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REVIEW OF RESEARCH

ABILITY GROUPING IN CATHOLIC AND PUBLIC SCHOOLS

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Researchers have found that students who attend Catholic high schools tend to outperform public high school students on standardized tests of achievement. Although many aspects of this finding have been examined in subsequent research, little attention has been paid to the issue of how ability grouping affects achievement across school sectors. A nearly universal practice in middle and secondary schools, ability grouping works to channel learning opportunities to students. The authors trace the history of ability grouping and review the findings regarding ability group effects, the assignment process, and mobility across groups in each school sector. Their analyses suggest that the way ability grouping is implemented in Catholic schools contributes to the Catholic school advantage in achievement.

Catholic schools have long been regarded as institutions that provide a high quality education to their students. Catholic parents send their children to Catholic schools not only because they value the religious instruction the children receive, but also because they believe their children will receive an outstanding education. Increases in attendance by non-Catholic students indicate that non-Catholic parents also think these schools offer a superior education (Bryk, Lee, & Holland, 1993).

Until the latter part of the 20th century, little empirical research had been conducted to evaluate the quality of a Catholic education. The positive reputation of Catholic schools was based primarily on a sense that Catholic school graduates were successful in gaining admission to elite colleges, in receiving academic scholarships and honors, and attaining a high rate of college completion. It was not until the 1980s, more than 100 years after the creation of the Catholic school system, that survey data became available to permit research examining the Catholic school reputation for excellence.

The first wave of the national longitudinal survey, High School and

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Beyond (HSB) became available in 1982. This data set contained information on students in 1,015 secondary public and private schools across the country. Coleman, Hoffer, and Kilgore (1982) analyzed these cross-sectional data to compare student achievement in Catholic and public schools. They found that students in Catholic schools earned higher test scores than their peers in public or other private schools. While the differences in test scores across school sector were not large, they were noteworthy in their consistency across subject area, grade, and school demographic characteristics. This result became known as the Catholic school advantage. The study provided empirical support for the belief that Catholic schools are particularly successful in promoting student academic achievement.

The Coleman et al. (1982) study was criticized on methodological and statistical grounds. The sharpest criticism stemmed from the fact that the analysis was based on cross-sectional data and hence could not establish causality. When the second wave of HSB became available, Hoffer, Greeley, and Coleman (1985) repeated the analysis. Their results, based on longitudinal models, showed the same Catholic school advantage that had been observed in the cross-sectional study. The researchers concluded that Catholic schools are engaging in practices and policies that are particularly conducive to student learning. They hypothesized that a strong curriculum, strict discipline, and a communal spirit characterize Catholic schools and account for their academic success.

In the subsequent analyses of the HSB data, Greeley (1982) and Hoffer et al. (1985) employed several analytic techniques to examine the Catholic school advantage. These studies revealed a positive effect of Catholic school attendance on verbal and mathematics achievement gains from sophomore to senior year. This effect was equivalent to half a grade in these subjects. It was attributed to the strength of the curriculum, the number of required courses, and the amount of homework assigned. The gains were larger for Black, Hispanic, and lower socioeconomic status (SES) students, leading to the suggestion that Catholic schools uniquely promote the common school ideal. By reducing the negative effects of race and SES on achievement, Catholic schools distribute learning opportunities more equitably across students. The research also showed that public schools that made demands on students similar to those made in Catholic schools produced comparable achievement results.

In the late 1980s, responding to a request from the National Catholic Educational Association to study effective Catholic schools, Bryk and Holland undertook an intensive examination of a small number of Catholic high schools and Bryk and Lee conducted further comparative analyses of student achievement in public and Catholic high schools in the HSB data set. Their results (Bryk et al., 1993) were consistent with Coleman, Hoffer,

and Kilgore's (1982) work revealing a Catholic school advantage. The in-depth analysis of seven Catholic high schools provided insights into how Catholic schools attain their academic success. The researchers concluded that the strength of the curriculum in Catholic schools is a major cause of student achievement. They observed that teachers in Catholic schools assume that all students can learn and require all students to take challenging courses. The schools also avoid offering low-level remedial courses and provide a solid curriculum for students of all ability levels.

Bryk et al. (1993) identified the climate of Catholic schools as another factor explaining the Catholic school advantage and differentiating the schools from public and other private schools. They noted that Catholic schools are orderly environments where, because discipline is regularly and consistently enforced, students feel safe and secure. Moreover, Catholic school students have a sense of shared identity. Along with their principal and faculty, students form a close community characterized by respect, caring, and service. The faith based orientation of Catholic schools serves as a powerful force that unifies the school community and provides an additional layer of support to help students develop cognitively, emotionally, and socially. This faith-based orientation motivates teachers to pursue the goals of the school and supports their commitment to student learning.

While these major research studies provide empirical evidence of the high quality of a Catholic education, they do not analyze the mechanisms that explain the Catholic school advantage. Suggesting that a rigorous curriculum, strict discipline, and a communal spirit promote student learning identifies factors that increase achievement, but does not explain how schools channel learning opportunities to students and engage them in the learning process. Further analysis is needed to better understand Catholic school effectiveness.

