Do Single-Sex Schools Improve the Education of Low-Income and Minority Students? An Investigation of California's Public Single-Gender Academies

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Single-sex public schools are seen as a vehicle for improving the educational experiences of low-income and minority students. Our two-year ethnographic study of low-income and minority students who attended experimental single-sex academies in California indicates that improving achievement involves more than separating students by gender. Using students' and educators' voices, this anthropological study shows that these schools' successes were due more to the interrelated contributions of the schools' organizational characteristics, positive student-teacher relationships, and ample resources. [gender, educational reform, minority students, educational policy]

Is the separation of students by gender a vehicle for improving the educational experiences of low-income and minority students? This question is particularly salient today as politicians as well as parents and educators push for more school choice in the public sector and strive to replicate the successes of single-sex education that have been documented in the private sector. In this article, we offer a new way of assessing the impact of single-sex public schooling by bringing to life the voices of students and educators. The student composition of schools is clearly a significant determinant of program outcome, but our ethnographic study reveals the importance of understanding student-teacher relationships, the role of resources, and the single-sex school arrangement as an interrelated set of factors that jointly construct the educational experiences of low-income and minority students.

We begin with a review of the relevant literature and competing interpretations of the merits of single-sex education. We follow with a description of our methodology and of the schools in our study. We then provide an analysis of the impact of single-sex public schooling on a sample of low-income and minority students who attended California's experimental, public single-sex academies from 1998 to 2000.

The Context for Single-Sex Public Schooling

In the United States, many efforts to improve the academic achievement of low-income and minority students have been undertaken, including Head Start preschools; comprehensive school restructuring models such as Success for All and Accelerated Schools; and tutoring, mentoring, and after-school programs (Fashola 2002). Recently, as part of a plan to provide additional opportunities for students to choose a "better" school, the Bush administration lessened Title IX restrictions on single-sex schools (U.S. Department of Education 2004). This change has renewed

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interest in establishing single-sex schools within the public school system as a way to address the needs of students who have not been successful in traditional coeducational schools. Assessing the scale of single-sex public schooling is problematic, as some public schools choose to operate single-sex classes or programs covertly (Streitmatter 1999). All-girls math and science classes have been documented in numerous states, including Arizona, Ohio, Minnesota, Colorado, Michigan, and New Jersey. Other examples of single-sex public schools include Afrocentric academies for boys in Detroit, Baltimore, and Milwaukee and the Young Women's Leadership schools in Harlem and Chicago.

Preceding the change in federal legislation, Governor Pete Wilson drafted legislation in 1997 that resulted in the opening of 12 single-gender public academies in California (6 each for boys and girls) in six districts. In a speech in December 1997 at one academy, Wilson stated, "Kids need options . . . and single-gender academies will stimulate competition and give kids opportunities they currently do not have because they are trapped in their schools, and they need another approach." According to the state-level administrators we interviewed, Wilson initially presented a plan for allmale academies as magnet schools for low-income and minority boys and all-female schools focused on math and science. Ideologies about gender, race, and the definition of public schooling appear to have influenced how he envisioned these schools. His initial plans raised concerns among legal advisors and feminists alike. In the end, Wilson's attorneys drafted legislation for single-gender academies that had as its "primary goal" "increase[ing] the diversity of California's public educational offering" within a framework that ensured "equal opportunities at both boys' and girls' academies" (Education Code sections 58520–58524).

Overview of Theoretical and Empirical Research on Single-Sex Schooling

In part, the interest in single-sex public schools as a solution for low-income and minority students is supported by research showing that students' educational experiences vary by gender within and across ethnic and racial groups. For example, low teacher expectations have been shown to disadvantage African American males in public school classrooms (Fordham 1996). African American females fare better by comparison (Hubbard 1999). Teacher expectations are typically lower for low-income and African American students than for middle- and upper-income white students (Diamond et al. 2004; Farkas 1996). Similarly, Latino males and females each face social and academic pressures that differ from those of the other and from those of their white peers, and these pressures themselves vary depending on whether the students live in urban or rural locations (Gibson et al. 2004). Latinas perform less well than other racial and ethnic groups of girls on several key measures of educational achievement (Ginorio and Huston 2001) but have "steadily increased their high school and college graduation rates over the last 20 years," moving ahead of their male peers (Cammarota 2004:53).

Studies specifically focused on single-sex schooling claim that such schools benefit students academically, especially males from low-income and minority backgrounds (Ascher 1992; Hales 1998; Hudley 1995; Riordan 1994). Riordan's (1994) synthesis of findings on single-sex education points to positive effects for girls and minority boys, but not for white boys. He suggests that benefits for African American and Hispanic students are due to single-sex schools' reversal of the "gender stratification norm." In coeducational settings, minority boys are "expected" to fail, in comparison to their white peers and to minority girls. Hudley (1995) notes that the safe and orderly nature of a sex-segregated program benefits some African American boys.

Not all researchers concur that single-sex schooling is advantageous for students. Results are mixed and controversial (American Association of University Women 1998).

For example, Harker (2000) found that separation by sex did not guarantee higher test scores for minority and low-income students in single-sex and coeducational schools in New Zealand. Marsh (1991) concluded that paying attention to more factors, including race and socioeconomic status, challenges older assumptions that single-sex schools ensure positive academic outcomes. Critics also point out that the research showing that single-sex schools positively affect the educational experiences of some boys and girls has been conducted mainly at Catholic schools (Hawley 1992; Hopkins 1997; Riordan 1994). Thus, class differences may account for the observed educational outcomes (Riordan 1992). In addition, Taylor-Gibbs (1988) notes that separating students by gender and in some cases by "race" or ethnicity has been criticized as depriving students' access to mainstream programs. Some analysts assert that gender-based separation constitutes a return to structured inequality, an especially troublesome possibility when single-sex programs target students of particular racial and ethnic groups.

