



CLPP *working paper*

CAPTURING LATINO STUDENTS IN THE ACADEMIC PIPELINE

Patricia Gándara, Editor
Katherine Larson
Hugh Mehan
Russell Rumberger

May 1998

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Chicano/Latino Policy Project**



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The Chicano/Latino Policy Project (CLPP) is an affiliated research program of the Institute for the Study of Social Change at the University of California, Berkeley. The CLPP supports, coordinates and develops research on public policy issues related to Latinos in the United States and serves as a component unit of a multi-campus Latino policy studies program in the University of California, Berkeley. Although the CLPP's current research focus is Latino Youth, the CLPP supports and encourages the development of research from a wide range of disciplines, including, but not limited to education, health care, immigration and political participation, and labor mobility.

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A summary of this report is available at <http://www.ucop.edu/cps/pipeline.html>, or you may request the paper version of this Policy Brief by calling the CPS at (510) 643-9328.

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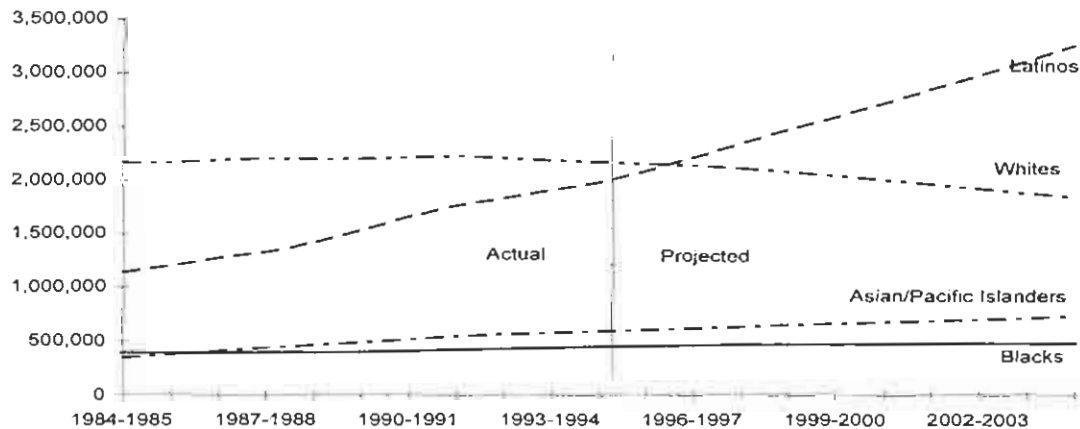
CHAPTER 1 INTRODUCTION

Latinos now make up the single largest ethnic group in California's public schools (California Basic Educational Data System, 1997). Unfortunately, they also have the highest dropout rate of any ethnic group (Rumberger, 1991). These facts create an obvious challenge for a state attempting to reform its education system and raise its educational productivity. This paper reports on three projects in California that have attempted to stem the tide of Latino dropouts and increase the college-going rates of this population. The three programs we review here, ALAS, AVID, and Puente, have each tested a set of strategies aimed at increasing the educational achievement of Latino students. While the aims of the programs are similar, their strategies differ according to the segment of the population they target and the ways in which they deploy their resources. There are important lessons to be learned from these programs and their impact on students and their families. Moreover, it is critically important to the future of the state that California capitalize on efforts such as these, which have been systematic, grounded in research and theory, and evaluated under stringent conditions.

CALIFORNIA'S GROWING LATINO POPULATION

The Latino population in California is exploding. According to California State Department of Finance estimates, the Latino public school population is projected to triple in size between 1984 and 2004, while the white population is projected to decrease over this same period (see Figure 1.1).

Figure 1.1 California K-12 Enrollment by Major Ethnic Groups, 1984-2004



SOURCE: California State Department of Finance, "K-12 Graded Public School Enrollment by Ethnicity, History and Projections--1995 Series."

Consequently, if the overall educational achievement of California students is to be improved, it is especially important to understand and address the educational achievement of Latino students.

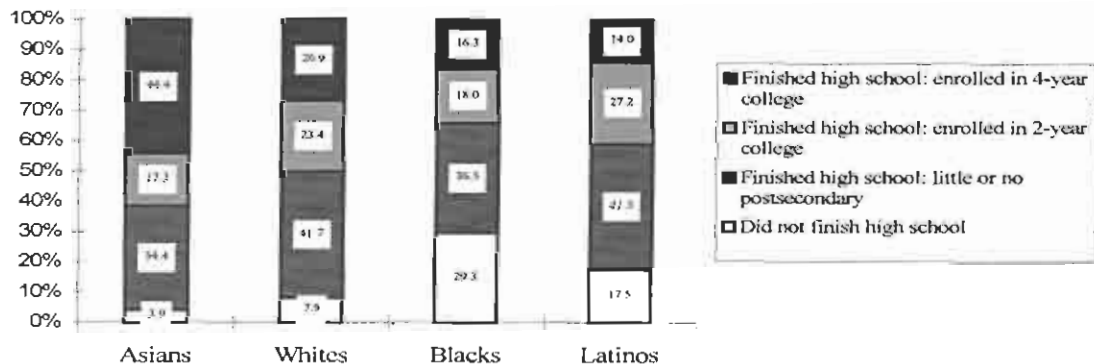
Close to 85% of the California Latino population is of Mexican descent (Latino Eligibility Study, 1993). These Latinos have been cited as more educationally "at risk" than non-Mexican Latinos, largely because of their low rates of persistence in school (De la Rosa and Maw, 1990; Aguirre and Martinez, 1993).