One of the primary mechanisms that schools use to effect student learning is the organization of students for instruction. How students are assigned to classes and other instructional groupings determines the curriculum to which students are exposed and the pedagogical characteristics of the teachers who transmit the curriculum to them. Further, the way students are organized for instruction evokes social psychological processes that influence learning. Hence it is likely that curricular differentiation has a direct impact on student learning and can explain differences across schools and school sectors in student academic achievement.

In most private and public middle and secondary schools in the United States, students are grouped for instruction by ability. A large body of research has accumulated evaluating the efficacy of ability grouping in public schools. The results of these studies are fairly consistent in conclud-

ing that variation in how ability grouping is practiced explains within and between school differences in student achievement. For this reason, a comparative analysis of ability grouping in Catholic and public schools could determine whether the way ability grouping is practiced in Catholic schools explains their academic effectiveness. This paper examines similarities and differences in the way ability grouping is practiced in Catholic and public schools in order to determine whether this practice accounts for or contributes to the Catholic school advantage.

HISTORY OF ABILITY GROUPING

Ability grouping in public high schools became common around the beginning of the 20th century, precipitated by changes in immigration patterns, the expansion of education, and the advent of intelligence tests. As the population of school-aged children grew, school size increased. This made it necessary to develop a better system for organizing students for instruction within the larger schools. Homogeneous grouping emerged as a convenient way for schools to serve the needs of a variety of students with different backgrounds and abilities (Goldberg, Passow, & Justman, 1966; Lucas, 1999). Intelligence tests facilitated the assignment of students to these groups (Mondale & Patton, 2001).

Ability grouping originated as a strict curricular assignment designed to prepare students for a career. This practice was referred to as tracking. Most schools had three tracks: vocational, general, and academic. The vocational track trained students for trades such as plumbing, mechanics, and carpentry. The general track offered students the basic knowledge needed for low-skilled jobs that would not require a college degree. The academic track prepared students to attend college.

Assignment to one of these tracks determined the trajectory of a student's future career prospects. Once assigned to a track, the students had little latitude in choosing their courses. The placement rarely allowed students to take courses outside the prescribed track. This rigid structure effectively guaranteed that the majority of students would be led into specific educational or career paths because they were constrained from exploring other vocational or academic options while in high school.

The structure of the public high school curriculum began to change during the 1950s. High school enrollment grew significantly during this time, because baby boomers were reaching adolescence. Students still took required courses within their assigned track, but, in addition, they could choose from a variety of elective courses. This growth in course offerings led to the characterization of the comprehensive high school as a "shopping mall" (Powell, Farrar, & Cohen, 1985). Students were given the opportuni-

ty to choose electives that fit their specific interests. This signaled the beginning of a change in the structure of tracking (Lucas, 1999).

The public school curriculum experienced another transformation during the late 1960s and early 1970s when schools began to place greater emphasis on student academic achievement and college preparation. This was due in part to pressure arising from the success of other nations in the areas of math and science (Mondale & Patton, 2001; Powell et al., 1985). In addition, many scholars and educators at this time began to doubt the validity of intelligence tests as scientific instruments to determine curricular assignments (Scarr & Weinberg, 1976; Stodolsky & Lesser, 1967). For these reasons, schools began to prescribe a standard academic curriculum for all students. Courses in mathematics, social studies, science, and English became almost universal requirements for a high school diploma. This type of academic curriculum remains in place in most schools today.

As tracking changed and was replaced by a more academic curriculum, educators began to stratify courses by ability level. While still referred to as tracking, this method of organizing students for instruction is more accurately called ability grouping. Ability group levels generally include basic, regular, honors, and advanced courses. Basic courses are designed to provide students with extra help and a less challenging curriculum. Regular courses provide a general academic foundation, while honors classes present more material and require a somewhat higher level of involvement. Advanced courses are most challenging and prepare students for college. Placement at any course level is designed to allow students to acquire the skills necessary to advance to postsecondary education. The number of course levels vary from school to school, depending on the size and mission of the school. While all students receive an academic education, they can take a basic course in one subject and an advanced course in another. This allows students to focus on subjects of particular interest or to receive extra help in a weak subject. Ability grouping is widely practiced in junior and high schools today (Lucas, 1999).

Little information is available about the way students were grouped for instruction in Catholic schools in the first half of the 20th century. However, the history of curricular decisions in these schools is suggestive. The Catholic school system was well established as separate from the public school system at the turn of the 20th century. Its creation arose partly as a reaction to the overarching Protestant ethos of public schools and partly as an attempt by Catholic immigrant groups to resist Americanization and maintain their ethnic identity. Catholic schools briefly considered imitating public schools by offering a more vocationally based curriculum. However, they soon rejected this form of curriculum because they believed that all Catholic school students, regardless of their social origins, must be trained

to reason and given a broad body of knowledge to prepare them to assume their responsibilities in society (Bryk et al., 1993).

Catholic colleges also placed pressure on secondary schools to maintain an academic curriculum by favoring college preparatory schools in their admissions policies and by initiating strict admissions requirements. The decision to focus on academic programs over vocational training set the tone for Catholic education in the coming decades (Bryk et al., 1993). Given this strong emphasis on an academic curriculum, it is likely that some Catholic schools practiced ability grouping, at least at the secondary level, by the middle of the 20th century.

