching heterogeneous classrooms. This is when the curriculum is organized around a central theme rather than disconnected topics and skills. Researchers believe that all students can benefit academically by using this approach.

CHAPTER 4

Summary, Conclusion, Recommendations

Summary

This study examined the process of school tracking and its effects and consequences. The literature pertaining to school tracking has certain trends towards the unfavorable.

The literature suggests that school tracking exists because teachers and administrators generally assume that tracking is the best way to address individual needs and to cope with individual differences. Studies show, however, that there is little evidence to support that assumption. The effects of tracking on student outcomes have been widely investigated, and the bulk of the work does not support commonly held beliefs that tracking increases student learning. The literature suggests students of all ability levels can achieve as well in heterogeneous classrooms as in homogeneous classrooms. Separating students to accommodate student differences appears to be neither necessary, effective, or appropriate.

Though the literature suggests negative trends of school tracking, the literature also stated that tracking continues to be a significant feature of schools. Thus, tracking continues to be a problem and does not seem to be easily resolvable. Therefore, a study of this nature reinforces the fact that effects and consequences of school tracking are not understood.

Conclusion

1. Tracking is contrary to the American ideal of common and equal education for all, and it is educationally unsound. The vast majority of students--those excluded from the highest track--are expected to learn less, are given less challenging material, and not surprisingly, learn less. Tracking structurally locks many of its participants into unacceptably low levels of student performance.

2. There are serious concerns as to how and when track placements are made, how they are perpetuated, and how track assignments alone, separate from the student's ability, may affect school progress and vocational outcomes.

3. Track placements have a tendency to exaggerate differences among students rather than to provide the means to better accommodate them. Students who are initially similar in background and prior achievement become increasingly different in achievement and future goals when they are placed in different tracks. This cumulative effect is the result of track placements that, once assigned, tend to remain fixed.

4. The long-term negative effects of being in low ability classes have been documented. Placement in low track classes restricts the vocational options available to students and increases the likelihood that students will drop out of school prior to graduation.

5. There is a well established link between track placements and student background characteristics. Poor and minority children are disproportionately placed in low ability tracks. It has been suggested that tracking helps to maintain and perpetuate class status from one generation to another by sorting children from different backgrounds.

6. Students placed in low ability tracks experience the educational environment differently than those placed in higher tracks. Students in low ability classes spend less time learning, are taught lower level skills and knowledge, and are exposed to fewer types of instructional materials.

7. Students in low ability tracks develop strongly negative attitudes towards school and themselves as a result of their track placement.

8. There is no consistent evidence that school tracking has a positive influence on learning for any group of students. Until educators believe this information, school tracking will persist.

Recommendations

The debate is no longer over whether American education is in trouble, but over what should be done. United States schools need to change. The challenge is to move to a new level of learning, one in which more students learn more, learn in depth, and learn how to learn. Reaching a new level of learning will be difficult, because American education seems locked into practices that act as

barriers to attaining more effective education. The practice of tracking is one of those barriers.

1. There is still much to be learned about how tracking works and why it persists. Educators must discover how long-standing traditions, school and district guidelines, standards of common practice, and beliefs about students' abilities and limitations translate into daily decisions about which tracks schools should offer, which students should be assigned, and what students should learn in different tracks.

2. Research needs to be conducted to discover how students' family backgrounds, motivations, peer group influences, and self-concepts interact with their track placements to produce differences in achievement and attitudes. Policymakers must discover the extent to which beliefs about race and class differences continue to effect teachers' and administrators' reactions to poor and minority children.

3. Vocational programs need closer examination. Three critical questions that need further research are:

a. Whose interests are best served by the focus of programs on training students with skills to meet labor market demands?

b. Whose interests are best served by the focus on developing individuals who can intelligently determine the course

of their own lives with informed decisions about society and their own work within it?

c. In whose interests and toward what ends should vocational education strive?

The aforementioned recommendations all are appropriate for further research. However, information alone will not execute the reform necessary. Until research knowledge is supported by educators, local school districts, and state boards, little change is likely to occur.

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