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Whole-School Detracking: A Strategy for Equity and Excellence

The Preuss School on the University of California, San Diego campus is dedicated to preparing all 700 of its students to be eligible to attend college when they graduate if they choose. Students, who must be from low-income families, are enrolled in a single college-prep track. Because students who enter the school as 6th graders may not have the academic preparation necessary to succeed in rigorous college-prep classes, the school provides a wide range of social and academic supports.

Eighty percent of the students from the first graduating class of 55 attend 4-year colleges as of Fall 2004; 20% attend community colleges—with their transfer to UC campuses guaranteed in 2 years. This gives us an existence proof that detracking (i.e., presenting underserved students with a rigorous academic program, supplemented

by a comprehensive system of academic and social supports) can propel students from low-income households toward college eligibility and enrollment.

IN AN UNPRECEDENTED move by a major research university, the University of California, San Diego (UCSD) has established a charter middle/high school on our campus for the express purpose of preparing students from low-income backgrounds for college. Students at the Preuss School are selected by lottery; in the 2002–2003 school year, 57.3% of the student population was Latino, 14.2% African American, 19.7% Asian, 6.3% White, 2.0% Filipino, and 0.5% Pacific Islander. The curriculum from 6th to 12th grade is exclusively college prep. The school supplements instruction with a comprehensive system of academic and social supports, including a longer school day and longer school year (which provides more intense opportunities for in-depth learning), tutoring by UCSD undergraduates, Saturday Academies for students who continue to

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struggle, psychological counseling, mentoring by community members, and parental involvement and education.

Eighty percent of the students from the first graduating class of 55 were attending 4-year colleges as of Fall 2004; 20% are attending community colleges—with their transfer to UC campuses guaranteed in 2 years (McClure & Morales, 2004). This gives us an existence proof that detracking (i.e., presenting underserved students with a rigorous academic program, supplemented by a comprehensive system of academic and social supports), can propel students from low-income households toward college eligibility and enrollment. This article describes the Preuss School's detracking strategy, its curriculum, and the scaffolds erected to support student success. We also discuss how these structures provide the organizational framework for a culture of learning for teachers and students.

The Cognitive and Sociological Rationale for the Preuss School

The principles of the Preuss School are derived from current thinking about cognitive development and the social organization of schooling. Research in cognitive development supports the *universal development* thesis, which suggests that all normally functioning humans have the capacity to reason sufficiently well to finish high school and enter college when they are supported with the appropriate academic and social scaffolds (Bruner, 1986; Cicourel & Mehan, 1985; Meier, 1995; Resnick, 1995). By contrast, students segregated into low-track classes are often exposed to a limited range of cognitive tasks that do not stretch their higher order thinking and communicative skills, do not extend them to solve new and complex problems, and do not facilitate the transfer of knowledge gained in one situation to another situation. The implication of the universal development thesis is that schools should not segregate students into high and low tracks. Indeed, all students—those enrolling in college and those entering the world of work—benefit from a rigorous academic curriculum.

This modern conception of cognitive potential is supported by sociological critiques of tracking (Education Trust, 2003a, 2003b; Haycock & Navarro, 1988; Lucas, 1999; Oakes, 2003; Oakes, Gamoran, & Page, 1992). The distribution of students to high-, middle-, and low-ability groups or academic and general tracks correlates with ethnicity and socioeconomic status. Children from low-income or one-parent households, families with an unemployed worker, or linguistic and ethnic minority groups are more likely to be assigned to low-ability groups or tracks. Furthermore, African American and Latino students are consistently underrepresented in programs for the gifted and talented but overrepresented in special education programs (Mehan, Hertweck, & Meihls, 1986; Mercer, 1975).

Recognizing that tracked schools are inequitable and ineffective, educators have been exploring alternatives to these practices since the 1980s, notably replacing the tracking system (Burriss & Welner, 2005; Comer, 1988; Levin, 1987; Oakes & Wells, 1998; Sizer, 2004; Wheelock, 1992; Yonezawa, Wells, & Serna, 2002). Detracking attacks the problem of students with varying educational experiences in a fundamentally different way than tracking. Whereas tracking segregates students of varying background into separate courses of study and holds instruction time constant, detracking has the potential to hold high standards constant and varies the amount of instruction time, and social and academic supports.

We are attracted to the idea of detracking students due to its commitment to rigorous academic preparation for underrepresented students. Academic rigor is a necessary ingredient, but we also need to intensify the academic and social system supporting untracked students to increase the possibilities that underserved students will become eligible for college and university enrollment.