This conflicting evidence has led some researchers to suggest that factors other than school type are more significant contributors to positive student outcomes (Lee 1997). Scholars have long recognized the important role teachers play in students' academic achievement (Acker 1994; Fullan 1999). Empirical work on teacher-student interaction shows that teachers' expectations regarding students' ability influence the construction of educational outcomes (Weiler 2000). Importantly, these expectations often are formed on "the basis of an interplay between students' background characteristics and the institutional practices of the school" (Mehan 1992:16). Moreover, studies show that students receive the most support and elicit the highest expectations from educators when there is a high degree of overlap in values and norms between the two groups (Mehan et al. 1996; Stanton-Salazar and Dornbusch 1995; Vasquez et al. 1994). Some have suggested that this overlap is most likely to occur when students and their teachers are from the same socioeconomic class (Bourdieu 1984; Lareau 1989) or have a common "racial" or ethnic identity (Foster 1991; Ladson-Billings 1994; Lareau and Horvat 1999). Gender matching or mismatching also can affect teacher-student interaction (Grant 1994).

Charting a New Path in Single-Sex Education Research

Is single-sex schooling truly a panacea, or does the answer to improving students' social and academic outcomes lie in other factors? Most of what we know about the effects of single-sex schools is drawn from quantitative, comparative studies of student performance in private-sector schools (Lee et al. 1994; Marsh 1991). We believe qualitative studies, particularly those that provide comprehensive ethnographic data specifically focused on low-income and minority students in public schools, are likely to yield a deeper and more complete understanding of these schools. To clarify the limits and possibilities of single-sex schooling for this group, we advocate replacing cause-and-effect analyses with ones that focus on the multiple, interrelated processes that shape students' academic outcomes (Hall and McGinty 1997; Tharp 1997).

Research on single-sex schools has paid little attention to teacher-student interactions, the school context, or the circumstances of students' lives. These are significant omissions. Diamond et al. (2004:76) have pointed out that the educational outcomes of minority students must be studied on a broader organizational level to understand "how student composition (school context) conditions how teachers evaluate and behave toward students." Because studies of single-sex schools generally have not examined the larger social, economic, and cultural context of students' lives, we know little about the relationship between school context, family background, and academic achievement in these settings.

In the study reported here, we used an ethnographic approach to examine the lived circumstances of low-income and minority boys and girls who attended three all-boy

and three all-girl academies within California's public school system. By focusing on the day-to-day interactions of teachers and students in the context of the single-sex setting and in the context of students' lives, we gained a clearer picture of the mediating factors that can impact the education of adolescents. Based on our interviews with students and teachers at these academies, and with district officials, we argue that the single-sex schools were successful in providing a system of social supports that addressed the serious and pressing needs of these students. The accomplishments of California's single-sex academies were the product of more than the separation of students by gender, however. The rich resources made possible by generous state funding and the strong, positive bonds forged between students and teachers in their everyday interactions played key roles as well. We contend that the interrelatedness of these three sets of factors accounts for the schools' ability to provide positive experiences for this group of students.

Methodology

In 1997 several California school districts launched pilot projects as part of the state's experiment with publicly funded single-sex schools, spearheaded by then-Governor Pete Wilson. The academies recruited students in several ways. Almost all school districts advertised with flyers or sent mailers to students' homes and to administrators and social service agencies. The new schools also received media coverage. Some students were personally informed about the schools by teachers or administrators, others by law enforcement officials or social service providers. In several districts, the single-sex schools gave school officials a new option for placing students. Parents made the final enrollment decision, but they and their children often were strongly encouraged to choose the new academies. The students who participated in our study were challenged by limited English proficiency, poverty, race discrimination, geographical location, or a combination of these factors.

Data Collection

We decided to co-investigate the single-gender academies in part because we share a research background in educational reform with particular attention to educational inequalities as they exist across ethnic, social class, and gender lines. When we learned about the impending state educational experiment in 1997, we approached state officials to gain permission to study all of California's new single-sex public schools. Because state legislators had neglected to fund a formal evaluation of the experiment, state and school administrators were very receptive to our grantsupported research plans. We were interested in knowing the successes and limitations of single-sex public schooling for low-income and minority boys and girls, and we wondered to what extent such an arrangement might empower each gender. group. Over a two-year period (1998-2000), we conducted longitudinal case studies of all six single-sex public academies. Here we report our findings for three: Evergreen and Pine middle schools, and Palm High School (all names are pseudonyms). Each school served large numbers of low-income and minority students. Despite the possibility that the philosophical and structural differences between the three schools might confound our results (e.g., middle versus high school), we focused on these schools because each explicitly identified serving "at-risk" students as its mission. We found no evidence that any of the schools' known differences affected our analysis.

Our three-member research team (the authors and a graduate assistant) visited each of the three single-sex academies five or six times, for two to three days per visit. During the first year of the study, the team comprised two white women and one

Latino male; during the second (and last) year, the team was made up entirely of white females. All three team members had significant experience conducting qualitative research in urban school settings. It is difficult to assess the implications of our subject positions on the conduct or outcomes of the research. We were explicit in our conversations with all of the participants that we approached the single-sex arrangement objectively and, like them, were curious to understand its impact. We were well received by all, including state officials, teachers and administrators, and students.