THE LATINO EDUCATIONAL PIPELINE

The educational attainment of all Latinos is significantly lower than that of other ethnic groups both in the United States and in California. In 1995, 30% of all Latinos in the United States ages 16 to 24 had left high school without finishing, compared to 9% of whites and 12% of blacks (McMillen, Kaufman, and Klein, 1997, Table 5). Also, Latino high school graduates are less likely to attend college. Of the 76,000 Latinos who graduated from California high schools in 1995, only 3.5% (2,700) enrolled in the University of California, compared to an overall enrollment rate of about 13% for all California high school graduates (California Postsecondary Education Commission, 1996, Profile Series 6-2). A major challenge in the state of California is to improve the rates of both Latino high school graduation and college attendance.

The flow of students through the various levels of the educational system is sometimes referred to as the educational pipeline. The U.S. government tracks cohorts of students as they move through the educational system; one such database is the National Education Longitudinal Survey of 1988 (NELS:88), a longitudinal panel study of a cohort of eighth graders begun in 1988 (Carroll, 1996). Of the 13,120 NELS students in the third follow-up panel, 1,281 attended school in California in 1988.¹ This sample of California NELS:88 students is useful for analyzing the educational pipeline of Latino students in California.²

Figure 1.2 Educational Attainment of California Eight Graders by Ethnicity



SOURCE: National Educational Longitudinal Survey of 1988. Third-follow-up California Panel (N = 1281)

Figure 1.2 shows the 1994 distribution of educational attainment of California Asian, white, black, and Latino students who were enrolled in the eighth grade in 1988. Consistent with other data, the

¹ When compared with official school enrollment figures, the ethnic distribution of weighted sample of California NELS:88 respondents appears to be similar to the actual ethnic distribution of California students enrolled in 8th grade in the 1987-88 school year. See Rumberger et al., 1997, Appendix Table A.1.

² We weighted the sample in all the figures to provide more accurate estimates of the California population of eighth graders.

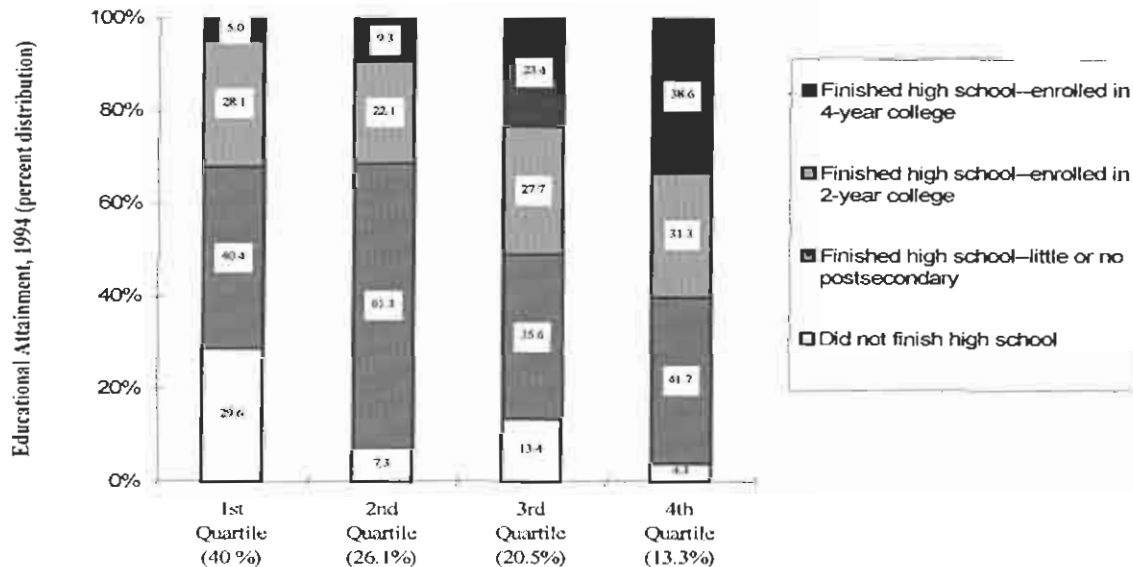
figures show wide disparities in the educational pipeline among ethnic groups. Whereas by 1994 only 4% of Asian students and 8% of white students had left high school without finishing, more than 29% of black students and 17% of Latino students had.³ The other large disparity was enrollment in four-year colleges: 44% of Asian students and 27% of white students were enrolled, compared to only 16% of black students and 14% of Latino students.

WHY LATINO STUDENTS ARE AT RISK

Research has identified a variety of factors that account for the disparity in educational attainment among ethnic groups (e.g., Fernández, Paulsen, and Hirano-Nakanishi, 1989; Velez, 1989; Rumberger, 1991). Some of these factors have to do with the characteristics of students, such as their educational background, attitudes toward school, and social behaviors.

Latino students are at risk in part because they have lower levels of educational achievement in elementary and middle school, which reduce their chances of finishing high school and attending college. To illustrate, students who participated in NELS:88 were administered a series of tests in reading, math, science, history, and social studies in the eighth grade. Test scores were standardized across the entire population of eighth graders and reported in quartiles, such that 25% of all eighth graders had scores within each quartile. Reading test scores for California Latino eighth graders and their subsequent level of educational attainment are shown in Figure 1.3.

Figure 1.3 Educational Attainment of California Latinos by Eighth Grade Reading Scores



SOURCE: National Educational Longitudinal Survey of 1988, Third Follow-up California Panel.

³ The black sample size is only 62, so the figures for black students may have a high degree of error.