Mission and Goals of the Preuss School

This is where the Preuss School enters the picture. The curriculum and pedagogy of the Preuss School is based on a belief in the value of a traditional liberal arts education. Every graduating stu-

dent should be capable of written and spoken expression (in both English and a foreign language), mathematical reasoning, and understanding scientific procedures and results. Each should also have a broad appreciation of the diverse cultures that make up Western and non-Western civilizations. The fine and performing arts are not construed as electives but well-considered courses in the intellectual development of students. The senior year of the school is integrated with the UCSD freshman year; seniors are expected to take at least one UCSD course during their final year.¹

Above all, the Preuss School provides an environment where students are made to feel confident and safe, and are encouraged to develop a greater sense of self-worth and a sense of pride in their academic accomplishments. Although specializing in secondary education, the school is designed to reflect UCSD's high level of achievement by continually fostering a culture of academic accomplishment. Students are taught the art of questioning and the skill of logical thinking in an environment that encourages risk-taking. The school also seeks to develop personal character, good physical health, good judgment, and ethical behavior. It is further recognized that the home and school should share dual responsibility for encouraging young people to develop as scholars and citizens.

Creating a Culture of Learning

The Preuss School at UCSD uses a lottery to select low-income sixth-grade students with high potential but underdeveloped skills, and immediately enrolls them in rigorous college-prep classes. This rigorous middle school curriculum in Grades 6 to 8 prepares them for a high school core curriculum that fulfills or exceeds the University of California and California State University entry requirements. Courses at the Preuss School include 4 years of English, 4 years of math, 4 years of science (including three lab sciences), 4 years of a foreign language, and 1 year of a visual and performing art. At the Preuss School, students' course-taking sequence mirrors that of most private or elite public schools.

Preuss students are not typical private or affluent public school students, however. Some of the students speak English as a second language, some have not been successful in elementary or middle school, and none of the students' parents has graduated from college or in some cases even high school. Therefore, the founding faculty and principal knew from their collective experience that it was important to structure academic supports and a culture of learning to assist students in meeting the challenging curriculum required for competitive eligibility for 4-year colleges and universities (Mehan et al., 1996).

A visitor noted that at the Preuss School, "a college culture is everywhere" (Brandon, 2004, p. 10). Indeed, the first step in preparing underserved students for college eligibility was creating a college-going culture. Elements of this culture include what Peterson and Deal (2002) described as shared purpose shown through rituals, traditions, values, symbols, artifacts, and relationships that characterize a school's personality. Culture is important because it "shapes the way students, teachers, and administrators think, feel, and act" (Peterson & Deal, 2002, p. 9).

The application process to the Preuss School acts as a student's first introduction to a college-going culture. The application form resembles a college application and forces students to think about college at a very early age. Students describe their reasons for wanting to attend the school, discuss their commitment to the rigorous courses they will encounter, and express their interest and desire in attending college.² From the first day of school, students become immersed in exploring different types of colleges and learning about requirements, costs, and potential sources of support. They tour the UCSD campus on special enrichment activities and interact with college tutors on a daily basis.

The college application process, including writing college essays, becomes a regular part of the student's advisory curriculum beginning in high school. High school students take courses at the university and intern on campus, giving them access to the library and professors, thereby increasing their cultural capital and connecting them to valuable social networks. The Preuss School re-

quires that all students apply to at least one University of California, California State University, and private college or university. This combination of actions both fosters a college-going culture at the school and assists students' application and admission to colleges.

Parents are also educated early about college requirements, costs, and sources of aid. University outreach officers provide much of the parental information in the early middle years. In the high school years, the college counselor and advisory teachers conduct regular application and financial aid workshops for students and their parents, making the option of going to college an integral part of students' and parents' lives.

Other symbols that focus students on college are the location of the school and the daily presence of UCSD students as tutors and interns. Operating on university grounds acts to integrate students into the culture of learning associated with a university campus. UCSD students serve as role models for the students they tutor. Preuss students rotate through their eight classes on alternate days mimicking the college Monday–Wednesday–Friday and Tuesday–Thursday class schedules.

One recent interchange in a classroom highlights how clearly the students share common beliefs and attitudes about attending college. A sixth grader working on a particular math problem was approached by a visitor and asked why he thought he needed to learn fractions. Without hesitation, he answered, "Because I'll need it for college."