To gain an understanding of the legislative background and social and political context of the single-sex academies, we interviewed officials at the California Department of Education and the governor's office. Then, using semistructured interview protocols with open-ended questions, we interviewed teachers, principals or academy directors, parents, students, and district officials at each of the schools. We asked about the origin of the academies and why educators and students chose to participate. We asked students to compare their previous school experiences with their current ones, from both an academic and a social perspective. We inquired about the professional background of teachers and noted their plans for staff development, teacher collaboration, and curriculum development. We also asked teachers and principals/directors about their perceptions of the benefits and weaknesses of the single-sex academies. Interviews lasted on average 45 to 60 minutes, although many were longer. Most interviews with adults were conducted individually. The majority of students enrolled in the academies were interviewed individually or in same-sex focus groups of two to four students. Students were chosen for interviews based on random selection as well as on a volunteer basis or upon recommendation by a teacher. All interviews were taped and transcribed at the completion of each site visit. We conducted approximately 300 interviews for this study, including many with students at each of the schools. Evergreen had a total student population of 60 students, Palm had 90 students, and Pine had approximately 140 students enrolled. A total of 88 interviews were conducted with boys (38 at Evergreen, 27 at Palm, and 23 at Pine) and 83 interviews with girls (41 at Evergreen, 27 at Palm, and 15 at Pine), which represents more than half of all of the students who attended the single-sex academies. In some cases, students were interviewed more than once during the course of our study, particularly at Evergreen, where the teachers and students were especially obliging. In addition to the individual interviews, we conducted focus group interviews with girls and boys at Pine. These focus groups included fifth-, sixth-, seventh-, and eighth-grade boys and girls, interviewed separately by sex two to three times over the course of the study.

During observations of single-sex classrooms, we took extensive field notes on student-teacher interactions and student-student interactions, and on the pedagogical strategies in use. Although we rely more extensively on interview data here and do not draw specifically on the observational data, that information informs our understandings of students' experiences at each site. Transcripts of interviews, field notes, and documents, such as original grant proposals and the state documents describing the single-sex academies, were coded and case reports of each of the schools were written to allow for cross-case comparisons. Individual interview transcripts were subsequently analyzed in light of the literature on education, gender studies, and feminist theory to further explore the themes we discuss in this article.

Research Sites

Evergreen Elementary was located in a small, rural, northern California town. At one time, the community drew its vitality from small family farms and logging. Both industries have since almost disappeared, leaving the area without a substantive economic base. At the time of our study, the town consisted mainly of people who were

retired, unemployed, or on welfare. The single-sex academies served seventh- and eighth-graders on the same site as the town's K–8 public school. There were all-girl and all-boy cohorts of approximately 30 students each. The two single-sex academies functioned as magnet schools, drawing students from the entire district, but primarily those from the local community. The students' parents had requested their children's placement in the academies. According to the school's grant proposal, most students were white (53 percent), 37 percent were Latino, and 10 percent were Native American. Test scores showed most students to be 1.5 grade levels below the national average.

Teachers and administrators reported that students were reluctant to excel academically and lacked the ability to effect change in their lives. They attributed this to the lack of positive role models in the small town. As one teacher explained, "What they see is what's in town . . . that's either the ones who dropped out or, you know, weren't able to make it, or maybe even went into the military but then came back When we ask them about careers . . . [they say], 'Oh, we can't do this, or we can't do that.'" The town's geographic isolation added to the students' disadvantages. Most reported never having been outside the state, and some had never traveled beyond Evergreen. Most had never visited a museum or historical site. One female student, recalling a school-sponsored field trip, noted, "Yeah, I saw my first escalator last year." Most insisted they wanted to "get out" of Evergreen after high school, either for college or job opportunities, but the typical pattern was for families to remain in the area. Early pregnancy was another potential barrier, as several girls mentioned to us.

Pine Middle School also was in northern California, but it was located in a predominantly poor, racial-minority school district in an urban area. The school served grades 5 through 8 and had approximately 140 students. Most were Latino (46 percent); the remainder were African American (38 percent) and Pacific Islander (16 percent). The community's low-income population had high rates of unemployment, mobility, and crime. At least 50 percent of the students in the district were identified as limited English-speaking. According to district documents, three of four students were eligible for free or reduced lunch, and most children had limited access to medical and dental resources. Suspension and dropout rates were high (approximately 65 percent for the latter). District administrators and school educators told us the district had the county's highest rate of teenage pregnancy. An extremely high proportion of the community's households were headed by single parents, and many students were living with extended-family members because their parents were addicts or absent from the home. Pine's student body included youths, mainly African American and Latino boys, who had been referred to the school because of poor academic achievement, excessive absences, discipline problems, unresolved health and human service needs, or a combination of these. One boy explained, "I got transferred here because I had a lot of problems at [other] schools." At Pine, another boy told us, "They teach you discipline."

Palm, the single-sex alternative high school, served 90 seventh through twelfth graders and was located in an urban area in southern California. The majority of the students were white (45 percent); the remainder were Latino (39 percent), African American (12 percent), or Asian (2 percent). District administrators or teachers had referred all students to this school. Most came from low-income families and had a history of truancy, gang violence, substance abuse, or other forms of criminal behavior. Many had spent time in juvenile hall, some were victims of sexual abuse, and most lived in violent environments. Some already were parents and had lowered their aspirations accordingly. "I wanted to go to the Air Force," one young girl recalled, "but then I got pregnant and had my baby." Some students blamed their lack of success on their own choices. One boy admitted,

[W]hen I first got kicked out of high school, like, they would keep on asking me, like, how come, like, you don't want to go to school? How come you don't want to attend? And all I could come up with is I don't like school. It's boring. But now that I think about it, even though school could probably be boring . . . it was myself—I would, like, be lazy, and I would be a fool, you know.

Describing the students' needs, Palm's principal said, "They have not been successful in traditional school settings, so we have to find ways of reaching them. We have kids who are 17 and have two kids at home, and they're working during the day and they don't have time for school . . . we have the kind of kids who need help succeeding in life."

The Needs of Students and the Response of Single-Sex Schooling

The students in this study generally were academically underachieving, and in some cases were two grade levels below the national average. Many had come from schools where they had been tracked into general education or remedial classes, and their teachers held low expectations for their success. As a result of these and other factors, some students had been chronically absent or had previously dropped out of school. They typically had low expectations for their own success.

