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Matchmaking: The Dynamics of High School Tracking Decisions

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Over the past 20 years, research has expanded educators' knowledge of the impact of high school tracking on students' curriculum opportunities and outcomes. Researchers also know that students are unevenly distributed among tracks, with low-income and minority students more likely to be in low ability classes for the non-college-bound. At the same time, they still understand little about how schools actually match particular students to tracked courses. Scholars and educators variously draw on technical/structural (e.g., a match between tracking and the differentiated structure of workforce), cultural (e.g., norms regarding race, social class, and educational prospects), and political or individualistic (e.g., choice, parent pressure) theories to explain students' track assignments. To shed further light on the school dynamics that shape track-related course taking, we provide findings from a 2-year examination of tracking decisions at three comprehensive high schools. Setting these findings against prior theoretical and empirical work, we suggest an eclectic explanation that blends structural, cultural, and individualistic explanations for track assignments. High school tracking decisions, we conclude, result from the synergy of three powerful factors: differentiated, hierarchical curriculum structures; school cultures alternatively committed to common schooling and accommodating differences; and political actions by individuals within those structures and cultures aimed at influencing the distribution of advantage. Both research on tracking and efforts at school restructuring could benefit from this broader perspective.

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Senior high schools in the U.S. attempt simultaneously to enact the nation's strong preference for common schools and to accommodate what are generally considered important and instructionally relevant individual differences. This effort has produced comprehensive high schools in every community that provide a comprehensive and differentiated set of curriculum opportunities. Despite their many similarities, however, some comprehensive high schools focus almost exclusively on academic preparation; others are heavily vocational, and others strike a more even balance between the two sides of the high school curriculum (NCES, 1985a). These differences usually correspond to social and economic characteristics, with schools in advantaged communities typically offering more extensive and well-developed academic offerings, especially in science and mathematics, than schools in less well-off neighborhoods (Oakes, 1990). Correspondingly, these advantaged schools offer much smaller (but often better developed) vocational programs than schools with large concentrations of disadvantaged students (Goodlad, 1984; NAVE, 1989; Oakes, 1983).

It's not surprising, then, to find parallel differences in student course taking. Low-income and minority students in the U.S. participate at higher rates in vocational curricula and at lower rates in academic curricula than do affluent and White students (Ekstrom, Goertz, & Rock, 1988; NCES, 1985b; Oakes, 1985).¹ Moreover, within the vocational area, low-income and minority students disproportionately take classes related to low-skill jobs (e.g., agricultural field work, institutional cooking, and housekeeping), whereas Whites and affluent students more often take courses that teach general skills (e.g., keyboarding) or that include considerable academic content (e.g., aviation, agricultural science) (Oakes, 1983).² On the academic side of the curriculum, low-income and non-Asian minority students disproportionately take low-level and remedial courses, while Whites and Asians tend to dominate enrollments in advanced and honors classes (Braddock, 1990; Oakes, 1990).

Competing Theories

Over the past 20 years, researchers have learned a great deal about the impact of high school tracking on curriculum opportunities and student outcomes (e.g., Gamoran & Berends, 1987; Oakes, Gamoran, & Page, 1992; Page & Valli, 1990). However, we still understand little about how high schools decide what courses to offer and how to place students in them. Nevertheless, researchers have drawn on a number of competing theories to explain how students from various backgrounds end up in different tracks. These theories differ principally in their reliance on technical/structural factors, cultural norms, or more political and individualistic dynamics as the basis for understanding how and why schools match particular students with particular courses.

Schools Fit the Social Order—for Good or Ill

The most common explanations contend that tracking decisions represent schools' efforts to use educational structures and technologies to match students and courses in ways that both further societal goals and accommodate individual differences.

Human capital theories, for example, suggest that tracked schools serve primarily for preparing students for productive work. Because the workforce is differentiated, schools offer a wide array of opportunities that students invest in as they prepare for different sectors of the workforce. With such investments, students increase their human capital—knowledge and skills—which determines how much they can attain (income, status, etc.) as adults. Human capital theory recognizes that all educational options do not provide equal returns. However, it suggests that the competition for various options is fair—that the primary mechanisms for allocating students to curriculum opportunities are objective assessments of relevant abilities, effort, and interest. Attainment of high-status education and the highly rewarding occupations that follow, then, results from an open contest based on merit. Students who are able, ambitious, and hard working can use schooling as an avenue for social and economic mobility (see, e.g., Rehbarg & Rosenthal, 1978).

Other structurally oriented theorists argue that the matches made between students and courses represent, more than anything else, schools' central role in maintaining a society that is stratified by race and social class. Like the human capitalists, they see the differentiated curriculum opportunities in high schools as mirroring differentiated occupational opportunities in the larger society. But, rather than providing for contest-based social and economic mobility, tracking decisions maintain the occupational and social advantages of children from families with high-status positions. Schools, they argue, match lower status students with curricula that prepare or certify them for occupations much like those of their parents. Some argue that this reproduction takes place in an almost mechanical way (Bowles & Gintis, 1976). Others suggest that schools' contribution to social and economic sorting is not straightforward but full of contradictions and tensions that reflect both democratic impulses and structural inequities in society (e.g., Apple, 1982; Carnoy & Levin, 1985; Giroux, 1981). Such theories find support in work showing that counselors' judgments are influenced by social class background—students' dress, speech patterns, and behavior (Cicourel & Kitsuse, 1963).

Other work illuminates how structural properties of tracking fix and sustain placements, even if students' needs, interests, or abilities should change. Rosenbaum (1986) theorizes, for example, that students' group placements early in school signal their ability and trigger similar placements later on. The tournament-like structure of tracking adds further stability, he argues, because access to the high-status curriculum is maintained only by a series of student wins (demonstrations of ability, effort, and achievement), and any loss (demonstration of less ability, etc.) removes the student from further

consideration for these curriculum opportunities. Moreover, even students who win in the low-status curriculum are prevented from moving up, if they've missed out on learning experiences considered prerequisite to a higher curriculum (Hallinan, 1987; Oakes, 1987).

Organizational Exigencies Shape Tracking

Explanations relying primarily on technical/structural explanations for how schools fit the larger social order imply that schools' track placement decisions follow rational and fairly universal attainment models consistently. While the patterns of course offerings and participation related to students' background characteristics noted above are consistent with these explanations, there is also considerable variability among schools whose students are quite similar. Schools vary in the number and type of courses they offer and in the prerequisites for entry into various tracks. Even within schools, there is considerable overlap in the characteristics of students enrolled in various courses and tracks (Garet & DeLany, 1988; Kilgore, 1991; Oakes, 1985).

It's not surprising, then, that some researchers have moved away from more global structural explanations to argue that far less rational, local exigencies—structural and cultural—may be the most important as schools match courses and students. These analysts argue that track placements more likely result from organizational constraints and trade-offs than from the rational processes that theories of predetermined societal intentions or individual choice and merit would suggest.

For example, Garet and DeLany argue that schools' best intentions to match students with appropriate courses are frustrated by the vagaries of managing day-to-day operations (Garet & DeLany, 1988). The logistics of creating an efficient schedule often wreak havoc with schools' efforts to offer well-developed programs and interfere with students' opportunities to follow well-defined course sequences (or tracks) across subject fields (Garet & DeLany, 1988). Kilgore has noted that a shortage of staff expertise and limited resources forces compromises at many high schools (Kilgore, 1991). In others, peer influences on student choices, teachers' recommendations, the general climate of expectations for student achievement (Kilgore, 1991), and parent demands (Useem, 1991) press schools to admit students to classes for which they may be under- or overqualified, according to the school's more formal placement criteria. Other constraints come with demographic changes or changes in state policies. In many locales, for example, declines in student enrollments and increased academic requirements from the state have acted in combination to virtually eliminate a "vocational track" in comprehensive high schools (Clune, 1989; Kirst, 1984).

The course taking options for any one student are constrained by these organizational regularities. The chances of an individual student's enrolling in a particular track are not *only* a function of his or her own suitability for a particular position in the track structure but also of the number of slots in each track available at the schools and the abilities and desires of other students competing for those slots (Sorensen, 1987).