Like public schools, Catholic schools began to offer more elective choices during the 1950s (Bryk et al., 1993). However, these changes did not persist and Catholic schools quickly returned to a more strictly academic curriculum. The relatively smaller size of Catholic schools and their limited facilities made an expanded curriculum inefficient. More importantly, Catholic schools were committed to a strong academic curriculum. They avoided introducing elective options that might dilute their academic program. Consequently, as the public schools adapted a more diverse curriculum as part of school reform efforts in the 1960s and 1970s, Catholic schools chose to limit their curriculum to predominantly academic courses.

Differences in the missions of the two school sectors are evident here. Public schools have a more diverse school population, many of whom are better served in high school by courses aimed at preparing them for post-high school employment. Consequently, they need to provide a wide variety of courses to meet the diverse needs of their students. Catholic schools, on the other hand, include as part of their mission the preparation of students for post-high school education. To attain this goal requires a strong academic program.

By the middle of the 20th century, most Catholic high schools were practicing ability grouping in order to achieve their high academic standards. Since the schools were typically smaller than public schools, they tended to have only two or three ability group levels, such as regular and honors, or basic, regular, and honors. In contrast to their counterparts in many public schools, students in the basic ability group in Catholic schools were given a rigorous curriculum and faced high expectations for achievement. The basic group tended to be small and students were encouraged to move to a higher ability group as soon as possible. The high ability group in most Catholic schools resembled the advanced group in public schools in terms of the rigor of the curriculum and the ability of the students (Hallinan, 2002).

The practice of ability grouping in both the public and Catholic sectors was pervasive throughout the second half of the 20th century. Research on

the effects of the organizational differentiation of the curriculum grew rapidly. Ability grouping became a central issue in discussions of school reform. Questions about the efficacy and equity of the practice attracted the attention of politicians as well as policymakers. Interestingly, despite the dominance of ability grouping in public discourse on schooling, Coleman et al. (1982) neglected to include a variable for ability grouping in their statistical analyses of HSB. This omission became one of the main critiques of the study (Braddock, 1981; Goldberg & Cain, 1982). Even today, despite the large amount of research on the effects of ability grouping, little research is available comparing how ability grouping is practiced in public and Catholic schools.

EFFECTS OF ABILITY GROUPING ON STUDENT ACHIEVEMENT

A large body of research examining the effects of ability grouping on academic achievement is available. Interest in ability grouping effects may be due, in part, to the intriguing finding that more variation in achievement occurs within schools than between schools (Coleman et al., 1966; Gamoran, 1987). This variation generally occurs across ability groups, suggesting that group placement is a powerful determinant of academic achievement.

Research examining the effects of ability grouping on student achievement generally has taken one of two directions. Most studies compare student achievement across ability groups in homogeneously grouped schools. A few studies compare student achievement in homogeneously and heterogeneously grouped schools. This latter approach is not used often because most schools employ at least some form of ability grouping. Both types of studies show that ability grouping disproportionately benefits students in higher groups.

Studies that compare students across ability groups in homogeneously grouped schools consistently show that, controlling for ability, students in high and advanced ability groups show the greatest gains in achievement (Alexander & McGill, 1976; Gamoran & Berends, 1987; Hallinan & Kubitschek, 1999; Sorensen & Hallinan, 1986). Students assigned to the low ability groups make the least gains. The findings vary by school, likely due to fluctuations in ability grouping policies and practices. Some schools impose more rigorous academic standards than others in making ability group assignments and schools vary in the learning opportunities provided at a given ability group level.

Researchers who compare homogeneously and heterogeneously grouped schools also find benefits to high ability group placement. These

studies show that mean achievement scores across grouped and ungrouped schools are similar. However, variation in achievement scores is greater in homogeneously grouped schools. Students in these schools receive both higher and lower scores than their counterparts in heterogeneously grouped schools who have scores closer to the mean. This finding indicates that students in low groups in ability grouped schools would score higher if they were to attend an ungrouped school. On the other hand, students who are placed in high or advanced groups in ability grouped schools would do less well in an ungrouped school. These findings reinforce the conclusion that ability grouping disproportionately benefits those in high level classes and may harm those in basic classes (Figlio & Page, 2002; Kerckhoff, 1986; Slavin, 1990).

Betts and Shkolnik (2000) offer a challenge to this finding. They find that after controlling for teachers' perceptions of the ability of their classes in both homogeneous and heterogeneous schools, no significant negative effects of grouping on the academic achievement of students in the lowest groups occurred. Students in middle groups were disadvantaged and those in the highest groups were advantaged, but not to the extent shown in previous research. Rees, Brewer, and Argys (2000) critiqued this research by claiming that many of the supposedly heterogeneous schools in the sample actually had an informal system of tracking and that many of the heterogeneous classes actually contained students with similar ability levels. In general, the overwhelming conclusion of ability group researchers is that the practice advantages students assigned to high ability groups, disadvantages or does not help those assigned to low groups and has little effect on students in the middle groups, compared to those in ungrouped schools.

In comparing ability group effects in one Catholic and five public schools, Gamoran (1992) found that the effect of ability group level on achievement was reduced in Catholic schools. In this study, the gap between high and low group students in Catholic schools was narrower than in public schools. Moreover, the Catholic schools raised the test scores for students in low ability groups rather than depressing the scores of students in high groups. This pattern was strongest for math outcomes but also was evidenced in tests of verbal ability.