Forty percent of all California Latino students scored in the lowest quartile of reading scores and 26.1% scored in the second quartile; only one-third of all Latino students scored above the 50th percentile in reading. Students who scored in the lowest quartiles in reading were much less likely to finish high school and to attend college. Among students who scored in the bottom quartile, 30% never finished high school and only 5% were attending four-year colleges two years after their expected high school graduation in 1992. In contrast, among students who scored in the highest quartile in reading, more than one-third were attending four-year colleges and less than 5% failed to complete high school. While the educational situation for Latino students in California is in urgent need of attention, the political situation in the state renders the needed interventions problematic.

Latino students are at risk not only because of their individual characteristics but also because of the characteristics of their families, schools, and communities. Both researchers and school practitioners have come to realize that the various settings or contexts in which students live—their families, schools, and communities—all shape their behavior and influence their academic success (Jessor 1993). A recent report by the National Academy of Sciences on the problems of adolescence points out that too much emphasis has been placed on "high-risk" youth, and not enough on the high-risk settings in which they live and go to school (National Research Council, Panel on High Risk Youth, 1993).

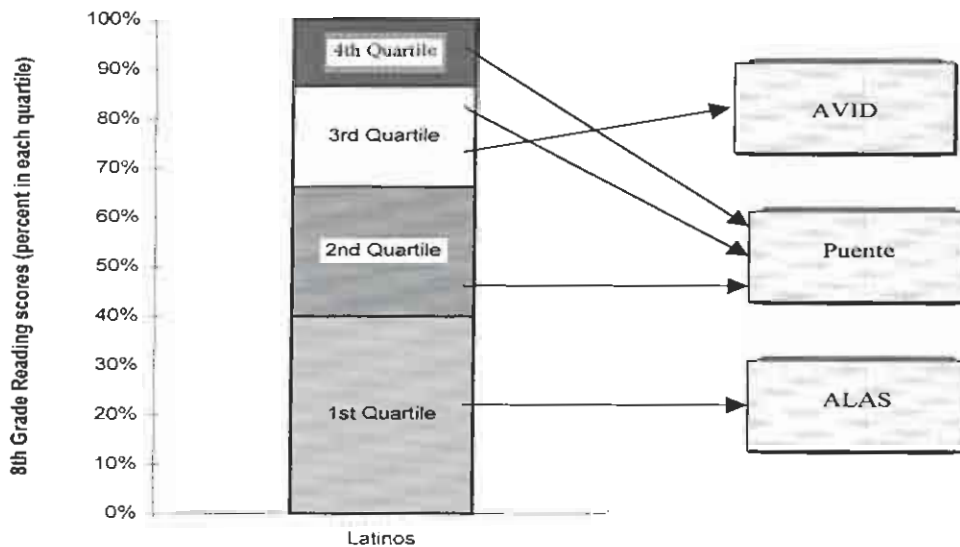
Many Latino students live and go to school in high-risk settings. For example, in 1995 Latino children 18 years old and younger were more than twice as likely as white students (39% versus 16%) to live in poverty, and young Latino children 3 to 5 years old were almost seven times as likely as white students (27% versus 4%) to have parents who had not completed high school (U.S. Department of Education, 1997: Figures 1 and 3). Research has shown that both factors have a strong influence on educational achievement. In 1993-94, Latino children were twice as likely to attend a high poverty school as white students (U.S. Department of Education, 1997: Figure 5). Research has found that the learning environments and resources differ markedly between high poverty and low poverty schools. For example, teachers in high poverty schools are more likely to report problems of student misbehavior, absenteeism, and lack of parental involvement than teachers in low poverty schools; teacher salaries and advanced training are also lower in high poverty schools than in low poverty schools (U.S. Department of Education, 1997: Figures 6 and 7, Supplemental Table 56-2).

IMPROVING THE EDUCATIONAL ACHIEVEMENT OF LATINO STUDENTS

To remain economically competitive in the twenty-first century, California must improve the educational achievement of its growing number of Latino students. This report describes three innovative programs that target different segments of the Latino population, each program differs in the reasons its target population is at risk of educational failure.

The first program, ALAS, targets the lowest achieving Latino students who have the greatest risk of dropping out of high school. These students can be considered *comprehensively at risk* because poverty, social conditions, and family instability often compound the problems encountered in schooling. Hence, this is a comprehensive program addressing the needs of families as well as students and has been piloted at the middle school level. The second program, AVID, targets *academically underachieving* students with above-average test scores at the high school level and attempts to move them into a college preparatory academic track. These students generally come from lower income communities where they may not receive consistent support to fulfill their academic promise. AVID's focus is directly on the students. The third program, Puente, targets students who are more *generally at risk* for reasons such as attending high schools where small percentages of students go on to college and where social problems commonly derail students' academic aspirations. Puente includes students along nearly the whole continuum of academic achievement with the aim of ensuring that they complete high school and go on to college. It focuses on high school students in the context of their communities, relying on community-based adult mentors to provide support and encouragement. Differences in the academic achievement levels of students in the three programs are illustrated in Figure 1.4.

Figure 1.4 Targeted Populations for AVID, Puente, and ALAS Programs



SOURCE: Chapters 2-4.