Although some argue that these structural limits are not primarily a function of students' race and class (e.g., Sorensen, 1987), others contend that student characteristics interact with structural constraints. Students' background characteristics are signals of ability, which may affect both the number of high-track positions that a school makes available and the placement decisions about individual students within schools (Oakes, 1987; Rosenbaum, 1986). The value for a comprehensive, differentiated curriculum (and the limits that structure places on the number of high-status slots schools make available) may reflect the long-standing and widely held belief that few American students—particularly low-income, minority, and immigrant students—are really capable of or interested in rigorous academic work.

Taken together, all the above explanations suggest a dynamic far more complex than any one of them accounts for. Students' track placements are probably less open and meritocratic than human capitalists contend. At the same time, placements are probably more open and serendipitous than reproduction theorists claim. Schools do not *simply* offer a wide range of offerings from which students and their parents choose. But neither do they *simply* match students to academic and occupational opportunities in ways likely to reproduce their current social and economic status. Schools face a variety of organizational constraints that limit their ability to match students to the curricula they want or for which they may be best suited in the eyes of the school. Nevertheless, local constraints fit into a larger context of affluent and White students' having more opportunities to take courses with considerable exchange value beyond high school. In the sections below, the validity and usefulness of these explanations are further explored using data about tracking decisions in three comprehensive senior highs.

Using Case Studies to Understand Tracking Decisions

The study reported here employed quantitative and qualitative case study methods in an attempt to understand how educators frame tracking decisions. Specifically, we wanted to clarify the effects on students' course taking of educators' judgments about what courses are best for students, students' and parents' choices, and the constraints and opportunities inherent in schools' own cultures and the larger social and policy context. We were especially interested in identifying factors that contribute to the racial, ethnic, and social-class patterns of curriculum participation.

The Schools

We selected three 4-year senior high schools located in adjacent communities within a major West Coast urban center.³ The schools' geographic proximity held constant several factors that might otherwise have confused an understanding of similarities and differences in the decision making processes. Because the schools are in the same labor market area, we could be more certain that they would not be geared to preparing students for communities with very different needs. Graduates and dropouts of the three schools

had immediate access to the same postsecondary education and training opportunities. Finally, the schools were subject to the same state resource and curriculum policies—for example, high school graduation and state college and university requirements, regulations governing the use of Perkins money for vocational programs, and other state-controlled vocational programs.

The schools were demographically quite different. Calvin Coolidge High School serves a racially and socioeconomically diverse group of students who live in an integrated community. George Washington High is almost entirely middle- to upper middle-class White and Asian. William McKinley High’s students are nearly all African American and Latino, and a substantial proportion are poor. Table 1 displays these differences in more detail. Additionally, each of the schools is part of a different local district, with its own interpretations of state policies and its own curriculum policies.

Table 1
Student Characteristics, by School and Grade

	Washington		Coolidge		McKinley	
	12	10-12	12	10-12	12	10-12
Number of students	458	398	446	380	436	350
Sex (%)						
Male	44.5	45.2	47.7	46.6	47.0	48.0
Female	55.5	54.8	52.3	53.4	53.0	52.0
Race/ethnicity (%)						
White	63.8	66.1	46.2	47.6	0.2	0.0
Black	0.4	0.3	12.8	10.8	72.9	72.3
Asian	29.7	28.1	12.6	13.2	1.6	0.9
Latino	5.7	5.0	27.1	27.6	22.5	24.0
Other/missing	0.4	0.5	1.3	0.8	2.8	2.9
Country of birth (%) ^a						
USA	71.0	73.1	—	—	68.8	70.6
Japan, Southeast Asia	24.2	22.9	—	—	1.8	1.4
Mexico, South/Central America	0.7	0.5	—	—	15.6	17.4
Europe, Africa, Middle East	3.9	3.3	—	—	2.7	2.0
Other/missing	0.2	0.2			11.1	8.6
SES (%) ^b						
Low	—	—	13.2	13.4	—	—
Middle	—	—	60.8	61.1	—	—
High	—	—	14.4	15.5	—	—
Missing	—	—	12.6	10.0	—	—

^aData on country of birth were not available for Coolidge High students.

^bSES data were available for Coolidge High students only. Data were derived from retrospective assessment of each student’s family income by that student’s former guidance counselor.

The similarities and differences among the schools permitted us to raise preliminary hypotheses about how schools juggle academic and vocational programs in comprehensive high schools. They also permitted us to explore how schools in different systems respond to similar pressures from state policymakers and labor market demands, as well as local beliefs about different students' educational needs.

Study Methods

We analyzed student handbooks, course descriptions, and master schedules to obtain the public information about course offerings and enrollment processes at each school. On-site interviews and observations revealed the subtler, more subjective story about how the schools made tracking decisions. At each school, we interviewed the district curriculum director, the district vocational education coordinator, the school principal, assistant principals, or deans responsible for overseeing curriculum or counseling; all of the counselors; and approximately 15 teachers. We also interviewed students drawn from both vocational classes and academic classes in various tracks at two of the schools, although our primary interest was in educators' perceptions of how the schools made decisions about curriculum and student assignments.⁴ We designed protocols as we proceeded, in order to incorporate knowledge gained in the preceding tier of interviews. Nevertheless, we queried all respondents about the influence on school decisions of several internal and external factors.⁵ We asked about educators' perceptions of the "appropriate" curricula for various students, guidance counseling practices, grades, and test scores. We also asked about students' and parents' influences on the nature of programs and on the students' assignments.

We also collected background and transcript data for all students who were seniors any time during the 1987–1988 school year.⁶ This sample included both graduates and nongraduates.⁷ We noted each student's gender, race, or ethnicity, and date of birth. At Coolidge and Washington, we had access to each student's eighth-grade reading and math standardized achievement test scores (e.g., the Comprehensive Test of Basic Skills); at all three schools, we located students' 10th-grade reading and math scores.⁸ We also recorded end-of-high-school outcomes for each student on a number of variables.⁹ Finally, we collected data about the courses students had taken each semester (including summer school) for all four high school years. For each mathematics, English, and vocational course, we noted the general subject area, specific course title, the ability level or track of students for which it was intended, and the number of credits and the grade the student received. With the assistance of school personnel, we distinguished among ESL, low or remedial, regular, college-preparatory, and honors courses. In addition, because Coolidge and Washington offered courses that combined students from different levels, we developed codes to identify various combinations.¹⁰

To ensure the validity of our findings, we used standard triangulation procedures throughout. We collected data about each topic of interest from

a variety of data sources, and several data collectors conducted interviews and observations at each site. We also used triangulation strategies in analysis; at least two researchers coded and sorted them into categories or themes.

Findings: The Dynamics of Decision Making

In the following sections, we bring together under seven propositions the findings from the field work and transcript analyses. The propositions lead us to an eclectic explanation that blends existing theories for a multidimensional understanding of dynamic interplay of structure and culture in tracking decisions. Our explanation also suggests that, within the bounds of tracking's culture and structure, the political actions of individuals shape tracking decisions in different ways at different schools.

Proposition 1: Schools View Students' Abilities, Motivation, and Aspirations as Fixed

Each of the three schools had an elaborate procedure for obtaining achievement test scores and recommendations from junior high school teachers—information on which to base judgments about students' abilities and motivation. These judgments grounded decisions about what courses incoming students could choose to take and opinions about what track or ability level seemed most appropriate for them. They also drove students' assignments throughout high school, because these initial judgments were seldom revisited in subsequent placement decisions.

What made these recommendations and initial judgments so powerful was the widespread belief that a student's educational prospects are virtually set by the time he or she gets to high school. Many considered motivation and intellectual ability to be fixed attributes over which educators have little control. We found little evidence that educators at any of the schools thought that high schools courses could (or should even try to) increase students' intellectual capacities or raise their expectations. This theme echoed in the words of many administrators, teachers, and counselors in the three schools. Some told us directly that they felt that it was "all over" by high school.¹¹ For example, the principal at Coolidge said that he could tell by the end of kindergarten which children would be successful in high school.