Hallinan's (1991) results were similar to those of Gamoran. The students in the Catholic school in Hallinan's study had a higher mean test score than students in the six public schools in the sample. In addition, the distribution of achievement scores in the Catholic school showed less variation than in the public schools. These two studies provide evidence that Catholic school students are not necessarily disadvantaged by assignment to low ability groups whereas public school students often are.

Other studies note the cumulative nature of ability grouping effects on

student achievement (Alexander, Cook, & McGill, 1978; Gamoran & Mare, 1989). Some students may begin school with less knowledge and preparation than others. After a cursory evaluation, these students are likely to be placed in a low ability group. As time goes on, the gap between what these students are taught and what their peers in higher ability groups are taught makes it increasingly more difficult for them to move to a higher ability group. As a result, they may never have the opportunity to achieve their full potential. Alexander and Cook (1982) found that the apparent effects of high school grouping were due in large part to previous group placement and resource differences. In this way, group placement can continually reinforce and enhance initial differences among students.

The learning deficit resulting from low ability group placement is likely to be smaller in Catholic schools than in public schools. Catholic schools typically offer quality instruction at all ability group levels, including the low ability groups. Moreover, Catholic school students in low ability groups are less likely to be socially stigmatized than those in public schools. These factors reduce some of the negative instructional and social psychological effects of ability grouping that may prevent students from achieving their potential (Bryk et al., 1993).

DETERMINANTS OF ABILITY GROUP EFFECTS

While numerous studies have documented the magnitude and direction of ability group effects on student learning, research on the determinants of these effects is less common. This gap in the research may be due to the complexity of the learning process. A number of factors influence student learning making it difficult to conceptualize learning and to collect data on all the variables that likely create differences in ability group outcomes. Nevertheless, sufficient studies are available to provide insight into how ability grouping influences student achievement.

Hallinan (2003) cites three factors identified in previous research as leading to inequalities in ability group outcomes: the quantity and quality of instruction, motivational factors, and academic climate. These factors are interrelated. Learning opportunities are greatest when students receive ongoing, high quality instruction, are motivated to learn, and enjoy a supportive academic environment. If one or more of these factors is missing, student performance will be negatively affected. Previous research shows that these three factors are more likely to be present in high ability groups than in lower groups.

Several studies point to differences in the quantity and quality of instruction as a potential mechanism for creating and maintaining inequalities in student achievement (Gamoran & Berends, 1987; Hallinan, 1994;

Oakes, 1985). Researchers have found that students in high ability groups tend to receive high quality instruction from effective teachers, while their peers in lower ability groups are likely to be given a less interesting curriculum and inexperienced or ineffective instructors. This situation can create inequalities among students who might have performed equally well if they had been assigned to the same teacher and ability group (Alexander et al., 1978).

Eder (1981) points to the difficulty of teaching a class that is composed almost entirely of students who need extra help in a subject. When a class of students finds learning difficult, the number of disruptions and the general disorganization of the classroom increase. An ineffective teacher exacerbates this situation. These findings indicate that students in low ability groups are likely to receive less instruction than students in higher ability groups.

Research suggests that the quantity and quality of instruction may be higher in Catholic schools than in public schools. Hoffer et al. (1985) found that Catholic schools tend to assign students to rigorous academic courses, to require more semesters of academic course work for graduation, and to assign more homework than public schools. These factors have been shown to increase student achievement. Students at all ability group levels, not only those in the high ability groups, benefit from these features of Catholic schools.

The second determinant of learning, student motivation, is also expected to vary by school sector. Teachers and parents influence student motivation through the expectations they hold for student performance. Pallas, Entwisle, Alexander, and Stluka (1994) found that parents and teachers view students in high ability groups as more competent than those in lower groups. Differential expectations may lead teachers to treat students based on the students' ability group placement rather than the students' academic performance. When low expectations are conveyed to students, their self-confidence diminishes and their motivation decreases.

All teachers, whether in public or Catholic schools, tend to have high expectations for the performance of students in high ability groups. However, teacher expectations for student performance in low ability groups may vary by school sector. Teachers in Catholic schools likely have a more positive view of the academic potential of students in low ability groups than teachers in public schools. Catholic school teachers see low group placement as a chance for students to improve their achievement rather than as a statement about the students' abilities (Gamoran, 1992). Catholic schools also profess a more egalitarian philosophy of learning than public schools. This attitude may help to mitigate some of the potentially negative effects of labeling and prevent a loss of student motivation

(Camarena, 1990).

A third determinant of achievement is the learning climate of a classroom. Academic climate is formed by the norms a teacher establishes for student performance and by the norms students set for their behavior in the class. A strong academic climate is characterized by high standards for academic performance and by peer interactions that support academic achievement and high educational aspirations (Alexander & McGill, 1976). Research indicates that the strength of the academic climate decreases by ability group level. High ability groups tend to have a strong academic climate while low ability groups have a weak academic climate.

While the high ability groups in both Catholic and public schools are likely to have strong academic climates, sector differences are expected in the academic climate of low ability groups. Research shows that low ability groups in public schools generally have a weak academic climate. However, this may not be the case in Catholic schools. The emphasis of Catholic schools on academic achievement permeates the entire school, as does teacher determination that all students can and should learn. Moreover, the average student in a Catholic school is more likely to be exposed to peers who emphasize academic success and plan to attend college than the average public school student (Bryk et al., 1993). These factors suggest that ability groups at all levels in Catholic schools are likely to have a strong learning climate that fosters student achievement.