THE POLITICAL CONTEXT OF LATINO EDUCATION

ALAS, AVID, and Puente have targeted their efforts at the segment of the population that the data show is in greatest need—Latino youth (and, in the case of AVID, to a broader group of low-income students as well). However, the political context in the state has not been hospitable in recent years to such targeting of resources. In November 1994, California voters passed Proposition 187, which curtailed all services, including education, to undocumented immigrants. Then on July 20, 1995, the Regents of the University of California passed SP-1, a resolution barring the consideration of racial or ethnic background as one of the criteria for admission to the university or participating in its programs. More recently, in November 1996, voters passed the California Civil Rights Initiative (Proposition 209), which prohibits consideration of race or ethnicity in state hiring, admissions, and provision of government services. This series of initiatives has eroded the basis for targeting particular "at risk" students for special assistance, replacing it with a "color blind" policy that may only consider socioeconomic status. Unfortunately not all low-income groups experience the same academic disadvantage. In fact, upper income Latino students do not perform as well as working class white and Asian students on SAT examinations, which have become increasingly important in college admissions decisions (University of California Outreach Task Force, 1997).

While these initiatives claim to "level the playing field" by ignoring race and ethnicity, social science research over the last half-century has demonstrated that such restrictive policies only limit access to avenues of opportunity. As Rumbaut and Cornelius so cogently note,

Given this climate of opinion, it was a natural progression to move from steps to reduce immigrants' access to basic human services (Proposition 187) to renewed attacks on bilingual education and other programs seen as benefiting immigrants and other minorities, and to

attempts to create a more exclusionary concept of U.S. citizenship. (Rumbaut and Cornelius, 1995, p. 9)

The effects of these policies on the Latino population are clear: because many Latinos are immigrants, both legal and illegal, reduced access and fear of exclusion from social services, including education, only exacerbates an already difficult relationship between Latinos and the schools. Moreover, there are also consequences for the society as a whole. As educational opportunity is diminished for Latinos, and fewer and fewer students are able to navigate successfully through the educational pipeline, the California and national economies will pay in lost dollars and cents. A recent RAND Corporation report concluded that

Hispanics with a bachelor's degree will pay more than twice as much in taxes as those with only a high school diploma, and Hispanics with a professional degree will pay an estimated three times as much as those with a bachelor's degree. (Sorensen et al., 1995, p. 2)

Sorensen et al. (1995) further computed that if Hispanic participation in higher education nationally were raised to the level of whites for a single cohort of students, this would result in a \$30 billion increase in federal tax payments and a \$6.6 billion increase in contributions to Social Security and Medicare. On the other hand, failing to increase the educational attainment of Hispanics, "will exact a high economic toll for individuals and for society. Given the experience of other undereducated groups, there are certainly concomitant human, social and political costs" (Sorensen et al., 1995, p. 4).

For social as well as economic reasons, the educational situation of Latino students must be improved. The three programs described in this report are designed to stem the leaks in the educational pipeline for Latino students. In the following chapters, we describe each of the programs, show the evaluation results to date, and provide a brief cost analysis of the programs so that the reader may better understand how resources are used. Two of the programs, AVID and Puente, continue to expand in California schools, while the third, ALAS, was a demonstration project whose funding has ended. However, all have been able to contribute significantly to our understanding of "what works" for Latino students who experience various types of risk.

ORGANIZATION OF THIS REPORT

In the next three chapters, we describe each of the three programs in detail. For each program we describe its underlying conceptual framework, the intervention components, and the results of an evaluation of the program's effectiveness and costs. In the final chapter we compare and contrast the three programs in terms of key program elements and costs and suggest several policy implications for the state.

CHAPTER 2

THE ALAS DROPOUT PREVENTION PROGRAM

INTRODUCTION

ALAS, which means *wings* in Spanish, is an acronym for Achievement for Latinos through Academic Success. The ALAS program was developed to test a comprehensive approach for educating and graduating middle school, Comprehensively At-Risk (CAR) Latino youth who live in urban neighborhoods with high concentrations of poverty. Its target population is students who are deemed most at risk for dropping out of school.

ALAS differs from the other Latino programs reported here in four important ways.

1. ALAS does not address average or above average Latino youth, but focuses on at-risk Latino students who manifest the least motivation, poorest academic skills, and greatest need for teacher supervision. The notion that there is a reliably differentiated subgroup of Latino students who are *most* at risk emanates from the authors' previous and on-going work differentiating risk in Latino students (Larson, 1989a; Larson and Rumberger, 1995). Importantly, this highest-risk group of Latino students appears to represent, not a small minority of Latino students but, rather, 30% to 40% of the at-risk Latino population. Despite their substantial numbers, these are the students the authors have found to be the least positively affected by general school reform and the least helped by traditional dropout prevention programs.

2. ALAS differs from the other two programs in emphasizing psycho-social interventions as much as academic and cultural interventions. Problems with academic work, including those resulting from social class or cultural conflict, account for only about half the reasons why highest-risk students drop out or fail classes. Students' individual psycho-social behavior accounts for the other half (Wehrlage et al., 1989). Specifically, for about 50 to 60% of high-risk students, psycho-social behavior may manifest itself in overt behavior that is significantly disruptive to the individual as well as to school staff and other students. This disruptive behavior can include lack of productivity, truancy, verbal abuse, physical fighting, pranksterism, failure to follow instructions, chronic rule breaking, and vandalism. These Comprehensively At Risk students account for a major proportion of school staff's discipline efforts and time (Larson, 1989a), and their school behavior problems are clearly related to low grades and dropping out (Alpert and Dunham, 1986; Pallas, Natriello, and McDill, 1988; Rumberger, 1995).

3. ALAS differs from the other two by addressing not only students' individual characteristics but also risk factors in the settings in which the students live and function. This approach follows what a prominent group of developmental psychologists has recently proposed as a new paradigm—called behavioral social science—for studying problems of adolescent development in terms of how individual behaviors interact with contexts of influence (Jessor, 1993).