Rigorous Courses

Students benefit from taking rigorous courses as well as attending school on the UCSD campus, because students enrolled in higher level courses perform better than those in low-level courses. "In California, only 35% of our students successfully complete the college readiness curriculum ... currently 3 out of 4 African American and nearly 4 out of 5 Latino graduates are not eligible for admission to the UC/CSU systems for lack of access to, and enrollment in an appropriate high school curriculum" (Ali, 2002, p. 6). Even those minority students who score in the top quartiles on objec-

tive tests are frequently not enrolled in a rigorous course of study.

Preuss School students have no choice in the core curriculum. They all take the same college-prep classes at each grade level (with some exceptions for higher achieving mathematics students who may take university classes). The curriculum symbolizes the high expectations that the school has for each child, which further emphasizes the culture of learning being instantiated at the school.

A Personalized Learning Environment

A personalized learning environment is also an important part of the culture of learning at the Preuss School. The school is small in comparison to most—300 at the middle school and 400 at the high school. Small schools and small classes enable students and teachers to get to know each other well and ensure that student achievement is monitored closely (Kluver & Rosenstock, 2002; Meier, 1995).

An advisory teacher who works with the same group of students from Grades 6 to 12 serves as their advocate and counselor. Because the advisory class is a regular class in the student's schedule, its importance is not compromised. Further, to ensure that the advisory teacher has adequate time to "do advisory work," the school provides the teachers with 6.5 release days per year. A trained on-site substitute rotates through the classes and provides quality instruction. During this time the advisory teachers observe their students in classes, communicate with parents, or conduct one-on-one conferences.

Block scheduling is also intended to personalize the students' lives. Students and teachers spend longer periods of time together in classes, enabling each teacher to get to know his or her students well, cognitively and developmentally.

Academic and Social Supports

A central tenet of the school is that students must have a variety of supports to meet the challenges of the rigorous curriculum. Most notably, the school extends its year by 18 days, keeping

students and teachers together longer than the traditional year. This longer time in school gives students more opportunities to meet the rigorous academic demands. In a recent testimony before the University of California Regents, a Preuss graduate in her first year at the University spoke about her experience as a freshman: "I thought I couldn't possibly compete with anyone at UCSD but after taking my first mid-terms, I realized how prepared I was. All of the time and work at the Preuss School paid off more than I could ever imagine."

In addition to scaffolds, there must also be a systematic method to identify early those students who are struggling academically. The staff determined that the following elements would guide their efforts in building these supports:

1. Teaching strategies in the classroom that use the most current research on how students learn (Bransford, Brown, & Cocking, 1999).
2. An ongoing and weekly professional development model directed at assisting teachers to teach for understanding by using research-based methodologies.
3. An advisory class that provides supports in the form of peer collaboration, study skill methodologies, and information and dissemination of college information.
4. A method to help students remember the key skills needed for better understanding of concepts. The acronym I CLEAR (inquiry, collaboration, linking, evidence, application, and research) was developed by the initial founding staff and has become the school-wide organizational format around which to demonstrate student learning. Portfolios, for example, could be organized into the six areas, with student work inserted into the categories as an example of the skill used.
5. An early warning system that sets in motion a number of interventions to help students who are not meeting standards.
6. A system of tutoring—after-school, Saturdays, and in advisory classes—that serves to reinforce and remediate subject material.

Each of the supports is understood by the students to be an aid in their preparation for college. I

CLEAR is used by all faculty members and is part of the school's culture. The number of students who are at risk decreases as they move through the grades, suggesting that these scaffolds are instrumental.

Establishing a Culture of Professional Learning to Improve Student Learning

Just as a culture of learning for students is a clear focus for the school, so is professional learning for teachers. To foster professional learning activities, the school has carved out staff development time for 2 hr each week. In that time, the teacher staff developer, who is a senior member of the faculty, provides teachers with opportunities to share strategies, learn new teaching techniques, meet as departments or grade levels, and collaborate for improved student learning. The weekly meetings are rich in content and give teachers an opportunity to learn by doing. For example, they might try out a new teaching strategy one week and bring it back for discussion the next week. Using the model found in *The Teaching Gap* (Stigler & Hiebert, 1999) as a guide, the staff engages in lesson study, where teachers plan a lesson together and then observe one another teaching it. After the lesson is taught once, it is critiqued and changed and taught again by one of the other teachers in the group.