ASSIGNMENT OF STUDENTS TO ABILITY GROUPS

The effect of ability group level on student achievement highlights the importance of the process of assigning students to ability groups. If ability group level has an independent effect on student achievement, then it is critically important that students be assigned to the ability group that best facilitates their learning. Researchers have examined the assignment process to identify the criteria schools use in making group placements. The findings show that schools vary in the criteria they use to determine ability group. As a result, not all schools are equally successful in creating a good match between a student's learning needs and the learning opportunities provided by the group to which the student is assigned.

When tracking was first implemented early in the 20th century, educators relied on IQ tests to make group assignments. Viewing intelligence as a fixed and inheritable trait, they believed that intelligence tests accurately measured a student's ability to learn. As the concept of intelligence evolved, educators came to see intelligence as an aptitude for learning rather than as an innate trait. This new understanding led to a reliance on

standardized tests of achievement rather than IQ tests in making ability group assignments. Standardized achievement tests covered information that students were exposed to in school.

Over the course of the 20th century, educators further broadened their view of intelligence. Today, intelligence is seen as a multi-faceted and variable trait that includes thinking processes, knowledge structures, higher order thinking skills, and metacognitive strategies (Gardner, 1983; Stodolsky & Lesser, 1967). A student's ability to learn is no longer thought of as a fixed trait but rather as the result of student ability and effort in interaction opportunities to learn (Sorensen & Hallinan, 1986). This new understanding of intelligence has not precluded reliance on standardized tests to measure ability, but it has led to the inclusion of other academic criteria in making placement decisions. Moreover, a growing realization that standardized achievement tests may be culturally biased is reducing the paramount importance given to these tests in the past in making ability group assignments (Scarr & Weinberg, 1976).

Most contemporary schools rely on some measure of student achievement in making decisions about curricular placement. Most frequently, they use either standardized achievement test scores or prior grades or both. Some schools also seek recommendations from teachers and counselors. Increasingly, schools take into account parent and especially student preferences. When several criteria are used in the placement decision, the homogeneity of ability groups is reduced, at least as measured by achievement test scores.

Critics of ability grouping argue that school officials use student demographic characteristics in deciding ability group assignments. They point to research studies showing a disproportionate number of minority and economically disadvantaged students in low ability groups to support their claim. Descriptive data do show a high number of minority and low SES students in low ability groups. However, when student ability is controlled in multivariate analyses, the effects of race, ethnicity, and gender are markedly reduced or disappear. Unfortunately, the studies show that the effects of SES remain a factor in the assignment process.

Several studies of the assignment process in public schools reveal demographic effects on ability group assignment. In a study of six public high schools, Kubitschek and Hallinan (1996) found gender effects but no race effects on the assignment of students to ability groups. Slight preference was given to females in the assignment to higher ability groups in English. Hallinan (1992) found that low SES, older, and female students are more likely to be assigned to lower groups in middle schools. Gamoran and Mare (1989) report that after controlling for SES, African Americans and females are more likely to be assigned to college preparatory math

courses than Whites and males. They also show that students with high SES are more likely to be assigned to high ability groups. Because African American students are disproportionately from low SES backgrounds, they may be under-represented in high ability groups and over-represented in low ability groups. Based on these and similar studies, Gamoran (1992) and Useem (1992) conclude that the influence of background characteristics, especially SES, on the assignment process in public schools is one of the ways that ability grouping perpetuates inequalities in learning opportunities.

Studies of the effect of student demographic characteristics on ability group assignment in Catholic schools are not available. However, case studies reveal the importance that Catholic school counselors attach to assigning all students to challenging courses (Bryk et al., 1993; Gamoran, 1992). This policy suggests that student race, ethnicity, and gender likely play little role in ability group placement. Similarly, the commitment of Catholic schools to social justice and equity would suggest that SES is not a factor in the assignment process.

Ideally, the process of assigning students to ability groups results in their placement at a group level that is congruent with the students' capabilities. In practice, the assignment criteria used in some schools in making placement decisions may make this goal difficult to achieve. In public schools, guidance counselors are primarily concerned that students meet graduation requirements. This is the first consideration in assigning students to courses. Once counselors insure that students are taking courses necessary for graduation, they rely on a variety of factors to make additional course determinations.

In public high schools, each counselor is typically responsible for assigning hundreds of students to courses in a short space of time. This heavy student load creates the need to make simple assignment rules to increase efficiency. Using quantitative criteria such as standardized test scores and grades enables the counselor to achieve this end. However, counselors occasionally seek teacher recommendations, especially in ambiguous cases, or for political reasons. They also consider parental requests, though parents seldom make such requests. Finally, many counselors allow students to have input into placement decisions, both for required and elective courses. As a result, students whose test scores indicate they belong at one group level may be placed at a different level to accommodate their preferences. Moreover, given the complexity of the public school course schedule, counselors occasionally have to assign students to a different course level or to a different course altogether, to avoid a schedule conflict (Hallinan, 1991).