Because California's experiment with public single-sex schools was short-lived, meaningful data on the students' academic outcomes is not available. We do know, however, that a major benefit of the arrangement was the academies' ability to create an academic environment that eliminated "distractions" from the opposite sex and thus allowed students to become more academically focused. Organizationally, the arrangement provided sociological benefits for the students who attended them. A teacher at Palm explained it this way:

For boys, I think the main benefit is that it really does reduce distractions. These are kids who have trouble focusing on schoolwork in the first place, but then when you have guys in the classroom, they usually have to maintain what I call the double image. Image number one is for their homeys, or their male friends, who they want to seem like they're cool, like they don't give a crap, nobody's gonna put them in check, as they say, nobody's gonna control them, so they have that kind of bravado to keep up. And then when you have girls, there's another image that you want to be cool for the girls, you know, you want to impress a girl, you want to go out with her. So when you put the kinds of kids that we deal with into a setting where one of those distractions is removed, you have a better chance at getting to them, at getting them to focus on their work.

A boy at Pine made a similar comment: "When there's girls in here, there's gonna be less learning and, you know, there's gonna be more distractions 'cause, look, when I'm sitting right here . . . and a fine girl walks in, then I'm gonna turn around and start messing with them." Several teachers commented that the setting made certain actions unlikely. When boys did not have girls present, they felt less need to show off, act out, or engage in attention-getting behavior. Likewise, girls who did not have boys present did not have to vie for their attention. Instead of competing with each other, girls learned to work collaboratively, bond as friends, and become more focused on their academic work. Because boys and girls were separated during class time, they did not engage in the usual attention-getting antics prevalent in coeducational settings. They also explicitly recognized the fact that they did not experience harassment from the opposite sex in class. One girl at Pine explained, "Like, you know how you have to write a report . . . [when there were] boys in there, like, we won't want to talk because they be laughing." "I feel it's more comfortable [not to have boys]," another female Pine student said, and then elaborated, "You can express what you feel and like if it's a girl situation, you can talk with girls without boys hearing your business." At the district level, administrators also noted the value of gender separation. In the Pine School District, for example, an administrator commented, "I [and their teachers] can talk to girls about being a mathematician, about being a scientist and they're not worried about that sounding boyish. Or I can talk to boys about being a nurse, or being a teacher without it sounding less masculine."

One major advantage gender separation offered the girls was the freedom to make decisions about their appearance without harassment from the boys. In the Palm academy, a girl explained, "You can come out like in the morning . . . and you don't have to put like makeup on because we're girls and if there were guys here . . . [we would be thinking], 'Oh my god, I can't go like this.'" Another complained, "The guys [made] fun of me, the way I dress." She chose to wear baggy pants, a style that was "in" for boys, but not for girls. "You're supposed to wear these Daisy Duke shorts, you know," the girl said, adding, "They're little." The girls explained that when they dressed up, the boys would whistle at them. This, they said, was "annoying," and although they told the boys to "shut up," the girls felt embarrassed. "And then when you're walking, you know he's checking you out, you know he's staring at you." Although the girls agreed they wished they didn't care what the boys thought, they could "only ignore them for so long [The boys] kept doing it and you just can't get them to stop, you feel self-conscious and think-what's he gonna think about me?" The preoccupation with what the boys were thinking was a serious distraction in the coed setting of the schools the girls had attended the year before. For these young women and many others we interviewed, the single-sex setting was a safe haven that offered them a chance to concentrate on their academic work.

Financial Support: Additional Resources and Opportunities

The organizational arrangements of the single-sex schools were enhanced by the benefits students derived from the schools' extra funding. In 1997, amid a climate of dissatisfaction with public education, California legislators had followed Governor Wilson's lead and passed legislation that allowed school districts to receive \$500,000 to operate single-sex academies at the middle and high school levels. The funding was intended as a development grant; the schools could use the money as they wished. There were important additional conditions, however. The law specified that the monies be divided equally between a district's boys' and girls' academies and required that a district that opened a school for one gender must open a second school for the other. Moreover, both schools had to provide equivalent funding, facilities, staff, books, equipment, curriculum, and extracurricular activities, including sports.

The state funding had an enormous impact on the schools' ability to provide special resources and support for the students who attended them. Students benefited from small classes, and in some cases from extra teachers, special academic tutoring, on-site health care facilities, counseling, and field trips. Several schools also provided computers with the newest and most sophisticated software. The students we interviewed appreciated these advantages. For instance, they remarked on the benefits of small class size (typically 15 to 25 students). The girls at Pine reported that the small single-sex classes allowed them to be more academically focused. They felt smarter and better supported by their teachers, who were willing and able to provide more individualized help in the classroom. One girl said, "[The teachers] help me [because] you work with your teacher one-on-one, and you get the help you need." Students at Palm concurred. Comparing her experience in the single-sex academy with her experience in her former school, one student concluded, "Since [coeducational public schools] have so many people in class most of the time, they just explain [the lesson] to you and that's that." Another student agreed. "All they do is give you

the Bill of Rights [for example], tell you what it is and make you study it They don't go into details." In contrast, "The teachers here, they get into details, they explain things to you, make sure you understand. And they'll go over it until you do understand." Evergreen students also benefited from low student/teacher ratios. The first year of implementation, with a class size of approximately 28 students, each class had two teachers, and students received additional instruction in fine arts from a part-time teacher.

The state grant also gave some educators enough extra time to hone their grant-writing skills and compete successfully for additional funds to run their schools. The director at Pine, for instance, secured a Healthy Start grant to create a case management delivery system that allowed Pine students to receive one-on-one counseling and tutoring. The school formed a monthly disciplinary team composed of representatives from the school district and the city's police and probation departments, and from county health, public health, mental health, child welfare, and child protective services. This team met weekly to coordinate support services for all the students. One result was that Pine students received much-needed health and social services at their school site, a decided benefit for children whose families' precarious financial situations severely limited access to health care. During the school's first year, Pine's director also used Healthy Start funds to hire the Sylvan Learning Center as part of a strategy to improve students' reading skills.