4. And finally, ALAS differs because it focuses on the middle school level. Several recent studies have pointed to the need to address secondary school reform and dropout prevention at the middle school level (Carnegie Foundation 1989; California State Department of Education, 1987). Other studies have found that more than 50% of Latino males who drop out do so during middle school.

Hence, ALAS has seized upon a wide body of literature to create an intervention for at-risk Latino students at the middle school level. ALAS is designed to stem the enormously high dropout rates among this large group of Latino students.

TARGET POPULATION

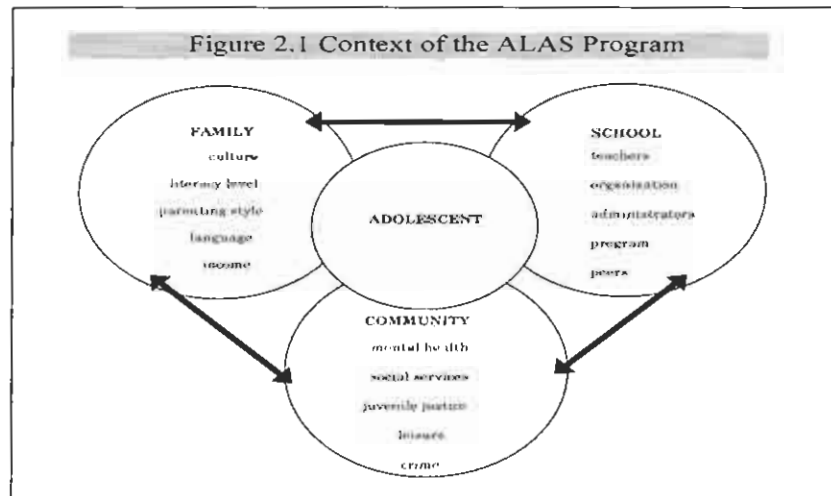
ALAS targets adolescents with poor academic performance and misbehavior who can be reliably differentiated from other students in the regular program. These subjects are referred to as Comprehensively At-Risk students (CAR), meaning that they are not only at risk for poor educational achievement and school dropout but they are also at highest risk for mental health problems, social-behavioral problems, delinquency, substance abuse, and teen parenting. All participants and comparison students were Latino.

CAR students were identified to participate in ALAS based on an assessment in sixth grade using a six-item teacher rating scale evaluating (1) need for supervision, (2) level of motivation, (3) academic potential, (4) social interaction skill, (5) difficulty to teach, and (6) need for special education services. Of these CAR students, 149 were randomly assigned to a CAR Comparison Group (n = 46) or CAR Participant Group (n = 44). Gender was equated in both groups, with each group being about two-thirds male. Groups did not differ significantly on reading scores, teacher ratings, or English language proficiency, with about half of each group being either Limited English Proficient (LEP) or Fully English Proficient (FEP). Nearly two-thirds of the students in each group tested below the 25th percentile on the reading portion of the Comprehensive Test of Basic Skills, and the remaining third tested between the 25th percentile and 50th percentile.

CONCEPTUAL FRAMEWORK

ALAS is founded on the premise that the youth and service providers (parents from this perspective are viewed as service providers in the home context) within school, family, and community contexts must be addressed simultaneously if dropout prevention efforts are to succeed. That is, it is argued that child behavior and development is an interaction between multiple contexts of influence and the individual characteristics of each child (Jessor, 1993). A central assumption of the model is that

factors within each context need individual reform to increase positive influence on youth, and, additionally, barriers that reduce or prevent communication and coherence between service providers must be bridged. Thus, ALAS consists of a series of specific *intervention strategies* focused on the adolescent as well as on service providers within three *contexts of influence* on achievement. The intervention strategies are designed to increase the effectiveness of service providers as well as to increase their collaboration (see Figure 2.1).



DESIGN OF THE INTERVENTION

The day-to-day operation of the ALAS program is delivered by a supervisor, counselor/advocates, and clerical staff who are housed full time in an office on the school campus. Each student is assigned a counselor/advocate who works as a case manager to insure that all components of the intervention are provided as needed and to monitor the student continuously. The counselor/advocate works not only directly with the student but also with school personnel, parents, and individuals and agencies from the community. The supervisor, who is an experienced teacher, counselor, or social worker, provides on-going training to ALAS advocate/counselors and works to build cohesion among school, family, and community.

Intervention Components

The ALAS program has four components: (1) the *adolescent* component focuses on social problem-solving training and counseling, student recognition, and enhancement of school affiliation; (2) the *school* component includes frequent teacher feedback to students and parents and attendance monitoring; (3) the *family* component includes use of community resources, parent training in school participation, and parent training to guide and monitor the adolescent; and (4) the *community* component focuses on enhancing collaboration among community agencies for youth and family services and enhancing skills and methods for serving the youth and family.

Specific intervention strategies within each of the four program components were implemented. Below is the rationale for each strategy.

1. *Remediate the student's ineffective social and task-related problem-solving skills.* The student intervention strategy used in the ALAS project is a social metacognitive problem-solving training program previously developed and tested by Larson (1989a, 1989b). ALAS students receive ten weeks of problem-solving instruction and two years of follow-up problem-solving prompting and counseling. The training also teaches school survival problem solving.

The need for dropout prevention efforts to focus on a student's school and classroom behavior is predicated on research that has shown that disruptive social and task-related behavior is the student characteristic that most disturbs teachers and school staff (Larson, Lesar, and Gao, in preparation). Social and task-related behavior and problem-solving skills have been consistently reported as problematic for low-achieving youth of all ethnic backgrounds. Indeed, social and task-related behavior problems are found to correlate with school failure over and above IQ and academic achievement.