Coolidge faculty's and administrators' comments clearly illustrate this core belief. The principal, for example, conveyed his belief that the high school is largely powerless to interrupt predictable patterns when he told us that kindergarten teachers can accurately identify those children who will be at-risk in high school. One counselor reported that high school teachers generally believe that, once a student gets to high school, he or she is either intrinsically motivated or not and this cannot be changed. To gauge the pervasiveness of this assumption, we asked teachers to give us an example of a student "who comes to this school with low-level skills and makes fairly dramatic improvements—for example, moves from general to college-prep classes." We probed responses in ways that enabled us to gauge roughly the

frequency of track movement at the school, as well as educators' perceptions of the relationship between changes in student ability or motivation and track-level shifts. Of 20 Coolidge teachers interviewed, six recalled such a student. One teacher with a long tenure at the school recalled a student "probably 25 years ago." Another said this sort of improvement "is rare." Another teacher said students move when they have been placed initially in the "wrong level, . . . not the *true* level of the student," indicating that she believed students have relatively fixed ability levels and that mobility between different levels results from selection errors. Another teacher predicted that not only would average students never move to the college track but also they would raise kids just like them.

Faculties at the other two schools expressed similar views. At McKinley, only 2 of 12 teachers interviewed could recall instances of students who made dramatic gains. Perceptions of the likelihood of a student's actually making intellectual improvements ranged from "slim" to "impossible" to "rare" to "possible." Seven of 18 Washington teachers cited examples of individuals who had improved dramatically enough to switch tracks. Some attributed improvement to students' newfound interest in a particular subject, maturity, or exceptional effort resulting from a strong desire to attend college. Most teachers held little hope for such improvement, either because students lacked essential basic skills or because students held negative attitudes that "were difficult to break through."

Proposition 2: Curriculum Seeks to Accommodate, Not Alter, Student Characteristics

It is not surprising, given the widespread perception of stability in students' intellectual capacity, that the schools saw their job as offering programs that *accommodate* rather than *alter* their students' abilities and motivation. This accommodation was reflected in the school's course offerings and in what faculty expected tracking to accomplish. Within the constraints of state policy requirements, educators at each of the three schools tried to offer courses in academic and vocational subjects that matched their view of the student body's needs. However, perceptions about what student bodies needed varied from school to school.

The curriculum at affluent Washington High, where the student body was generally viewed as highly able and motivated, was the most rigorous and sophisticated. Washington offered more Advance Placement and honors courses and fewer low-level academics than did either Coolidge or McKinley.¹² Washington's academic requirements for high school graduation (requirements that have little impact on college-bound students) were less stringent than McKinley's in terms of the number of classes students must take. However, our informal comparisons of the academic content covered by similar courses at the two schools (e.g., the number of chapters completed in the Algebra I text) suggested that the content of academic classes was considerably more complex at Washington than at McKinley. Additionally, at McKinley, the numerically large vocational program (65 classes offered in

comparison to 28 at Coolidge and 35 at Washington) was far less developed or articulated than at Washington.¹³ Both schools had access to the same regional vocational center, and Washington's students were encouraged to take advantage of its vocational education opportunities that went far beyond what could be supported by the school alone. In contrast, McKinley's high school graduation requirements made it nearly impossible for students to free up the 3-hour blocks required for participation at the regional center. Additionally, McKinley administrators discouraged students from attending the regional center because they worried that students' comings and goings would weaken their control over student behavior. It's not that vocational courses were not seen as appropriate for McKinley students; it was that, given the need to maintain order, the on-campus offerings were seen as good enough.

Coolidge, the racially diverse school, contrasted with the other schools in that the student body was most often characterized as academically diverse, rather than generally high powered or educationally disadvantaged. Correspondingly, the school's academic and vocational offerings were neither as consistently rich as those at Washington nor as weak as those at McKinley. The offerings in the regional occupational program to which Coolidge was attached were somewhat more limited than at the center serving the other two schools.

This accommodation view of curriculum was most salient at Coolidge in faculty discussions of how they had changed their courses in response to demographic shifts.¹⁴ One teacher reported that the past ratio of two fast-track classes to every slow one had been reversed as the population changed. A counselor gave another view of decline stating, "What we now consider [to be an] average [class] used to be [considered] slow." Demographic changes have also generated much discussion about whether the school's curriculum—both vocational and academic—is still appropriate for students. Most faculty believed that Coolidge provided a consistently high quality college-prep program, but they were concerned that the curriculum no longer served the needs of many students. For example, one teacher suggested that policies promoting honors classes needed to change with the times and that more slow classes should be made available. A counselor argued for more emphasis on vocationally oriented academic courses. Such changes were seen as ways to accommodate the new mix of abilities and motivation.

In addition to the schools' attempt to offer courses that match their general view of their student bodies, educators wanted classes that would accommodate a range of abilities and motivation. At all three of the schools, educators repeatedly expressed the wish to provide all students with courses in which they could be successful and maximize their potential. This was most evident when they talked about providing academic courses where low-ability students would not fail or feel pressure to drop out of school. However, in concert with the prevailing view that high school students' abilities are intractable, these lower level classes were not talked about as providing opportunities for students to catch up with their higher achieving

peers but rather as places where students with less ability would succeed because the material was at their level. One Coolidge teacher told us, “real problem kids are neglected here, . . . hidden in slow classes. The good kids are taken care of.” A McKinley teacher claimed, “The commitment to individuals is not here. A student who is failing has to get involved with the school’s program before the school will invest in the student.” Several others commented that help was available but that it was up to the individual student to take advantage of it. As one Washington teacher put it, of those “kids who learn to fail early . . . the majority never pick themselves up.” These comments suggest that, to the extent that the schools recognized the possibility of improvement, nearly all place the responsibility for improvement on the student.

In the area of vocational education, counselors and vocational educators told us that academically able students take courses that teach such skills as keyboarding or accounting—general skills thought beneficial for college-bound students. More mechanically oriented vocational courses were seen as suitable for students taking low-level academics. Several administrators, counselors, and teachers called on-campus courses like auto and wood shop “dumping grounds” for low-level students, especially those with behavior problems.

Proposition 3: Schools Accommodate Achievement With Advantage

As the schools tailored their curriculum to their views of what various students needed, students with histories of successful school performance benefited in at least two ways. Students attending schools with lots of high achievers had access to a larger number of high quality courses and to a general atmosphere of high expectations. The overall curricular differences among the three schools described in the previous section illustrate the differential benefit associated with judgments about the abilities and motivation of the school population as a whole.

In addition, the most successful students in all three schools were placed in better classes and, once placed, were likely to continue along this advantaged track. Within each of the schools, any one student’s prospects of taking those courses that lead to the greatest posthigh school opportunities increased as his or her relative standing in the school’s test score distribution increased. For example, a student at the 75th percentile in the school was more likely than one at the 50th percentile, and a student at the 50th percentile was much more likely than one at the 25th percentile, to be in a math course that met college entrance requirements. Even though vocational classes (particularly those not a part of an articulated sequence of courses) were open to all students, vocational education was largely the realm of low-achieving students. Students who took six or more vocational courses during their high school careers (vocational concentrators) were less than half as likely to participate in college-prep math or English as those who took fewer vocational classes.

The educators we talked with almost uniformly attributed this distribution of advantaged placements to students' own choices, motivation, and record of prior school success. At each school, documents and counselors responsible for course selection described points at which students were asked to indicate their preference for academic, vocational, and other elective courses. The choice-making process was most elaborate as students made the transition from junior to senior high school. Counselors described how parents of students at the feeder junior highs were involved through evening meetings at which high school counselors explained curricular options and the prerequisites for various classes. But, counselors also described to us how students' choices were added to a store of information about them that, as a whole, determined where they would be placed. When courses had established academic prerequisites, a combination of test scores, grades in prior courses, and teachers' recommendations were used to determine whether a student had met them. Only if these prerequisites were met, were students' choices honored. If they were not met, students were assigned to lower course levels. In courses without academic prerequisites, students' choices were usually honored.

At all three schools, students were usually free to choose their elective courses, and they were often permitted to opt for academic courses at lower ability levels than what the school might see as the best match. Usually, schools were also willing to accommodate parents who expressed a strong preference for enrolling their child in more difficult courses than those prior teachers or the guidance counselor had recommended. However, no school publicized this option, and, when parents exercised it, the schools usually protected themselves from liability (for the failure that they anticipated) by asking parents to sign a waiver.