The public schools in the communities we studied had lacked adequate resources for years. The principal of the single-sex academies in the Palm District said, "Why do I go for the single-gender [schools]? What's so great? It's a great opportunity. It's also money. I can do something. If you have a traditional school, you've got to get extra money." Grant funding underwrote the cost of the much-desired computer technology. Students learned to create PowerPoint presentations and conduct video-conferencing calls with experts from a vast array of occupations. The administrator compared this funding opportunity with the operating budget of another alternative public school in the area: "They are on a bare-bones budget. They buy nothing. They've got nothing going on over there. They buy only paper and pencils, and even

then, they are 'still in the red.'"

In coed schools, it is often assumed that interests and talents are gendered. Because the state grant required an equitable distribution of resources, both boys and girls were able to develop expertise in computers that increased their feelings of competence and sense of future opportunities. Funds broadened expectations for Evergreen students through field trips. School officials purchased vans to transport students outside their isolated rural community. Trips to Sacramento and San Francisco, and visits to college campuses gave students an expanded worldview, an awareness of opportunities never before envisioned. Camping trips allowed boys and girls to face challenges they had not previously attempted. Students boasted happily of their sixmile hike to the top of a mountain. An unanticipated benefit emerged among the parents who accompanied their children on the field trips. These adults became aware of opportunities that were available to them as well as to their children.

The Influence of Caring Teachers

The single-sex organizational arrangement spared students the distractions and negative aspects associated with coeducational schools. Students also benefited from the reduced class size, equal access to curriculum, and opportunities for academically and socially enriching experiences provided by state support. The success of the single-sex academies derived from more than these factors, however. The influence of caring educators who worked closely with the students was crucial. Some teachers in our study clearly shared gender, race, and socioeconomic backgrounds

with their students; we found that in these cases, student-teacher conversations seemed especially effective. But this kind of alignment was not a sufficient explanation for the positive interactions we witnessed overall. Rather, what seemed key is what Noddings (1992) has referred to as "authentic caring." The students in this study often lacked academic peers and faced many challenges both academically and socially. As Valenzuela (1999) points out, when youth become unavailable to each other as potential models for success or as providers of support, caring teachers become that much more salient. The most successful teachers we observed believed that "learning should be premised on a relation with teachers and other school adults, having as their chief concern their students' entire well being" (Valenzuela 1999:13).

Consider the following exchange between an interviewer and two high school girls at Palm:

Interviewer: Is it [Palm] better or is it worse [than the last school you attended]?

Girls: It's better. (both respond)

I: Why is it better?

Girl: Well, 'cause it makes people want to learn here instead of other schools.

I: How does it make you want to learn?

G: 'Cause they teach us in an interesting way—because it's really interesting

how they teach us—and we stay more focused. And the teachers are really nice and that's really important. 'Cause if a teacher's mean, you don't want to listen to them. But our teachers are really nice, so it works out good.

Caring teachers imparted social and moral lessons as well as academic ones. The teachers' ability to address the full range of their students' needs was enhanced by gender separation. Teachers reported that their students had come to believe, through the messages they received in their homes, schools, communities, or peer groups, that the goals of dating, marriage, and even early pregnancy were preferable to academic achievement. The teachers worried that their students were living in a fantasy world that was leading them to make choices that could damage their immediate and future lives. A teacher at Palm commented that the female students seemed to believe the notion that "they will marry Prince Charming and live happily ever after." Many were convinced that "the boy who goes to bed with me is the boy who will marry me." The boys, on the other hand, felt certain they could prove their manliness by having many sexual partners. Romance took precedence in these young women's and men's lives. The teachers worked hard to prevent this misplaced romanticism from derailing their students' academic progress. One student recounted the following advice from a teacher: "The ones you love the most will always like hurt you, so, like, marry the one that loves you the most."

According to teachers in the single-sex academies, their students were in desperate need of sound advice. In many cases the single-sex setting seemed particularly well positioned to address these needs. Teachers said that the absence of students of the opposite sex made it possible to have candid conversations that were essential to their students' well-being. The students affirmed this: "We can talk to them [teachers]," one girl said, and then continued, "They're not like the type of teacher that won't They care about us and we can talk to them about anything and they won't say nothing." Another student, describing a teacher, attested, "He's like the coolest teacher in the world. He's nice, he's kind of . . . he psycho-babbles but, you know."

School administrators reported, however, that attracting and keeping good teachers at these schools was very difficult (Hubbard and Datnow 2002). Teacher and administrative turnover created dire consequences for students whose lives were already plagued by instability. Some students complained they could never be sure who the teacher might be because substitutes appeared frequently. This instability added to their

feelings of confusion and anomie. Even when students had permanent teachers, they were often new, inexperienced, and frequently knew little about working with low-income and minority youth. There were, however, some very important exceptions.

We found that when single-sex academies were able to attract and retain teachers willing to be involved and engaged with students on multiple levels, the results were overwhelmingly positive. Although six out of the eight teachers at the Pine academy needed or wanted to be replaced in the school's second year, the two teachers who had been on site from the beginning developed close, trusting relationships with their students. Students viewed their teachers as important confidents. A girl at Pine commented, "I feel comfortable around my teachers. I trust my teacher Šhe helps me through." A student at Palm said, "I've come to him before with other stuff...'cause, like, I can trust him. He won't, like, go and tell all the teachers." The single-sex teaching environment contributed significantly to the students' level of comfort and willingness to have important personal discussions with their teachers. One girl explained that in the coed environment of her former school she had felt unable to talk to any of her teachers or to anybody else. Referring dismissively to the counselor in her old school, this girl said she "didn't trust her." The student insisted she would not go to this counselor with a problem she was experiencing at home, even though her home life was threatening her academic success. A boy at Pine also found the teachers to be people who cared about him, in contrast to the situation at his last school, where the teachers would "go out of their way to put you down; you just can't undo it, so you just quit, and give up on them."