The type of instruction that engages students and provides the background knowledge needed for deep understanding takes planning and preparation time. Teachers cannot develop projects, plan activities with the needs of learners in mind, or analyze materials without time. That is why the time that has been set out for teacher collaborative planning and sharing is so important. Respecting teachers' time is a part of the culture of learning at the school.

As a result of the ongoing and school-based professional development, teachers are made more aware of what it means to be a learner and how they must plan activities that take into account how students will better understand the material. Teachers dialogue frequently about professional development activities. If teachers request a

change, the staff developer is responsive, because like students, teachers must have ownership in their own learning.

Preliminary Results

The first class graduated from the Preuss School in June 2004; 80% of the 55 graduates were attending 4-year colleges as of Fall 2004, including UCSD, UCLA, Berkeley, MIT, Stanford, NYU, Dartmouth, and Spellman; the remaining 20% will attend community colleges—with their transfer to UC campuses guaranteed in 2 years. In addition, McClure and Morales (2004) presented some notable test score information and course-taking patterns about Preuss School students:

- Preuss School students scored above the 50th percentile in reading on the CAT/6 reading test in 2002–2003; greater than 80% of Grade 9 to 12 Latino and Asian students scored at or above the 50th percentile in reading.
- The percentage of students scoring at or above the 50th percentile on the CAT/6 Mathematics test ranged from 70% for 8th graders to 83% for 10th graders in 2002–2003.
- 90% of the Preuss School graduating class of 2004 passed both portions of the California High School Exit Exam by March 2003; 92% of the 2005 graduating class passed both portions of the California High School Exit Exam by March 2003.
- Students in the 8th through 11th grades wrote 327 AP exams during the 2002–2003 school year; 37% received a score of 3 or higher (which earns college credit).
- Every member of the Preuss School graduating class completed the UC/CSU A-G requirement; the rate for the graduating classes in San Diego County from 2000 to 2003 ranged from 35% to 39%.
- Ninety-eight percent of the class of 2004 took the SAT-I in 2002–2003; the California average was 37% and the SDCS average was 49%.
- The Preuss School average SAT combined score was 984; the California average was 1012,

and the San Diego County and SDCS average was 1003.

- In 2002–2003, the Preuss School had the highest API scores in San Diego County for schools with greater than 80% of students eligible for meal assistance and ranked in the top 10 of all schools, regardless of meal assistance eligibility.

Summary and Conclusions

Detracking is often associated with the removal of courses with differentiated curriculum. In addition to making that structural change at the Preuss School, the faculty and founding principal have made cultural changes to foster instruction and learning. The structures that have been developed to ensure that all students at the Preuss School UCSD are prepared for college also define the culture of the school. From the location on the college campus, to the extension of time in school, Preuss students are immersed in a culture of learning. The academic supports such as tutoring, mentoring, advisory classes, and the structure of the school day are also symbolic of the importance of time and effort to meet the goal of academic preparation.

A considerable body of research (e.g., Bowles & Gintis, 1976; Coleman et al., 1966; Jencks et al., 1978; Jencks & Phillips, 1998; Jencks et al., 1972) suggests that the socioeconomic conditions that students bring with them to school are more influential on their academic outcomes than what happens inside schools. The Preuss School at UCSD counters that assertion and provides an existence proof that students from low-income backgrounds can succeed in a rigorous course of study when provided the appropriate academic and social supports.

The question of replicability is often raised in discussions about the Preuss School. Critics ask: “The circumstances surrounding the school are so unique—how could they ever be duplicated anywhere else?” We have two answers to the question of replicability. First, UCSD is already serving as a model for university–school partnerships; most notably, we are adapting the principles learned at

the Preuss School to Gompers Charter Middle School, a No Child Left Behind program improvement school. In addition, other universities are asking us about how to establish college-prep charter schools on or near their campuses. Of course, these would not be exact replicas of the Preuss School at UCSD; any university would develop an appropriate school to meet the needs of its local contexts.

Second, the school has developed a combination of components that contributes to accelerated student achievement and college eligibility. Those educators committed to improving the opportunities of underserved students to learn may be able to adopt these practices in the context of their own school improvement efforts.

Notes

1. For information about the formation of the Preuss School, see Rosen and Mehan (2003).
2. Even if students are not selected for the school, at least they will have begun thinking about college. The application process influences more than Preuss's own students to imagine college as a future possibility (parent interview, 2002).

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