2. *Provide recognition and bonding activities.* To increase self-esteem, affiliation, and a sense of belonging with the school organization, students in the ALAS project are given frequent positive reinforcement such as praise, outings, recognition ceremonies, certificates, and positive home phone calls to parents for meeting goals or improving behavior, attendance, and school work. Students are allowed to "hang out" in the ALAS lounge during lunch or after school and are encouraged to bring friends to ALAS parties. In general, students are made to feel "looked after" and nurtured by ALAS staff.

The importance of *actively* working to increase the CAR student's sense of membership is made clear by studies showing that dropouts and ethnic and racial minorities report feeling much less of a membership or bonding to school than do other students (Wehlage and Rutter, 1986; Ekstrom et al., 1986). In another ethnographic study, Wehlage and his associates (1989) found that virtually every dropout they interviewed expressed the feeling that schools and teachers did not care about them and that they had no adult at school to turn to for help.

3. *Maintain intensive attendance monitoring.* All dropout research shows that dropouts have poor school attendance prior to dropping out (Rumberger, 1983). In many large secondary schools, attendance is not closely monitored and students quickly get the message that school staff does not really

care whether they are in school or not. For this reason, ALAS students are monitored for period-by-period attendance. Parents are contacted whenever there is student truancy or extended absence and this is followed up daily. Students are helped to make up missed time and are provided with positive adult contacts communicating a personal interest in the student's attendance.

Patterns of truancy are typically gradual, occurring over an extended period of time beginning in middle school. The National High School and Beyond data show that twice as many Latino dropouts admit to cutting classes compared to non-dropout Latinos (Wehlage and Rutter, 1986). Larson (1989a) found that highest-risk middle school Latino youth started the seventh grade with no worse truancy or absences than peers; however, by the end of the first semester of seventh grade the highest-risk students had more than doubled their truancy and absence rate (from 12% to 27%), and throughout the remainder of middle school these students never returned to their entry-level attendance patterns.

4. *Provide frequent teacher feedback to the parent and student.* The ALAS intervention provides weekly and, if needed, daily feedback reports to students *and* parents regarding classroom comportment, missed assignments, and missing homework. Students are taught to use this teacher feedback for focusing thinking and decision making during problem-solving maintenance training. The ALAS project also sends home regular notes (or makes telephone calls) to parents daily, weekly, or bi-monthly informing them about their child's school progress. Teachers are regularly informed by the ALAS counselor about how their comments and evaluations are addressed with the student and parent.

The need to provide Comprehensively At-Risk students with feedback regarding their school performance is predicated on a basic principle that behavior change is more likely if the subject receives specific and frequent feedback. Low achievers particularly need clear and frequent feedback regarding their performance—what they are doing well and what they need to improve (Brophy and Good, 1986). The traditional feedback system in secondary schools is report card grades every quarter semester. However, lowest-achieving, high-risk students require feedback and progress reports much more frequently.

5. *Teach parents school participation and teen management.* The ALAS intervention program trains parents in two skills: (1) parent-child problem solving, and (2) parent participation in the schools. Parents in the project receive direct instruction and modeling in how to reduce their child's inappropriate or undesirable behavior and how to increase desirable behavior. Parents are also specifically monitored for follow through and are prompted to use newly learned parenting skills. Additionally, parents are provided with information on *how* and *when* to participate in school activities, how to understand report cards and school credits, and when and how to contact teachers and administrators.

For adolescents, parental monitoring of their behavior has been shown to have a marked positive impact on grades and homework (Fehrmann, Keith, and Reimers, 1987). Rumberger et al. (1990) found that parents of school dropouts are less involved in their child's education than other parents, including parents of graduating low-achieving students. These researchers also found that parents of dropouts had a more permissive parenting style, were less involved in their child's life decisions, used negative sanctions and emotions when reacting to poor academic performance, and contacted the school less often.

The need for parent training for highest-risk Latino youth is supported by several factors. Many of these parents are immigrants, are from rural backgrounds, and have limited knowledge and no direct experience with parenting a child in an urban, high crime, gang-oriented, American barrio. Many parents have low literacy skills and do not receive mainstream information, tips, and cautions that are regularly directed to parents by the media, schools, and political and community organizations. And finally, for a variety of reasons, a portion of these parents lack effective parenting skills. Such parents may fail to participate in their child's school because they do not understand the role that parents are expected to play in American schools; they lack confidence and skills to interact with teachers and other school staff; and there are cultural mismatches between home and school (Casas and Furlong, 1986).

6. *Integrate school and home needs with community services.* The community component of the ALAS intervention functions to *directly* facilitate youth and parents' use of community services such as psychiatric and mental health services, alcohol and drug counseling, social services, child protective services, parenting classes, gang intervention projects, recreation and sports programs, probation, work programs, etc. Parents and youth are not simply referred to these community agencies by ALAS staff but are directly helped with making appointments, transportation, letters of reference, reminders, and so forth. Parents are given information about how a particular service may benefit them or their child and are monitored for keeping commitments to participate in the community service.

IMPLEMENTATION ISSUES

The most significant issues that emerge when implementing the ALAS program have to do with crossing cultural borders of the various constituencies—the teachers and school staff culture, the parent and Latino culture, the student culture, the social agency culture. Although crossing the Latino parent and social agency cultures is paramount to the delivery of the ALAS program and requires sensitivity and skill, these cultural borders proved to be much easier to bridge than the school and student cultural borders. For the most part, when parents and agency personnel were given respect combined with concrete "help" in providing for the ALAS adolescent, both Latino parents and individuals from various agencies were open and responsive to ALAS staff suggestions. Partnerships were built.