Our point is not that all teachers at single-sex schools are caring while all those at coed schools are uncaring. Rather, our interview data and observations indicate that when the setting is supportive and caring teachers are present, teachers can relieve the anxiety and stress that impedes students' achievement. This is a major contribution. Freedman (1999:G1) has discussed the significant role that anxiety plays in causing kids to "fall, jump or [get] pushed down life's stairs." Today's children are anxious from the moment they wake up until they go to bed. They worry about belonging, being accepted, and being good enough. They worry about getting enough to eat, having a secure place to sleep, preserving their personal safety inside and outside school, and maintaining their emotional balance. They worry about their physical survival and their emotional security. The students in our study faced especially serious life problems. During a group interview with seventh-grade girls at Pine, we listened as students confessed their fears over drugs and peer pressure, worrying that they might be unable to say no. They feared for the life of a mother, father, or grandparent and worried they might be left with no one with whom to share their lives. They were concerned about prior experiences with sexual harassment and fretted over feeling unsafe in their neighborhoods and even in their homes. Their message was painfully clear: These students not only needed but also depended on the personal help they could get from their teachers. Such help was much more often found in the single-sex schools. One young girl at Palm made this especially clear, noting, "That's what I like about [this school], that the teachers really care and they put a lot of time and effort . . . like sometimes, they even stay late just, like, for us and they don't have to stay late." One of her peers added, "Yeah, most schools, like continuation schools, treat you like you fucked up somewhere and [here] they treat us like people."

In their study of Advancement Via Individual Determination (AVID), an educational reform program, Mehan et al. (1996) concluded that the students' success was due largely to the support they received from dedicated AVID teachers who generously took on the roles of counselors and advocates. These teachers offered a system of social supports or "social scaffolding" that kept high school students on the academic track and made them eligible for college. Many of the teachers in the single-sex schools offered similar kinds of support. Single-sex academy teachers claimed they were deliberate in talking to their students about their personal lives and family circumstances. They saw

teaching in these schools as an opportunity, in a safe environment, to talk openly with their students. Moreover, they felt such interactions were part of their job.

At the Pine academy, Ms. Martinez used "Tribes," a curriculum designed to encourage students to share their personal feelings, to address her students' needs. She explained her decision to organize classroom discussions to include conversations about the girls' family circumstances this way:

I have a few mothers [of my students] who have just been incarcerated for a couple of years and are coming out this year and it's very hard on the child[ren] because now [they] have a tug. But the mothers are saying, "I'm very open. My child knows I did blah, blah, blah. But I still love my child and I don't want them to go down that road."

Loving their mothers but hating their destructive actions and the resulting incarceration created burdens that distracted these young girls and undermined their ability to concentrate on school work. Ms. Martinez assured her students she would be there for them. She called them at home and strongly encouraged them to turn in assignments and not let their grades slip.

It was common for caring teachers to help their students with more than academic matters. Their involvement extended to checking on students when they failed to come to school. One male student told us, "If you don't call the school and tell them that you're going to be late and then they might just . . . call your house or if they don't get no answer then, they'll just come to your house." Other times, teachers offered what McGinty (1999:117) has referred to as "idiosyncratic credit." Realizing that students could not concentrate on schoolwork when they were plagued by real-life concerns, some teachers allowed their students to deviate from the norm. For instance, students facing serious problems at home were allowed to go home and resolve the issues. This academic leeway kept students from dropping out of school or compromising their enrollment status within the system.

Teachers at the three schools understood the pressures their students faced, anticipated their difficulties, and were prepared to help them strategize ways to circumvent or overcome them. The schools' single-sex setting made possible the kinds of conversations that needed to take place. A Latina teacher who taught eighth-grade girls at Pine provided an example. Using her street-savvy perspective, she imparted some hard lessons to her girls about careers, dating, husbands, and pregnancy:

You know from all the colleges and all the places that I've been, I've never heard a man say, "I love this woman because she swears like a sailor," or, "I love my woman because she beats up everybody on the block." Or, "I love my woman because she had nine kids but don't have no job." You know, I never hear that. I said, "How many of the relationships that you've seen—the woman is on welfare and the boyfriend's trying to do something, he gives her two or three babies and he takes off?"

She gave this kind of counsel because she cared and because she had time alone with the girls. Engaging in unprotected sexual relationships is a serious issue for adolescents. There is a critical need for open, candid discussions about the risks of pregnancy. Students convince themselves that they will be the exceptions; they will not become pregnant, or if they do, the pregnancy will not negatively impact their lives. Most public school health classes address this topic, but according to the students in our study, conversations in those classes were less candid and therefore less helpful than the discussions in the single-sex academies. Students claimed they found talking in the coed settings embarrassing and were reluctant to speak out. The situation was different in the single-sex setting.

At Palm, Roberto, a Latino teacher who taught both boys and girls (at separate times), consciously utilized the single-sex setting to connect with his students and offer them the gender-specific, real-life advice he felt they needed. Students con-

firmed that he gave "good advice"—in fact, "better advice than the other teachers." When we encouraged Roberto to tell us about his strategy for helping students, he said the "advice" he gave was a deliberate, significant part of his curriculum:

I try to be real with them. I have the experiences. I come from a gang background, drug environment, the whole shebang. . . . My father was in prison, I know that lifestyle, my mother's been, you know, with these abusive men, and I know what's going on. And my younger sister, my 18-year-old sister, . . . I thought she was gonna make it; she graduated from high school but ended up getting pregnant before she graduated, and this guy dumps her and gets married with somebody else, and leaves her a single mother, so. . . .