Once placed in a particular track or ability level of a course, students tended to be placed similarly in subsequent years. Most teachers expressed reluctance to move students out of remedial classes or tracks to higher levels. At Coolidge, for example, successful completion of remedial U.S. history usually led to automatic placement in remedial economics, and one teacher estimated that only "three or four times during the past seven or eight years" were requests made to transfer students out of his remedial classes. When track movement did occur, it was likely to be movement to a lower level. For instance, Coolidge offered an extended, 2-year version of Algebra 1 called "Introductory Algebra." The math teachers interviewed estimated that about 20% of the students moved down to life math or business math after the first year of the course, whereas less than 10% went on to the Algebra 2 course after completing the 2-year introductory algebra series. Teachers in other subject areas also told us that honors and AP students dropped courses because the courses were "too tough" or students feared lowering their GPA. Likewise, at Washington, one teacher noted several instances of honors students' requesting downward transfers—requests he attributed to students' fear of failure. Among students completing a middle-level biology course, approximately 40% took a comparable-level physics course, 60% moved to

a lower level fundamentals of physics course, and only one or two students moved to honors physics.

Curriculum prerequisites were partly responsible for limiting less successful students' course taking opportunities. Foreign students at Coolidge faced difficulties in meeting college admissions requirements because they had to complete ESL courses before moving into college-prep courses. At highly competitive Washington, the screening process for college-prep science was stiff. Students in general track classes were viewed as unlikely to have developed "the discipline of study habits" and therefore were less likely to "qualify." At McKinley, placement in general chemistry, an 11th grade course, was contingent on successful completion of algebra and physical science. However, students taking Math A and Math B did not take algebra until 11th grade, if they took it at all, and, consequently, these students were barred from taking chemistry with their peers.

Other barriers to track mobility, and thereby less successful students' opportunity to take advantage of the schools' richest curricula, were raised at the district and state levels. At Washington, a district-mandated effort to meet state model curriculum guidelines revised a low-level general math course from a 2-year to a 1-year course. The teacher noted that the 2-year sequence had given a number of students the necessary algebra foundation to move to college-track math and that she currently had two such students in trigonometry. These students had taken the 2-year course in 9th and 10th grades, geometry in 11th grade, Algebra 2 in summer school, and enrolled in trigonometry in 12th grade. She worried that the new 1-year course would not allow students to absorb the theory necessary to shift into the higher tracks. One McKinley teacher described an even more rigid barrier—a policy that limited summer school offerings to remedial courses enrolling students who failed during the year. This policy precluded the school from offering prerequisite courses during the summer that would enable McKinley's students to move into more advanced classes.

To most educators, this distribution of curriculum advantages to those with records of high motivation and achievement seems commonsensical, but it also reflects a larger set of assumptions: that schools base students' curriculum opportunities on their past records of achievement and motivation and that schools see achievement and motivation as unlikely to be altered by high school experiences.

Proposition 4: Because Race, Ethnicity, and Social Class Signal Ability and Motivation, They Also Influence Curriculum Decisions

Influence on curriculum offerings. The predominantly middle-class, White and Asian student body at Washington was judged to be a high-achieving, highly motivated community. The school responded by offering the richest curriculum in both academic and vocational subjects. The mixed population at Coolidge was perceived as very diverse in achievement and motivation. The school curriculum paralleled this judgment, offering a college-oriented curriculum (with fewer advanced courses than at Washington) and a voca-

tional program featuring a wide range of business courses that were seen as appropriate for the large proportion of “average” students who probably would not go to college. And, even though all their students were Latino and African American, the McKinley administration was determined to do the best it could for its disadvantaged: However, it offered the fewest college-preparatory classes and the narrowest range of vocational offerings.

Despite the fact that the vocational program at McKinley offered students the narrowest range of vocational classes (and, consequently, the fewest opportunities to develop comprehensive knowledge and skills in specific vocational areas), McKinley students were most likely to take large numbers of vocational classes. For example, Table 2 shows that African-American boys at McKinley were more than twice as likely (and girls four times as likely) as their African-American peers at Coolidge to take 6 or more vocational courses.

Even those students in the top 25% of their class at McKinley had a greater probability of concentrating in vocational courses there than their counterparts at the more advantaged schools. For example, 42% of the top scoring African Americans at McKinley, compared with only 9% at Coolidge, took 6 or more vocational classes. Moreover, this pattern of skewed participation holds even when test scores were controlled across the three schools. For example, at McKinley, 27% of African-American males and 29% of Latino males who scored

Table 2
Probability of Becoming a Vocational Concentrator, by Sex, Race, and School (Sample: 10th–12th Grade Cohort)

	Washington ^a		Coolidge	McKinley
Male				
White	49.9	21.1	38.1	—
Black	—	—	20.7	54.3
Asian	22.0	4.1	7.9	—
Latino	20.1	2.4	27.6	56.7
Female				
White	30.3	13.2	29.3	—
Black	—	—	15.0	60.3
Asian	11.0	2.4	5.4	—
Latino	9.9	1.4	20.4	62.5

Note. Estimated probabilities are based on the school-specific logistic models. The probabilities are for students who attended their respective schools for 4 years. The math and reading scores are held constant at the school-specific means.

^aWe reported the participation of Washington students in two ways. The first number is the percentage of students who took six or more vocational courses. The second number reports the percentage who took six or more vocational courses beyond the two required semesters. The first number is relatively higher than would be the case without the requirement, and the second is probably lower. However, the effects of the requirement probably differ among various groups of students.

at or above the 80th percentile nationally on standardized achievement tests were vocational concentrators. At Coolidge, only 9% of African-American males and 13% of Latinos with scores this high did so. Thus, McKinley appeared to be *disproportionately* vocational, when compared to the other schools with larger numbers of middle-class, White, and Asian students.

Racial and social class signals of ability were particularly evident as Coolidge and Washington faculty described how demographic changes demanded curricular changes. Some Coolidge faculty saw the increase in ethnic diversity as providing, in the words of one teacher, a “marvelous mix,” whereas others were less positive. As described under Proposition 2 above, nearly all, however, perceived that a decline in student ability and motivation accompanied the shift.

Demographic changes at Washington had the opposite effect on the curriculum, but changes at this school also reflect racial signals of ability and motivation. Administrators and teachers attributed the increase in the number of math and science courses offered, especially upper level courses, to the influx of Asian students. Asian parents, they reported, had not supported students’ enrollment in sports or vocational education, and they pushed to have their children removed from ESL courses. Additionally, educators’ believed that Asian parents’ and students’ opposition to the 1-year practical arts requirement prompted a policy change wherein students could receive practical arts credit for completing computer courses offered by the math department. These curricular changes were made willingly, in part, because the parents’ wishes coincided with prevailing school assumptions about the abilities and needs of Asian students.

Effects on student assignment. Perceptions of students’ suitability for classes at various track levels were also influenced by race, ethnicity, and social class; at each school, racial groups had become identified in most educators’ minds with particular tracks. Asians, almost uniformly considered by educators to be highly capable and motivated, were strongly identified with the highest tracks at all three schools. One Coolidge honors class teacher observed, for example, that his current group of students was almost three-fourths Asian, that over the years he had fewer and fewer White students, and that he had not had a Latino honors student for more than 7 years. He attributed this to culturally determined student motivation. He was not unique. At Washington, we repeatedly heard from teachers and counselors about the extraordinary motivation and abilities of Asian students. At McKinley, where Asians constituted a very small fraction of the student body, teachers also identified Asians with college-prep and AP academic courses.

In contrast, Latinos, at all three schools were almost always judged as the least well-suited for academic work and were most often associated with low-track academic courses and vocational programs. Teachers at Coolidge reported a disproportionately large number of Latinos in the ESL, remedial, and low-level courses and a disproportionately small number of Latinos in the upper level courses; and at both Coolidge and McKinley, African Americans were typically viewed as more able to handle academic courses than

Latinos. White students at Coolidge and Washington seemed to rank somewhat below Asians in likelihood of academic success but above other minorities.