Crossing schoolhouse borders or the culture of teachers and administrators is particularly difficult when it comes to implementing an innovative advocacy program for those students who are often felt to be troublemakers, and therefore the least deserving of such intervention. In a time when most Latino students face educational difficulties (see Chapter 1), ALAS staff must be prepared to defend the notion that the Latino students who are most difficult to teach, those with seemingly the least motivation and potential, must be given extra help and scant resources. Moreover, while school personnel are prone to marginalize or "disown" highest-risk students, they are also very reluctant to relinquish their individual and collective decision-making authority over these students. Thus, the essence of the ALAS program, the case management approach, is threatened with failure at the outset if ALAS staff cannot work with school staff to convince them to share decision-making power with, and often defer to, the ALAS case manager. This potential for conflict often surfaced around discipline issues. Instead of individually tailored discipline, ALAS students were mostly given school-policy-driven punishments. The students were suspended when in fact most ALAS students considered suspension to be a reward, or they were given assignments that they could not possibly fulfill, such as writing a 1000 word essay, or they were assigned to after school gum removal detail when after school tutoring would have been more effective.

Another example of tension in crossing schoolhouse borders emerged in terms of academic work. Whereas teachers might have known how a student was doing in their own class they rarely knew how the student was doing in all of the other five classes. Because of on-going monitoring, the ALAS counselor/advocate did know precisely what work needed to be done in each class for the student to retain a passing grade. Sometimes, as part of an academic balancing act, the ALAS counselor would call in a student to miss a particular class or counsel a student to forgo an assignment in one class in order to complete a more critical assignment in another class. Most teachers are very resistant to this approach of missing one class to complete work in another.

Crossing the borders of *student* culture is a primary challenge of project staff. Working with students directly is such a significant aspect of the effort that, in one sense, it could be said that ALAS staff spend most of their time with students in "building relationships." Even during many of the interactions that are directed toward teachers, school staff, and parents, the primary intent is to build a stronger bond between students and ALAS staff by enhancing the school and family system for them.

These activities also build stronger bonds between students and parents and between students and educators.

In an attempt to cross student culture boundaries, four principles describe how the ALAS approach structures student-adult relationships and thereby increases student affiliation, instills hope, and promotes empowerment.

1. Be accountable for students' growth and progress.
2. Accept students as they are.
3. Attend to students' many needs and their complex situations.
4. Alter and individualize procedures and policies.

EVALUATION

Design

The ALAS program was implemented and evaluated as a pilot intervention program in one middle school. The program worked with students who entered in the fall of 1990 and graduated in the spring of 1993. Participating students received the ALAS program in conjunction with the regular school program for all three years of junior high school or as long as they remained in the target school. ALAS staff was based at the target school site every day for three years. All participating students received all of the intervention strategies. The comparison group received only the regular school program during junior high school. As explained earlier, students were randomly assigned to the ALAS and comparison groups.

To ascertain the efficacy of the program, ALAS students who received the full program during three years of middle school or who dropped out of school were contrasted to comparison students who received traditional school programs or dropped out of school. To disentangle ALAS program effects from the effects of factors after a student left the target school, ALAS students who transferred to another school were not included in the evaluation. Twenty-five percent of the ALAS students transferred before three years.⁴ Comparison students who transferred to another school within the same school district as the target school were included in the evaluation; comparison students who transferred to another school district were not included in the evaluation. The evaluation reported here contrasted 36 Latino ALAS students with 45 Latino comparison students.

Target School

The middle school where the program was implemented serves about 2,220 students in grades 7, 8, and 9. Approximately 96% of the students are Latino. When such demographic factors as socioeconomic status, student transience, race, and parent education level are controlled for, according to California Assessment Program data of student reading achievement, the target school ranked only in the 17th percentile of all California schools.

Short-Term Outcomes

The first evaluation of student outcomes for the program was performed when students were in ninth grade. These outcomes are referred to as short-term outcomes because the students had received the intervention during seventh, eighth, and ninth grade.

⁴ It might be argued that the ALAS students who left the program were the most "problematic" and, thus, the remaining ALAS evaluation group was "better off" than the comparison group to begin with. Sixth grade teacher ratings, reading scores, language designation and socioeconomic status (all prior intervention measures) were compared to test this argument. It was determined that the ALAS students who left the program early were not the most problematic students. The remaining ALAS students used in the evaluation showed no difference from the comparison students on pre-intervention sixth grade teacher ratings, California Comprehensive Test of Basic Skills reading scores, language proficiency, percentage on free/reduced lunch, gender, or race.

By the end of ninth grade, 97% of the ALAS students (35 out of 36 students) were still enrolled compared to 82% of the CAR comparison students (37 out of 45 students).⁵ (See Table 2.1.)

The total number of credits that ALAS students earned by the end of ninth grade, including summer school, was assessed. The ALAS program had a statistically significant impact on improving students' credits toward graduation. Whether students were on track (had completed one-quarter of their high school graduation requirements by the end of ninth grade) to graduate on time was also assessed. Seventy-five percent of the ALAS students were on track to graduate (27 out of 36 students) in a four year timeframe⁶ compared to 44% of the comparison students (20 out of 45 students) (see Table 2.1).

Data also indicated that the ALAS intervention dramatically improved school grades for ninth grade classes, especially reducing the number of failed classes. In general the comparison group received about twice as many fails as ALAS students during the ninth grade.