Roberto was honest and straightforward with the girls *and* the boys, as these details from his description of a typical conversation show:

You know, when these guys are saying, "Yeah, I'm getting it on with . . . oh, yeah, so many girls," I say, "You know what, man, you better be responsible and" . . . I say, . . . "it might seem glamorous to you, but let me tell you the reality of things." . . . With the girls, the girls tend to open up and say, "I have a boyfriend, oh, look at my hickeys." . . . And I say, "These guys sound so good, let me tell you what they're saying, 'Hey, baby . . . you look so great, you know." . . . And so I try to tell them. Yes, I try to give them my stories and my background.

Roberto admitted he had "a lot of stories to share with them" and believed that "in that sense [he did] get through to some of them." The students agreed.

Conclusions and Implications

As is increasingly common, the needs of many of the students in our study had been inadequately met in their previous schools. The single-sex setting gave them an opportunity for another chance at a successful academic life. Freed from the distractions of the other gender, students were able to focus on their lessons in a new and more meaningful way. They also were able to have more intimate and open conversations with peers and teachers.

State funding for the single-sex public schools helped by providing monies for resources and special services that were sadly absent from other schools. The benefit of state funding was starkly clear when funds for the single-sex schools were not awarded the second year. At Evergreen, the loss of funding resulted in a rapid deterioration of the situation for students in the single-sex setting. The teaching staff was reduced, extra programs that dealt specifically with the needs of low-income students were cut, and by year 3, Evergreen had closed its doors. At the time we ended our study, of the six original academies, Pine was the only one still open—thanks to continuing district support. Even with that support, however, Pine administrators were scrambling to get more grant funds in order to keep the school open. Finally, Palm closed its doors, much to the sadness of students, teachers, and parents; the district administration refused to cover the added expense created by the single-sex setting.

Students' positive experiences were not the sole result of separating students by gender, or of the extra support provided to them through generous state funding. Successful outcomes relied heavily on the special care offered by some of the teachers. Attracting and keeping teachers at the single-sex academies, however, was difficult, and high teacher turnover undermined opportunities for nurturing trusting teacher-student relationships. Fortunately, some of the teachers at the academies believed it was their responsibility to provide emotional and moral guidance, as well as academic support. These teachers' willingness to talk about "real life," providing advice about dating, marriage, and pregnancy, produced clear benefits for their struggling students.

In sum, we found that three important, interrelated conditions contributed to the positive experiences of low-income and minority students: the single-sex setting,

financial support from the state, and the presence of caring, proactive teachers. School administrators supported this nontraditional curriculum, sought resources that would benefit the nontraditional student body, and allowed more open in-class discussions about the personal and practical, not merely the academic. Although the organizational setting was clearly helpful to the students, resources and caring teachers were integral components of successful outcomes.

If the single-sex arrangement is to significantly benefit students, it must be expanded to include a more comprehensive agenda of opportunity. Learning is a privilege enjoyed by those who are relatively unencumbered by life's problems. The students in this study were unable to attend to the complexities of algebra and biology because their lives were laden with anxiety and pain. Without a system of supports similar to that provided by these single-sex settings, and without the money provided by the grant, students may continue to falter, following pathways that lead to no education, no job, and no future.

Our conclusions would not have been possible without the insights gained from a careful ethnographic analysis. Attending to the details of the everyday lives of boys and girls in single-sex public schools provides a new understanding of what it takes to construct academic success. Meaningful change must include a broadened inschool support structure that is deliberate in its intentions to craft a curriculum and pedagogy that meet student needs—a strategy that insists on the recognition that school boundaries blur with the realities of life. This approach could encompass single-sex classes or some single-sex "pull-out" time, within the context of a coed school. With the loosening of federal funding that is available to start such schools, we are likely to see the advent of many new single-sex schools. The growth of these schools will provide an opportunity to further investigate the experiences of low-income and minority students. Our research shows, however, that the "devil is in the details." If our most challenged students are to succeed, educators and policymakers must make emotional and social as well as academic knowledge explicit. Leaving such messages to chance is likely to doom any educational organizational arrangement, new or old.

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Notes

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1. The California legislation uses the term *single-gender*, yet one could argue that *single-sex* is a more appropriate term to describe the separation of boys and girls. Typically, the terms *sex* and *gender* refer to the biological and social characteristics, respectively, of being male and female. However, for the purposes of this article, we use both the terms *single-sex* and *single-gender*, typically using *single-gender* to maintain consistency with the language of the California experiment and the term *single-sex* to refer to prior research.

References Cited

Acker, Sandra

1994 Gendered Education: Sociological Reflections on Women, Teaching and Feminism. Bristol, PA: Open University Press.

American Association of University Women

1998 Separated by Sex: A Critical Look at Single Sex Education for Girls. Washington, DC: Author.

Ascher, Carol

1992 School Programs for African American Males and Females. Phi Delta Kappan 73(10):777–782.

Bourdieu, Pierre

1984 Distinctions: A Social Critique of the Judgment of Taste. Richard Nice, trans. Cambridge, MA: Harvard University Press.

Cammarota, Julio

2004 Gendered and Racialized Pathways of Latina and Latino Youth: Different Struggles, Different Resistances in the Urban Context. Anthropology and Education Quarterly 35(1): 53–74.

Diamond, John, Antonia Randolph, and James Spillane

2004 Teachers' Expectations and Sense of Responsibility for Student Learning: The Importance of Race, Class, and Organizational Habitus. Anthropology and Education Quarterly 35(1):75–98.

Farkas, George

1996 Human Capital or Cultural Capital? Ethnicity and Poverty Groups in an Urban District. New York: Aldine de Gruyter.

Fashola, Olatokunbo

2002 Building Effective After-School Programs. Thousand Oaks, CA: Corwin Press.

Fordham, Signithia

1996 Blacked Out: Dilemmas of Race, Identity and Success at Capital High. Chicago: University of Chicago Press.

Foster, Michele

1991 Constancy, Connectedness and Constraints in the Lives of African American Women Teachers. National Association of Women's Studies Journal 3(2):70–97.