On the vocational side of the curriculum, business courses were seen as attractive to, and appropriate for, a wide range of students. A number of respondents told us that many White, middle-class, college-prep students needed general typing and computing skills for college. But, other types of vocational courses—particularly, general shop classes and those training for specific occupations such as cosmetology—were thought to be most appropriate for low-income, Latino, and (to some extent) African-American students, because these groups were not seen as college bound. Interestingly, at all-minority McKinley, a number of teachers associated Latino students, rather than African Americans, with vocational education, noting that this group was most likely to seek work right after high school.

Many teachers denied any direct link between race or ethnicity and course placement, or, as a McKinley teacher put it, “If there is, it is not deliberate.” They attributed racial patterns in placement to the fact that Latinos, as a group, scored lower on standardized tests than did other groups at the two schools, while Asians, as a group, at both Coolidge and Washington, outscored other groups in mathematics achievement. But, global judgments made about students who belong to these groups often went beyond students’ achievement. At their most extreme, these judgments reflected stereotypical views about differences between racial groups.

Most respondents explained the relationship between race and social class and course assignments in terms of group differences in support, motivation, and interest. One Coolidge teacher linked wealth with increased parent involvement and, through that, placement. A Coolidge administrator told us that, although wealth itself was not related to academic placement, having a “two-parent strong family” (a factor associated with student wealth) increased the likelihood of kids being in the tougher academic classes.

Many faculty attributed Asian’s higher level placements to a cultural predisposition toward effort. For example, at Washington High School, one teacher commented: “I love classes with lots of Orientals; there are no discipline problems; they are motivated.” One Coolidge teacher noted Asians “work longer and harder . . . they study 7 hours a day, 6 days a week.” This teacher, along with a number of others, attributed the Asian students’ work ethic to “cultural expectations.” A science teacher at Washington made a similar judgment about Asian immigrants. Although he recently had asked that immigrants from Brazil and French-speaking Canada be transferred into lower level classes because their poor English skills made the science material difficult, he retained Asians with limited English-speaking skills in the class, because they would “network” to keep up with the material. Faculty generally assumed that these students would attend 4-year colleges and universities.

Latino students suffered the most negative judgments about their culture’s impact on school effort and motivation and, as a consequence, on their class placements. Educators at all three schools characterized Latinos

as having poor basic skills, little interest in school, and being “culturally disinclined” to aspire to postsecondary education. One Coolidge teacher said that Latinos, “as a result of the way they were raised, do not want to learn and view school only as something to get away from.” Another attributed their low representation in higher level courses to their home environment and lack of parental support. Other teachers and administrators mentioned the likely transience of Latino students as a factor.

A counselor at all-minority McKinley attributed the disproportionate representation of Latinos in vocational education to the value placed on vocational education by the Latino community. A teacher at the school blamed students’ self-perceptions—noting that minority, particularly Latino, students were “prejudiced within themselves about their expectations for themselves . . . they feel there is an ethnic path chosen for them.” As an example, he related the story of a student who thought she should become a secretary, so the counselor accepted this choice and steered her on a secretarial path despite the student’s high potential. Another expressed his frustration with Latino students with college ability who appeared to have their minds set on entering the workforce immediately after high school.

At Washington, one teacher noted that the school’s small group of African-American and Latino students did not fit the “gang member” stereotype because of their high socioeconomic status and that both groups “did all right.” However, another teacher, who was half Latino, commented on Latinos’ absence from higher level courses and their “invisibility” on campus.

A number of respondents at both Washington and Coolidge also cited the lack of effort and academic motivation among White students as a primary factor in their course placements. One Coolidge administrator, referring to White students, described a “type” of student in low-level courses as the “able but lazy” student. A second Coolidge administrator characterized middle-class White kids as apathetic, “smart, but spoiled . . . never had to apply themselves.” A Washington teacher observed that White students’ “interests seem to lie more outside of academic achievement than the Asian kids’.”

In contrast to the view that race and social class affected student assignments only indirectly—through group differences in support, motivations, and effort—a few Coolidge faculty felt that the tracking system led to blatant discrimination. One English teacher showed us a list of students who, according to their previous teacher, were “misplaced” in the fast track. She considered the previous teacher prejudiced, noting that many students on the list were Latino and “50% of the kids on this list belong in the fast class, they’re doing the work.” On the other hand, she identified a number of White students with “glaring deficiencies” whose names did not appear. Other Coolidge staff made explicit reference to racial discrepancies in the assignment process. The most salient evidence for these teachers was the underrepresentation of their predominantly middle-class African-American students in the fast track or honors courses. One also noted that, in addition to African Americans and Latinos’ being placed too low, the school routinely placed Asians “too high.”

Faculty perceptions of racial or social-class differences in students' track placement were borne out by our transcript analyses.¹⁵ Participation in college-prep math (defined as students' taking Algebra 2 by 11th grade) differed significantly by race/ethnicity, with participation rates in college-prep math dramatically higher for Asians than for Whites at Washington (79% and 33%, respectively) and Coolidge (72% and 38%, respectively). Latino students participated at an even lower rates than Whites at these two schools (15% at Washington; 8% at Coolidge). At McKinley, no significant differences were found in African Americans' and Latinos' participation in college-prep academic courses.

Although these patterns generally paralleled group differences in prior achievement, judgments made about students who belonged to different groups sometimes influenced assignments, even when past achievements were the same. To examine the effect of achievement scores on placement, we compared placement probabilities within and across schools for students using (a) similar relative test scores based on within-school percentile ranking and (b) similar absolute test scores as measured by students' national percentile ranking.

Tables 3 and 4 show the enhanced probabilities of Asians' enrolling in college-preparatory programs and the diminished chances of Latinos enroll-

Table 3
Probability of Taking College-Prep Math, by Percentile Score and School (Sample: 10th–12th Grade Cohort)

	Washington	Coolidge	McKinley
White male			
25th percentile	2.6	1.6	—
50th percentile	17.0	11.6	—
75th percentile	81.5	62.5	—
Black male			
25th percentile	—	3.3	1.9
50th percentile	—	21.2	8.9
75th percentile	—	77.4	32.5
Asian male			
25th percentile	10.0	17.0	—
50th percentile	46.2	62.2	—
75th percentile	94.9	95.4	—
Latino male			
25th percentile	2.0	0.7	2.3
50th percentile	13.6	5.3	10.8
75th percentile	77.1	41.4	37.4

Note. Estimated probabilities are based on a school-specific logistic model predicting the probability of taking Algebra 2 in the 11th grade or earlier. The probabilities are evaluated at the same point in the math and reading score distributions (i.e., lowest quartile, median, highest quartile) for each school.

Table 4

Probability That Students With Standardized Achievement Scores at the 30th, 50th, and 80th Percentiles Will Take College-Prep Math, by School (Sample: 10th–12th Grade Cohort)

	Washington	Coolidge	McKinley
White male			
Percentile score = 30	0.0	0.3	—
Percentile score = 50	0.9	3.6	—
Percentile score = 80	41.2	60.6	—
Black male			
Percentile score = 30	—	0.6	2.6
Percentile score = 50	—	7.1	16.6
Percentile score = 80	—	75.9	80.3
Asian male			
Percentile score = 30	0.2	3.8	—
Percentile score = 50	3.5	31.9	—
Percentile score = 80	74.6	95.0	—
Latino male			
Percentile score = 30	0.0	0.1	3.2
Percentile score = 50	0.7	1.6	19.9
Percentile score = 80	34.8	39.4	83.5

Note. Estimated probabilities are based on a school-specific logistic model predicting the probability of taking Algebra 2 in the 11th grade or earlier. The probabilities are evaluated at the same point in the math and reading score distributions (i.e., percentile scores equal to 30, 50, and 80).

ing in college-preparatory programs, even when their scores on achievement tests were comparable. For example, Asian males at the 75th percentile in their within-school relative test score distribution had about a 95% probability of taking college-prep math at both Washington and Coolidge, whereas a White male with the same standing in his school's test score distribution had only an 81% probability of taking college-prep math at Washington and an even lower probability (62%) at Coolidge. Again, at both schools, Latino males were least likely to be in college-prep math at each point in the score distribution. However, African-American students at Coolidge were somewhat more likely than Whites to be enrolled in college-prep math. In English, however, African Americans, like Latinos, were considerably less likely than Asians and Whites to take college-prep classes. These patterns did not hold at all-minority McKinley, where, for both subjects, African-American and Latino males had similar probabilities of being in college-prep courses.