Catholic schools differ somewhat from public schools in the way they assign students to ability groups. In Catholic schools, counselors are guid-

ed primarily by their goal of assigning students to the most academically challenging courses consistent with their abilities. Bryk et al. (1993) report that Catholic students in the 1980 HSB survey were twice as likely as public school students to be assigned to an academic track and twice as likely to have been placed in that track by a school official rather than selecting it themselves. They also found that the college aspirations of students in Catholic schools matched their course assignments better than those of students in public schools. Moreover, the data revealed that students who graduate from a Catholic elementary school and attend a public high school are less likely to be assigned to an academic track than those who continue their Catholic education in a Catholic school. In other words, students who transfer from a Catholic school to a public school experience reduced opportunities for placement in an academic track in the public school. These findings demonstrate how ability grouping acts as a mechanism for increasing student achievement in Catholic schools.

In an empirical study examining curricular assignments in one Catholic and four public high schools, Gamoran (1992) found that the Catholic school attached greater weight to the process of making ninth grade ability group assignments than the public schools. Students in the Catholic school met with a teacher who acted as an adviser, and with the student and parents, to discuss course placement. Interestingly, the recommendations of teachers from prior courses were emphasized less by the Catholic school advisors than they were in the public schools. This reduced the impact of students' eighth grade group assignment on their ninth grade placement. Consistent with Bryk, Lee, and Holland's (1993) analysis, Gamoran's research indicates that Catholic schools attach considerable importance to the assignment process and use curricular structure to maximize learning opportunities for all students.

In a study of ability grouping in six public and one Catholic school, Hallinan found that public school students were more likely to be assigned to a high ability group than Catholic school students. Table 1 shows that 35% of the public school students were assigned either to the honors or advanced ability groups in English. In contrast, only 23% of the Catholic school students were placed in the honors group. Similarly, in mathematics, 7% of the public school students were assigned to the advanced mathematics group compared to only 4% of the Catholic school students. However, despite the greater likelihood that public school students are assigned to high ability groups, Catholic school students are academically stronger than their public school counterparts at the same group level. Table 1 shows that the mean standardized test score for public school students in the advanced and high English ability groups was 89.8 and 76.4,

Table 1

9th Grade Test Scores and Distribution of Students by Ability Group, School Sector, and Subject

MEANS AND STANDARD DEVIATIONS OF ENGLISH TEST SCORES BY ABILITY GROUP

	Basic		Regular		Honors		Advanced		Total	
	$\bar{X}$	*SD*	$\bar{X}$	*SD*	$\bar{X}$	*SD*	$\bar{X}$	*SD*	$\bar{X}$	*SD*
Public (*N*=2581)	24.0	(14.4)	51.7	(18.5)	76.4	(15.0)	89.8	(7.8)	57.9	(23.9)
Catholic (*N*=233)	44.4	(14.4)	71.0	(15.6)	92.9	(5.6)			74.1	(18.6)

DISTRIBUTION OF STUDENTS ACROSS ABILITY GROUPS IN ENGLISH

	Basic	Regular	Honors	Advanced	Total
Public	11.0%	54.6%	29.5%	4.8%	100.0%
Catholic	7.3%	69.5%	23.2%		100.0%

MEANS AND STANDARD DEVIATIONS OF MATHEMATICS TEST SCORES BY ABILITY GROUP

	Very Basic		Basic		Regular		Honors		Advanced		Total	
	$\bar{X}$	*SD*	$\bar{X}$	*SD*	$\bar{X}$	*SD*	$\bar{X}$	*SD*	$\bar{X}$	*SD*	$\bar{X}$	*SD*
Public (*N*=2574)	29.6	(18.2)	50.5	(18.9)	67.6	(17.6)	85.9	(10.6)	92.2	(9.0)	61.3	(25.7)
Catholic (*N*=233)	44.2	(16.7)	56.2	(17.7)	73.3	(16.3)	91.2	(8.6)	96.7	(3.3)	74.6	(20.7)

DISTRIBUTION OF STUDENTS ACROSS ABILITY GROUP IN MATHEMATICS

	Very Basic	Basic	Regular	Honors	Advanced	Total
Public	18.0%	23.5%	35.8%	15.8%	6.9%	100.0%
Catholic	9.0%	11.6%	47.6%	27.5%	4.3%	100.0%

respectively, compared to 92.9 for Catholic school students in the high ability group. In this case, the Catholic school students had a higher mean achievement than their counterparts in both the high and the advanced English groups. A similar pattern of higher mean achievement for Catholic school students at the same ability group level as public school students occurs in mathematics.

Table 1 also demonstrates that most students in Catholic schools are assigned to the regular ability group in English and mathematics, while a smaller number enroll in a high or low ability group. In the public schools, students are distributed more evenly across ability group levels. This difference may stem from a difference in philosophy between the two school sectors. In Catholic schools, high and low groups are reserved for students with atypical needs, that is, students who are academically gifted or those

who need remedial help. Aside from these students, the philosophy of the school is that all students can learn when exposed to a rigorous curriculum and good pedagogy. Unlike Catholic schools, public schools are governed by organizational and political constraints that may require a more equal distribution of students across ability group levels. However, forcing a normal distribution of achievement into equal categories creates differences in homogeneity across group levels. The highest and lowest groups would have the greatest amount of heterogeneity in this situation. As a result, assigning equal numbers of students to each ability group level prevents teachers from offering highly challenging courses to the small number of gifted students in the school and intense remedial work to those who find learning particularly difficult.