Freedman, Jonathan

1999 Saving Our Students: Youths Need Continuity in Teacher and Classmates at Least Once a Day to Provide Intellectual, Emotional, and Social Support. San Diego Union Tribune, November 28: G1, G6.

Fullan, Michael

1999 Change Forces: The Sequel. London: Falmer Press.

Gibson, Margaret, Patricia Gándara, and Jill Koyama, eds.

2004 School Connections: U.S. Mexican Youth, Peers and School Achievement. New York: Teachers College Press.

Ginorio, Angela B., and Michelle Huston

2001 Sí, Se Puede! Yes We Can: Latinas in School. Washington, DC: American Association of University Women Educational Foundation.

Grant, Linda

1994 Helpers, Enforcers and Go-Betweens: Black Girls in Elementary Schools. *In* Women of Color in America. Maxine Baca Zinn and Bonnie T. Dill, eds. Pp. 43–63. Philadelphia: Temple University Press.

Hales, Michael

1998 A Comparison of the Progress of African American Students Attending Single Gender/Single Race and Mixed Gender/Mixed Race Classes in Four Elementary Schools. Unpublished doctoral dissertation, University of Maryland, Department of Education.

Hall, Peter M., and Patrick J. W. McGinty

1997 Policy as the Transformation of Intentions: Producing Program from Statute. Sociological Quarterly 38(3):439–467.

Harker, Richard

2000 Achievement, Gender and the Single Sex/Coed Debate. British Journal of Sociology of Education 21(2):203–218.

Hawley, Richard A.

1992 A Case for Boys' Schools. Independent School 52(1):53.

Hopkins, Ronnie

1997 Educating Black Males: Critical Lessons in Schooling, Community and Power. Albany: State University of New York Press.

Hubbard, Lea

1999 College Aspirations among Low-Income African American High School Students: Gendered Strategies for Success. Anthropology and Education Quarterly 30(3):363–383.

Hubbard, Lea, and Amanda Datnow

2002 Are Single-Sex Schools Sustainable in the Public Sector? *In* Gender in Policy and Practice. Amanda Datnow and Lea Hubbard, eds. Pp. 109–132. New York: RoutledgeFalmer.

Hudley, Cynthia

1995 Assessing the Impact of Separate Schooling for African American Male Adolescents. Journal of Early Adolescence 15(1):38–57.

Ladson-Billings, Gloria

1994 The Dreamkeepers: Successful Teachers of African American Children. San Francisco: Jossey-Bass.

Lareau, Annette

1989 Home Advantage: Social Class and Parental Intervention in Elementary Education. New York: Falmer Press.

Lareau, Annette, and Erin M. Horvat

1999 Moments of Social Inclusion and Exclusion: Race, Class, and Cultural Capital in Family-School Relationships. Sociology of Education 72(1):37–53.

Lee, Valerie E.

1997 Gender Equity and the Organization of Schools. *In* Gender, Equity, and Schooling. Barbara Bank and Peter Hall, eds. Pp. 135–158. New York: Garland.

Lee, Valerie E., Helen Marks, and Tina Byrd

1994 Sexism in Single-Sex and Coeducational Independent Schools. Sociology of Education 67(2):92–120.

Marsh, Herbert W.

1991 Public, Catholic Single-Sex and Catholic Coeducational High Schools: Their Effect on Achievement, Affect, and Behaviors. American Journal of Education 99(3):320–356.

McGinty, Sue

1999 Resilience, Gender, and Success at School. New York: Peter Lang.

Mehan, Hugh

1992 Understanding Inequality in Schools: The Contribution of Interpretive Studies. Sociology of Education 65(1):1–20.

Mehan, Hugh, Irene Villanueva, Lea Hubbard, and Angela Lintz

1996 Constructing School Success: The Consequences of Untracking Low Achieving Students. Cambridge, UK: Cambridge University Press.

Noddings, Nel

1992 The Challenge to Care in Schools: An Alternative Approach to Education. New York: Teachers College Press.

Riordan, Cornelius

1992 Single and Mixed Gender Colleges for Women: Educational, Attitudinal, and Occupational Outcomes. Higher Education 15(3):327, 336–345.

1994 Girls and Boys in School: Together or Separate. New York: Teachers College Press.

Stanton-Salazar, Ricardo D., and Sanford M. Dornbusch

1995 Social Capital and the Reproduction of Social Inequality: Informational Networks among Mexican-Origin High School Students. Sociology of Education 68(2):116–135.

Streitmatter, Janice

1999 For Girls Only: Making a Case for Single Sex Schooling. Albany: State University of New York Press.

Taylor-Gibbs, Jewelle

1988 Young, Black, and Male in America: An Endangered Species. Dover, MA: Auburn House.

Tharp, Roland G.

1997 From At-Risk to Excellence: Research, Theory, and Principles for Practice. Santa Cruz, CA: Center for Research on Education, Diversity and Excellence.

U.S. Department of Education

2004 Federal Register, March 9, 2004 (vol. 69, no. 46), http://www.ed.gov/legislation/FedRegister/proprule/2004-1/030904a.html, accessed June 14, 2004.

Valenzuela, Angela

1999 Subtractive Schooling: U.S. Mexican Youth and the Politics of Caring. Albany: State University of New York Press.

Vasquez, Olga A., Lucinda Pease-Alvarez, and Sheila M. Shannon

1994 Pushing Boundaries: Language and Culture in a Mexicano Community. New York: Cambridge University Press.

Weiler, Jeanne Drysdale

2000 Codes and Contradictions: Race, Gender Identity, and Schooling. Albany: State University of New York Press.



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