These racial patterns held when absolute test scores were used, although the probability of being in the college-prep track differed depending on the school attended. Table 3 shows the estimated probabilities of taking college-prep math for boys in different race or ethnic groups with national percentile

scores equal to 30, 50, and 80. For example, a Latino student at McKinley with achievement scores falling in the 80th percentile nationally had a probability of participating in college-prep math equal to 84%. A Latino student with the same scores at Coolidge or Washington had a 35% to 39% probability of participating. This distribution, with the highest probabilities of taking college-prep math at McKinley and the lowest at Washington, holds for all races at each test score level.

This pattern also applies to placement in college-prep English for all students except Latinos, who were more likely to be in those classes at Washington than at Coolidge. Again, the differences in teachers' and counselors' perceptions of Latinos at Washington and Coolidge provide a clue about this pattern. Washington educators seemed to regard Latino students as "just like Whites," whereas the Coolidge staff reported their Latino group to have fewer home advantages, more academic deficiencies, and limited futures.

This pattern of between-school probabilities suggests several possible interpretations. If an imaginary queue of students is formed from highest to lowest ability, our data indicate that a higher percentage of students at Washington than at McKinley would take college-prep math. However, a student with above-average ability (e.g., with percentile scores equal to 80) would have had less than a 50-50 chance of entering the college-prep track at Washington but would almost certainly have been in the college-prep track at McKinley. One interpretation is that this student would have been crowded out of the college-prep track at Washington by the large number of students with higher ability and crowded into the college-prep track at McKinley by virtue of the fact that he or she was one of the top students. Alternatively, the student at Washington with above-average ability may have been less motivated or encouraged than his or her counterpart at McKinley, perhaps because of a large cohort of high-achieving peers, to participate in the college-bound track. Finally, the interview data from McKinley indicated that, because that school encourages students to attend college, its college-prep track may have been broader and less rigorous than those at the other two schools.

Although these data illustrate clear links between students' status characteristics and curriculum offerings at the school level and student placements, only one of our respondents reported instances where a student's placement was based directly on race, ethnicity, or socioeconomic status. Instead, educators consistently credited student placement to a combination of student choice (Latino girls' preference for cosmetology, e.g.), motivation, and ability, although many recognized the indirect effects of student background characteristics on these factors.

Ambivalence about tracking. The obvious links between course assignment and students' status characteristics caused ambivalence and discomfort for educators. Despite the prevailing view that tracking was necessary to accommodate students' differences and the widespread conviction that assignments were made fairly, many at the schools felt considerable discomfort about how the tracked curriculum and assignment criteria promoted

race- and class-related differences in course placements. Others expressed considerable ambivalence about tracking practices generally.

As one Coolidge counselor put it when asked about students from different groups enrolled in different tracks, “I don’t like the words coming into my head.” One Coolidge teacher, after describing the predominantly White and Asian composition of her honors English class, said, “Of course, anyone can take the course, because it is a student decision theoretically . . . [but non-Asian minority students are] smart enough to know if they are prepared or not for a class.”

Proposition 5: Structural Regularities Constrain Curriculum Adaptations

So far, our analyses have focused on how the school’s responses to students’ characteristics shaped both their curriculum offerings and individual students’ assignments.

In addition, structural factors—such as, staff capabilities, the number of sections offered of any one course, prerequisites to enrollment, and other policies regulating course offerings—constrained opportunities and set ceilings on student attainments. Some of these structures became embedded in tradition over time as each school used judgments about the needs of past cohorts of students to predict the needs of future groups. However, we also found that long-standing beliefs about how the high school curriculum should be structured and recent policies mandating increased academic requirements for high school graduation limited schools’ flexibility in accommodating their student bodies and pressed them to offer more college-preparatory courses than they might have otherwise thought appropriate. As we describe below, these ideological positions led to structural regularities at schools that affected the matches made between students and courses.

Despite the differences in the ways the schools judged the capacity and needs of their student bodies, the curriculum offerings and tracking systems at our three schools were more alike than different. This similarity was driven, primarily, by a long-standing and shared commitment to the ideal of the comprehensive American high school—that is, each high school wanted to offer a full program that included academic courses from remedial to advanced placement levels and vocational offerings ranging from introductory, avocational industrial arts classes, to business courses that teach generic skills, to sequences of occupationally specific courses that prepare non-college-bound students for work.

In recent years, the curriculum at all three schools had become even more similar as a result of state policies emphasizing academics and college preparation. During the past 2 decades, the state had enacted new curriculum frameworks, graduation requirements, proficiency examinations, university admission requirements, and accountability systems that embodied assumptions that all students needed considerable academic preparation and that schools should press as many students as possible toward rigorous academic courses. Although these policies pressed all three schools toward more academic and fewer vocational offerings, their effects varied, in part, with the

degree to which the assumptions of state policies matched the assumptions of those at the schools. For example, Washington traditionally emphasized college preparation and made few changes in response to state graduation requirements. Many at Coolidge and McKinley, on the other hand, expressed misgivings.

Increased academic requirements prompted Coolidge to maintain a strong academic tradition, although many perceived this focus to be poorly suited to the needs of the current student population. For example, a Coolidge counselor who supported the state superintendent's emphasis on every student's right of access to a college-prep curriculum also worried that, "not every kid can handle it . . . every kid has [a] right to [the] courses they should be in." Because so many of the staff did not see the school's diverse student body as suited for college-prep courses, they instituted a range of levels of college-preparatory courses. For example, English, social studies, and some science sections were internally classified as fast, medium, or slow.¹⁶ Counselors and teachers uniformly reported that these designations (not recorded on students' transcripts) guided grading practices: Students could earn no more than a B in a medium section and no more than a C in a slow section. This policy (albeit hidden from parents and the public) helped teachers feel more comfortable about enrolling slower students in college-preparatory courses.

At McKinley, like at Coolidge, the curriculum structure pressed students who otherwise might be in low-level classes to enroll in college-preparatory courses. Some lauded this outside pressure because they felt it provided minority students with greater access to academic classes. School administrators consistently touted the school's enactment of the state's interest in college preparation and its academic image. The college counselor had worked energetically to have all of McKinley's academic courses meet university entrance requirements, and she expressed enormous pride in the fact that her actions ensured minority student participation in high-track classes. In contrast, many teachers expressed strong misgivings. They saw the social problems faced by many McKinley students as severely limiting the school's ability to promote academic achievement and college attendance. One McKinley math teacher lamented the school's insistence on offering calculus, given the limited number of qualified students. And, despite the designation of all McKinley's core academic courses as college-preparatory, several teachers described the content of these courses as very low level. All of the schools felt the effects of state policies in the decline of their vocational programs. Each felt less able to assign students to vocational programs, even when they believed (or students believed) that such programs best matched the students' abilities and interests. Even at high-achieving Washington, one teacher criticized the state as "unrealistic," because "not every kid is college-prep, and not all kids can use higher level thinking skills."

One effect of these structural constraints on local schools' placements was that students of equal ability had the best chance of being placed in a college-prep course at a school with lower average achievement levels than

they had at a school with higher average achievement levels. These findings are consistent with structuralist theories (Hallinan, 1987; Sorensen, 1987) and some previous research (Garet & DeLany, 1988) indicating that schools treat a fairly fixed fraction of their students as college-bound. For example, even though McKinley had fewer slots in the college-prep curriculum overall, the achievement scores required for African-American and Latino minority students to qualify for a slot were considerably lower than at either Washington or Coolidge. Thus, structural constraints worked somewhat to counterbalance beliefs about accommodation that might have otherwise led to even fewer college-prep opportunities for the minority students at McKinley.