Table 1 also shows a sector difference in student scores on standardized achievement tests. All the students in the study took the ISTEP examination in ninth grade. The mean achievement score in English for the six public schools in the study is 57.9 with a standard deviation of 23.9, while the mean for the students in the Catholic school was 74.1 with a standard deviation of 18.6. Similarly, the mean mathematics achievement score for the public school students was lower than for the Catholic school students, with a mean of 61.3 with a standard deviation of 25.7 compared to a Catholic school mean of 74.6 and standard deviation of 20.7. These sector differences in the achievement distribution illustrate why it is more feasible for Catholic schools to offer a challenging curriculum to virtually all of their students. While trying to challenge above average students by placement in higher ability groups, public schools are limited by the smaller number of students at the high end of the ability distribution.

Finally, Table 1 shows that fewer students in Catholic schools are assigned to low ability groups than in public schools in both English and mathematics. Moreover, the mean achievement of students in the low ability groups in the Catholic school is considerably higher than in the public schools. Again, these results indicate the commitment of Catholic schools to providing a challenging curriculum to the greatest number of students, while providing a remedial curriculum to only the few students for whom it is necessary.

School organization is also a factor affecting the process of assigning students to ability groups. Constraints imposed by school level variables can affect placement independent of student characteristics. Hallinan (1991) shows that the number and size of high ability groups in high school tends to remain constant from year to year. This stability limits the ability of the school to respond to the needs of incoming cohorts of students (Garet & DeLany, 1988). For example, course enrollments may close, forcing students to take a less demanding course, or students may be assigned to a

more advanced class than appropriate, to insure that a school meets class size requirements. These structural constraints reduce the academic benefits of ability grouping.

Since Catholic schools tend to be smaller than public schools, they typically have fewer ability groups. Moreover, Catholic schools have a narrower range of achievement than public schools. A smaller number of ability groups and a narrow distribution of achievement makes it easier for Catholic schools to make appropriate group assignments. Moreover, assigning a student to an inappropriate ability group is likely to have a smaller effect on student learning in Catholic schools because the achievement differences across ability groups are not as great as in public schools.

Interestingly, attending a Catholic school prior to entering a public high school has an effect on ability group placement for students entering high school. Hallinan (1991) shows that students who attended a Catholic school for eighth grade have a slightly higher probability of being assigned to a high ability group in English and mathematics in ninth grade than their peers who attended a public school for eighth grade.

MOBILITY ACROSS ABILITY GROUPS

Ability group assignments are not necessarily permanent placements. Schools that permit students to change ability group levels, based on academic considerations, can correct initial placements that are discovered to be inappropriate and make accommodations for the different learning rates of students. Flexibility in ability group assignment also improves ability group homogeneity, since students can be reassigned to classes that provide a better fit to their abilities.

Several models have been proposed to describe the pattern of movement across ability groups. These models were formulated when tracking was still practiced and describe mobility across general, vocational, and academic tracks. However, the models are useful depictions of movement across academic ability groups as well.

Turner (1960) claimed that track change could be depicted either as a sponsored mobility model or a contest mobility model. Sponsored mobility occurs when students are selected early in their schooling to belong to an elite group and receive special opportunities and resources. Selected students remain in the elite group throughout their school careers. Contest mobility is based on merit and ability. Students are allowed to move upward and downward across ability groups depending on their performance. Turner argued that streaming in British schools fits a sponsored mobility model while a contest mobility model represents tracking in United States schools.

Rosenbaum (1978) proposed a different model of track mobility. He suggested a tournament model according to which students who do well can advance to a higher track, if they do poorly, they move to a lower track and lose the opportunity for future upward mobility. Rosenbaum found some empirical support for this model.

Hallinan and Sorensen (1983) described mobility across ability groups as a vacancy competition. They claimed that students can move to a higher ability group only when a position becomes open, that is, only when a student exits from the group. When a position becomes available, the student ranking highest according to some set of criteria is offered the slot. Similarly, a student can move to a lower ability group only when a position becomes available. School characteristics such as class size, space, and teacher resources determine the rate of mobility.

Other mobility models include Garet, Agnew, and DeLany's (1987) matching model, in which school officials and students make course assignments jointly. Schools determine which courses are offered and at what levels and students choose from among these options. Mobility occurs, but is constrained by the master schedule.

Barr and Dreeben (1983) suggest that a technical model describes ability group mobility, at least in elementary schools. Characteristics of ability groups, including number, size, and student composition, are determined by school personnel, based on distributional characteristics of the student population. Teachers can change the size of ability groups depending on the needs of students. The technical model allows for mobility according to student learning need. With the possible exception of the matching model, all these models are based on the assumption that mobility is motivated solely by academic goals.

These models of track and ability group mobility are ideal types. Whether a particular model is a reasonable representation of group mobility in a particular school depends on the assignment policy in that school. All the models assume that mobility is based only on academic considerations. To the extent that other factors, such as student background or school organizational characteristics, influence placement, the models lose explanatory power. Regardless of fit in a particular school, the models have heuristic value to helping school personnel make explicit the rationale they use for mobility decisions.