Proposition 6: Declining Resources and Demographic Shifts Also Constrain Offerings and Assignments

External changes such as demographic shifts, shrinking enrollments, and declining resources further constrain schools' curricular discretion. Difficulties caused by declining enrollments and reduced funding had the greatest effect on the vocational programs at each of the three schools, but declining resources also affected the ability of the school to pay careful attention to student assignments in academic courses.

All three schools felt the squeeze of reduced electives because of increased academic requirements, a change that has been particularly detrimental to vocational education. This squeeze took the form of reduced enrollments in vocational courses and, as a consequence, fewer teacher resources and less funding. At all three schools, the need to maintain minimum enrollments forced counselors and teachers to abandon prerequisites, to combine introductory and advance sections, and to retain disruptive students; the decline in resources meant that the schools had to make do with outmoded equipment. One Coolidge administrator described how these changes had led to a discrepancy between philosophy and practice. He noted that district philosophy called for vocational courses that prepared students for the labor market, but, because of "the reality of program survival," classes in electronics, metal, and graphic arts—areas for which there was a market—had been reduced or eliminated, whereas the avocational wood-working classes were maintained, and a new woodworking teacher was hired. These classes persisted because they required the least new equipment and because they were seen as more suitable for low-ability students and those with behavior problems.

Teacher shortages also affected the type of courses that could be offered. For example, one administrator attributed problems in vocational education to poor quality teachers and teaching noting that capable college business majors would select a more lucrative field than teaching. Declining enrollments also made the hiring of new teachers impossible in any but required academic subjects, and vocational retirees were not replaced. As a result, the vocational offerings were at the mercy of the teachers remaining at the school. Such vagaries in staff expertise contributed to the considerable lack of fidelity we found between the curriculum as offered and as envisioned

in the minds of educators. For example, none of the schools offered a coherent set of vocational courses, and vocational education teachers at all three schools told us that recent budgetary and programmatic cuts had resulted in the elimination of most advance vocational courses. Some teachers told us that, as a result, students who could take only introductory courses in, for example, auto shop or industrial drawing would *not* acquire training sufficient to move directly into a job in those fields.

Heavy counselor loads severely limited the extent to which they could advise students about courses. Counselors were each responsible for 450 students at Coolidge and for 400 students at Washington, assigned alphabetically. At McKinley, counselors were assigned to students in the ninth grade and stayed with them for 4 years. Because of the school's high attrition rate, their caseloads ranged from 350 to 700 students each. At none of the schools was it possible for counselors to carry out their advisement and placement function with more than the most superficial attention to each student.

Finally, the schools faced enormous logistical difficulties as they attempted to create a master schedule that offered all of the required courses at a number of track levels and enabled the appropriate placement of hundreds of high school students into those courses. At each school, we were told that some student assignments and tracking resulted from constraints in the scheduling process—such as, groups of low-level students winding up in the same (nontracked) elective classes. These glitches in the placement system were viewed as unintentional and regrettable, but unavoidable.

Proposition 7: Irregularities Advantage the Most Advantaged Students

As the previous sections make clear, the schools were not always able to make the curriculum decisions they thought best for students. In some cases, policies interfered; in other cases, resources constrained schools' choices. However, the constraints the schools faced in developing an appropriate curriculum for their students and in making appropriate matches between students and courses affected students on different curriculum paths differently. Those in the highest status, academic curriculum had the best defined and most carefully sequenced programs, partly because of the policy priority given to these programs and to the special attention these students garnered.

State policies governing college admissions requirements and the college-prep track at all schools left little room for deviation in the courses to be taken or in the course sequence. Moreover, teachers reported that the curriculum of the college-track courses was better defined and the sequencing of courses better articulated. Certainly, in AP courses, teachers strictly covered the material needed to receive college credit. In addition, the better teachers were assigned to these classes, because, as one counselor told us, mastery of the material necessitated it.

High-achieving students were also given additional time and consideration by counselors. At two of the schools, a counselor was specifically designated to assist the high-achieving students, and this counselor generally served fewer students than the other counselors. At Coolidge, the pull-out

counselor was assigned to high-ability students, and at McKinley one extra counselor was hired to assist college-bound students only.¹⁷ Low-functioning students received special attention when placed in remedial labs, especially when class size was reduced—a benefit mentioned by many respondents. However, unless eligible for special education, the low-functioning student generally had access to few coherent programs (especially in vocational education). In direct contrast to the teacher assignment policies for high-achieving students, slow classes were more likely to be assigned a less-qualified teacher. As one counselor put it, the “PE teacher, who doesn’t have enough classes.”

Students in the middle level, however, appear to have had the least coherent and least stable programs. Counselors reported spending little time with these students. One counselor told us she sees about 75% of her students during the semester but rarely sees the rest. The 75% includes the “top students” and “the problems.” A number of counselors recognized that students “fall through the cracks,” especially the poor to average student who is passive or undecided about his or her future. These are the very students for whom counseling may be most important.

Further, because more courses were available and the course sequence was less rigid at the middle level, these students were less likely to receive a coherent program—a problem exacerbated by the inadequate counseling most of these students received. These students were more likely than others to have an empty slot in their schedule filled with any available course. Although this serendipitous placement might result in a higher track placement, generally the prerequisites associated with these courses precluded it.

Not only did the schools establish more responsive systems for the high-achieving student, but the students in this group and their parents were more efficacious. Washington and Coolidge both had waiver policies that allowed parents to change their child’s class levels if they were unhappy with the school’s placement decisions. None of the schools advertised this policy, however, and, at each school, counselors told us that the high-achieving, affluent (largely White and Asian) students and their parents were those who requested such changes. The purpose of the waiver policy was to convey that the school lacked confidence in those students’ ability to succeed, but that parents could assume the risk if they wished. It was also intended, counselors and teachers told us, to discourage all but those families most certain about their ability to help their children negotiate the bureaucratic and academic demands of school.

A More Eclectic Explanation

Our analyses of practices at Washington, Coolidge, and McKinley do not support a unidimensional view of curriculum offerings and student assignment. Rather, they suggest a more eclectic explanation that allows for the dynamic interplay of structural, cultural, and political factors.

Educators at all three schools, for the most part, talked about their perceptions and practices in ways very consistent with a human capital perspective. At all three schools, the most salient overall goal was to ready students for productive workforce participation—whether or not students would pursue postsecondary education or training. The vocational side of the curriculum—or what was left of it—was designed originally to fit the demands of the local labor market—construction trades, aviation, the entertainment industry. The regional occupational programs attached to the schools attempted to connect students with prospective employers.

In keeping with a human capital perspective, each school had elaborate procedures for ascertaining students' past achievement, teachers' judgments of their abilities and motivation, and students' preferences. These procedures were designed to ensure that placements were merit based and that students had some choice. It's not surprising, then, that faculties saw the opportunity structure as open, fair, and merit based. Teachers, counselors, and administrators tended to justify existing differences in student placement as resulting from a fair competition for the available slots in the college-prep track and from self-selection. Disproportionate racial, ethnic, or social-class representation in track placement (given equal achievement) was attributed to differences in students' choices. Many acknowledge that these choices were culturally related, but only in ways that were considered beyond the ken of the educational system. Consistent with this widespread view, our transcript analyses show considerable convergence between students' measured achievement and their course placements.

Nevertheless, none of the three schools was engaged in a neutral, achievement-based process of building human capital. Economically advantaged Whites and Asians had consistently better access to courses that would lead them to college and higher status jobs, compared with Latinos whose achievement was similar. These advantages came from the type of curriculum offered in schools in more advantaged neighborhoods and from the placement of these students in high track classes within their schools. We did not find that apparent mismatches between students and curriculum could be adequately explained by structural constraints or open admissions policies where curriculum decisions were determined by students' choices. Rather, differences in course participation flowed, in large part, from perceptions educators' held about race and social class differences in academic abilities and motivation. Most striking in these Southern California schools were common beliefs in the high ability and motivation of Asian students, the lack of support and value for education among Latino families, and how these beliefs were mirrored in students' course taking. Both between- and within-school differences in curriculum opportunities argue quite strongly against an open, merit-based system.

Yet, when we juxtapose educators' views of the fairness and openness of the placement process at the three schools and their considerable regret about the racial segregation the tracking system causes, we are cautioned against a simplistic view of schools as deterministic sorting agencies. These

three schools did not mechanistically sort students into college-prep or vocational courses in ways that blatantly discriminate against low-income and non-Asian minority students and that reproduce the economic and social order. Tracking may have contributed to these ends, but students and their parents also played an active role in producing them. As noted above, more advantaged parents took advantage of the waiver policy that permitted students to move into higher tracks. All students were given choices about their elective courses, and they were often permitted to opt for easier academic courses. Perhaps low-income and Latino students, in particular, were simply less confident about their ability to manage difficult courses. Or they, along with their African-American peers, may have seen vocational courses as providing them a safety net from joblessness, should college or posthigh school training not be possible. Nevertheless, our interviews and observations suggest that the schools seemed to accept these choices and only rarely pressed low-income and minority students to stretch beyond their own or others' low expectations. These findings suggest that race, ethnicity, and social class do, as Rosenbaum (1986) suggests, signal ability to educators. Once signaled, judgments about ability trigger assignments, insofar as the school's curriculum structure will allow appropriate placements to be made. With Apple (1982) and Giroux (1981), then, we find evidence of a social and economic sorting process filled with contradictions—some structural, some cultural, and some a result of individual actions.

Yet, across the three schools, we find more similarities than differences. The curricula at all three are more similar than different, and they are heavily academic—a finding inconsistent with a narrow human capital or social reproduction perspective. Moreover, the three schools reveal far too much variation, even sloppiness, in the patterns of offerings and assignments than either of these global structural explanations would require. Many of the vocational courses were offered (or not offered) simply because of faculty expertise or experience. The range of students in any set of courses—academic and vocational—was extraordinarily wide, along both social and academic dimensions. This finding suggests that, if the schools were intending to be efficient and effective at either human capital development or social sorting, their operations severely constrained their accomplishing these ends.

Like Garet and DeLany (1988), we found numerous unplanned factors that intercede and affect what schools actually do. Such factors as declining enrollments and demographic shifts can lead to fewer resources (as well as to the perception that existing resources are a poor match with what students currently need). These, in turn, affect staff expertise, counselor load, and scheduling. Such contingencies touch schools in unpredictable ways and interfere with their best efforts to make and carry out rational decisions.

What we find is that curriculum offerings and student assignments result from a mix of efforts to match talent with opportunities, cultural assumptions about the effects of race and class on school success, structural characteristics of high schools, and political maneuvering by efficacious students and their parents. This eclectic explanation, then, suggests a complex dynamic in large

diverse high schools that bundles together school culture, structures, and the actions of individuals—a dynamic that has important commonalities across schools but that does not operate identically at all schools or for all students within schools. Importantly, however, this dynamic does not appear to be neutral. Across the three schools, both the regularities and irregularities seem to consistently work to the advantage of the most advantaged students, providing them with the greatest access to the curriculum most likely to enhance their educational outcomes and their life chances beyond school. Rather, we see an interaction of demography, ideology, and organizational factors. Within the structural looseness of the school, advantaged students are able to manipulate the system in their favor. The schools' preconceptions about the stability and social determinants of ability inadvertently reinforce this advantage.

We conclude, then, that high school tracking decisions result from the synergy of three powerful factors: differentiated, hierarchical curriculum structures; school cultures alternatively committed to common schooling and accommodating differences; and political actions by individuals within those structures and cultures aimed at influencing the distribution of advantage. That this synergy plays a part in society's intergenerational transmission of social and economic positions is not surprising. However, it's a more comprehensive explanation of how this transmission works than those typically advanced. We believe that research on both tracking and efforts at school restructuring could benefit from this broader perspective.

Notes

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¹For example, 48% of the White 1982 seniors, who were a part of the federal High School and Beyond Study, reported being in academic programs, compared with 32% of the African Americans and 23% of Mexican Americans (Ekstrom, Goertz, & Rock, 1988). In contrast, 29% of these White seniors reported participating in the vocational track, compared with 39% of the African Americans and 44% of the Latinos (Braddock, 1990). Even high-achieving African-American students take more vocational education than do their White peers (NAVE, 1989).

²National data show that African-American students, more than Whites, enroll in courses designed to teach them specific skills for jobs in occupational home economics, health occupations, and construction (Hoachlander, Brown, & Tuma, 1987). And, academically disadvantaged African-American students spend more time than their White counterparts in work-based courses (e.g., work experience programs) and in courses preparing for low-level service-related jobs (NAVE, 1989). Across racial groups, economically disadvantaged students take a relatively larger percentage of occupationally specific courses and a somewhat smaller percentage of classes providing more general employability skills (e.g., typing and introductory courses in industrial arts) than do their more affluent schoolmates (Hoachlander, Brown, & Tuma, 1987).

³We have kept confidential the identity and location of each school and the identity of all individuals with whom we spoke. The names we have assigned to the three schools are pseudonyms.

⁴The third school, McKinley, felt that interviewing students would prove too disruptive. As described later, this response proved to be very consistent with the overall atmosphere at the school.

⁵External factors included funding levels and policies at the state and local levels and demographic and socioeconomic characteristics of student populations. Internal factors included the philosophy of the site administration, the capacity and teaching preferences of the staff, and the logistics of building a schedule.

⁶Other studies of students' course taking patterns have based their samples on the cohort of students enrolled in the freshman class (Garet & DeLany, 1988). Given the limitations of the administrative and record-keeping procedures at the three schools, it was not possible within our time frame and budget to collect transcript data for the group of students who entered ninth grade in the fall of 1984.

⁷These data enabled analyses of the curriculum experiences of the student cohort enrolled at the schools sometime during their senior year. Students who were present from their freshman to senior years are included, as well as those who transferred into the school between their freshman and senior years and remained there. This sample does not include students who were in the graduating class of 1987–1988 but who transferred to another school or dropped out before the start of their senior year.

⁸Because the schools used different achievement tests, we used students' percentile rankings to obtain a comparable measure across schools.

⁹We noted graduation status, final GPA, class rank, total course credits, and, at two of the schools, whether the student completed the state university's requirements for admission. For those students who took the SAT or ACT college admissions tests, we recorded scores on both the verbal and math subtests. At all three schools, we noted whether a student requested that his or her transcript be sent to 2-year or 4-year colleges and universities or to technical trade schools as part of the process of applying for entrance to that institution. These end-of-high-school outcomes gave us an opportunity to understand the extent to which the schools altered overall achievement levels or the relative standing of various groups of students during their high school years.

¹⁰We also used course location codes to identify courses taken at another U.S. or foreign high school, at an adult or continuation school, at a junior college or university, or at the off-campus regional center.

¹¹These comments typically were part of administrators' and teachers' responses to our question about whether they could recall students who had made dramatic gains or notable shifts in their achievement or effort in high school.

¹²For example, unlike Washington, Coolidge offered courses in remedial U.S. history and remedial economics. And while all of McKinley's academic classes were advertised as satisfying college entrance requirements, its large number of regular level courses were supplemented by a small number of honors and advanced sections in most subjects.

¹³To judge how well-developed and articulated vocational courses were, we considered whether sequential courses were offered that attempted to increase students' skill levels in a vocational area over 2 or more years—e.g., a course in Introductory Drafting that provided prerequisite knowledge and skills for a Computer-Assisted Drafting course. McKinley's vocational program included seven 2-year course sequences, compared to seven 2-year and four longer ones at Washington.

¹⁴Coolidge's student body consisted almost entirely of White, upper, and upper middle-class students in the 1970s, but it had become 30% immigrant and second-generation Latino, 14% African American, 12% Asian, and 44% Anglo at the time of the study.

¹⁵Recall that our transcript analyses included only those students who completed Grade 12. Because dropout rates differ at the schools—with larger proportions of African-American and Latino students leaving prior to graduation—and because dropouts come disproportionately from the non-college-bound sector of the student body, our estimates of group differences in college-prep course participation are quite conservative.

¹⁶One counselor showed us the file in the main office where these designations were recorded.

¹⁷Although not assigned to a special counselor, students at the very bottom were given more attention than those students falling in the middle academically.

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