In a study of six public high schools, Hallinan (1996) found considerable mobility in English and mathematics among students at all grade levels. Most changes in ability group assignments occurred at the beginning of a school year, although some occurred during the year as well. Upward mobility was more common than downward mobility. This was due primarily to the fact that many students dropped a course or took it in summer

school rather than moving to a lower ability group. Moreover, many students dropped out of school after 10th or 11th grade, reducing the number who would move to a lower group. The study showed that the considerable amount of ability group mobility in the schools resulted in more homogeneous ability groups. The fact that many students assigned to lower ability groups were able to move to higher groups suggests that they were given opportunities to improve their skills to meet the prerequisites for more advanced courses.

Lucas and Good (2001) examined ability group mobility in the sophomore cohort of the HSB survey. They found considerable mobility across ability groups in the study, with more than half the students changing group levels between sophomore and senior year in both English and mathematics. Students were more likely to move downward than upward in both English and mathematics for all race, ethnicity, and SES categories. In both analyses, dropouts were excluded. Since many students moved to a lower group and subsequently returned to a higher group, the researchers reject the tournament model as a valid portrayal of mobility in these schools.

Hallinan (1994) found that Catholic school students in the study experienced less mobility across ability groups than public school students. Since great care was taken in the initial assignment of Catholic school students to ability groups, fewer incorrect assignments seem to occur. Moreover, the achievement distribution in Catholic schools was narrower than in public schools, allowing for greater homogeneity in ability groups. This provides the opportunity to insure a good fit between student capabilities and ability group level. In addition, Catholic school students in the study had fewer scheduling conflicts than public school students. When conflicts did exist, the counselor typically made course decisions based on academic considerations.

Ability group mobility generally is viewed as a positive policy, at least when change is designed to improve learning opportunities. When students in public schools change ability groups based on academic considerations, they are expected to improve their academic achievement. In Catholic schools, ability group mobility is infrequent, though not due to rigidity in the assignment process. Rather initial assignments in Catholic schools are made with such care that not many changes are necessary. When changes do occur, they appear to be made by school personnel in keeping with the school's high academic standards. Thus the mobility process in Catholic schools serves to maintain and possibly increase the homogeneity of ability groups. In public schools, the wider distribution of student achievement makes more course adjustments necessary to maintain group homogeneity. However, when change for nonacademic reasons is permitted, group heterogeneity increases and learning opportunity may be reduced.

CONCLUSIONS

Ability grouping is a common and controversial aspect of school organization. Proponents of ability grouping claim that educators can implement the practice in a way that facilitates student learning in an efficient and effective way. Critics argue that the practice of ability grouping discriminates against minority and low SES students and creates inequities in students' learning opportunities. Comparing ability grouping in public and Catholic schools illustrates how the practice operates in each sector, identifies factors that influence its practice, and suggests ways that ability grouping can be improved to make it more equitable and effective.

Research suggests that Catholic schools are more successful than public schools in utilizing ability grouping to promote student learning. Since Catholic schools assume that all students can learn a challenging curriculum, they assign students to the highest ability group compatible with their capabilities. Hence, unlike public schools, nearly all students in Catholic schools are assigned to academic courses. Student demographic characteristics play a negligible role in the assignment process in Catholic schools, given their commitment to encourage all students to attain their highest academic potential.

Catholic school personnel invest considerable time in making initial ability group assignments. As a result, subsequent change in placement is often not needed, reducing disruptions to instruction. Public school counselors have a more difficult task in making ability group assignments, given the number of students they must schedule, the wide distribution of student abilities, and the practice of considering student preference in the assignment process. Catholic schools rely heavily on quantitative measures of achievement in making ability group assignments, while public schools consider parental preference, student choice, and more qualitative measures of achievement. These differences in the assignment process result in the creation of more homogeneous ability groups in Catholic schools than in public schools.

Some researchers believe that the Catholic school advantage, created in part by ability grouping, arises from the Catholic mission to serve all people. This commitment leads to a more inclusive environment that supports and helps all students to be successful academically, rather than just those who have the most academic potential. Other researchers claim that the high achievement of Catholic school students results in part from selection factors. In 1985, approximately 70% of principals in Catholic high schools reported that prospective students had to pass a test to gain admission (Bryk et al., 1993). This narrows the range of achievement in the school, and creates a more academically gifted student population. Moreover, stu-

dents who attend Catholic schools are likely to have highly motivated parents who are willing to invest in their child's education and take an active interest in their progress.

While selection factors may play a role in the Catholic school advantage, it does not adequately explain the high achievement of Catholic school students. As the research reported in this paper indicates, within school factors, such as the way ability grouping is practiced, account for much of the success of Catholic school students. Research shows that controlling for background factors, Catholic school students perform better than their public school counterparts at all ability group levels. Moreover, the recent commitment of Catholic schools to the education of inner city students has resulted in remarkable academic success with this population despite their weak academic backgrounds and poor preparation for schooling.

The aim of ability grouping is to provide students with a curriculum and pedagogy that offer a challenge commensurate with the students' abilities. A comparison of the way ability grouping is practiced in Catholic and public schools demonstrates features of the practice that directly link to student achievement. All schools can adapt these practices in an effort to improve student learning.

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