Intermediate-Term Outcomes

We were also interested in finding out whether the effects of the program could be sustained beyond the ninth grade, when the students had moved onto high school and were no longer receiving any intervention services. We refer to these outcomes as intermediate-term outcomes because they represent one-year sustained effects of the program beyond the intervention.

At the end of tenth grade, 86% of the ALAS students (31 out of 36 students) were enrolled in some educational program compared to 69% of the comparison students (32 out of 45 students).⁷ (See Table 2.1.)

Table 2.1 Enrollment and Graduation Status of Participant and Comparison Groups During Ninth, Tenth, and Twelfth Grades

| | <u>Participants</u> | | <u>Comparison</u> | |
|----------------------|---------------------|------|-------------------|------|
| | N 36 | | N 45 | |
| | N | % | N | % |
| <i>Ninth grade</i> | | | | |
| enrolled | 35 | 97* | 37 | 82* |
| on track | 27 | 75** | 20 | 44** |
| <i>Tenth grade</i> | | | | |
| enrolled | 31 | 86+ | 31 | 69+ |
| on track | 16 | 44** | 10 | 22** |
| <i>Twelfth grade</i> | | | | |
| graduated | 11 | 32 | 12 | 27 |

+ Difference between groups statistically significant at the .10 level.

* Difference between groups statistically significant at the .05 level.

** Difference between groups statistically significant at the .01 level.

NOTE: Enrolled means attending any educational facility at which a GED or diploma could be earned. On track means the students had accumulated sufficient credits to graduate within four years.

SOURCE: Analysis of ALAS Evaluation Data.

High school credits earned by the end of tenth grade, including summer school after tenth grade, were used to determine whether students were indeed accumulating credits while enrolled in school. At the end of tenth grade, students must have earned a minimum of 110 credits, or one-half of their credits, to be "on track" to graduate within a four year time frame. Although the number of students who were on

⁵ Fisher's Exact Test < .02.

⁶ Chi-Square 10.414, df 1, < .001.

⁷ Chi-Square = 5.45, df = 1, < .02.

track was stunningly low for both groups, more than twice as many ALAS participants (44%, or 16 out of 36 students, compared to 22%, or 10 out of 45 comparison students) were on track.⁸ (See Table 2.1.)

Long-Term Outcomes

Additionally we wanted to see if the ALAS middle school intervention would improve high school graduation rates, fully three years after the intervention efforts had ceased. (We expected that the ALAS intervention would *not* affect school graduation because any social behavioral change—in this case, school attachment—is very unlikely to be maintained over a three year period if the behavior is not prompted or coached along the way.) After the ALAS students finished the program in ninth grade they received no more help from project staff. Thus we hoped for, but did not expect, gains to be maintained through high school graduation. At the end of twelfth grade, 32% (11 out of 34 students; 2 were deceased) had completed high school, compared to 27% of the comparison students (12 out of 46 students). As expected, there was very little difference between the two groups (see Table 2.1).

COSTS

The ALAS program was implemented as a pilot program in one middle school. The program worked with three groups of students—two groups that entered in the fall of 1990 and graduated in the spring of 1993 and another group that entered in the fall of 1991 and graduated in the spring of 1994. Analysis of the costs for the first two groups is found below (see Table 2.2).

Costs can be divided into two components: costs associated with starting a program and the on-going costs of running a program for several years. Startup costs for ALAS are minimal and are, in fact, only for training ALAS staff and teachers to deliver the social problem-solving curriculum to seventh grade participant students. In the evaluation study, these training costs have been averaged over three years to derive an average training cost per year for the full program. The costs of recruiting and training the ALAS counselors, which was done by the ALAS supervisor, are captured in the on-going costs per year for the supervisor's salary. Not accounted for are the costs of training the supervisor. The supervisor may need no training if his/her prior experience and background are sufficient to embrace the innovations of ALAS. The majority of program costs were paid through an external federal research grant, which was awarded to the project directors to develop, implement, and evaluate the ALAS program. The school where the pilot program was implemented paid few of the costs. Any replication of the ALAS program would have to rely on other sources of funds.

The costs of the ALAS program are shown in Table 2.2. The average number of students in the program per year was 107, yielding an average annual cost per participant of approximately \$800 per year.

Table 2.2 Costs of the ALAS Program

| | |
|---|--------------------|
| Training | |
| Trainer (1 day) | \$400.00 |
| Teacher's sub (3 x 1 day) | \$450.00 |
| Personnel | |
| Supervisor (half-time) | \$24,161.00 |
| Counselor/advocates (3) | \$48,102.00 |
| Office staff (half-time) | \$9,890.00 |
| Materials/Supplies | \$1,805.00 |
| Total | \$84,808.00 |
| Per student cost (@107 students) | \$792.00 |

SUMMARY AND CONCLUSIONS

This study tells two stories. First, there is the significance of this intervention in both the *magnitude* of improvement and the *breadth* of impact over many outcome variables, as well as in the sustained effects one year after the intervention terminated. That is, data show that during middle school, the intervention, on average, doubled or tripled school success on virtually every measure of school

⁸ Chi-Square = 5.71, df = 1, < .02.

performance and engagement. By the end of ninth grade, students in the comparison group had twice the number of failed classes, were four times more likely to have excessive absences, and were about twice as likely to be seriously behind in high school graduation credits. Effects of the intervention were sustained for one year after the program ceased providing service. By the end of tenth grade, students in the comparison group were about 20% less likely to be enrolled in an educational program and about half as likely to be on track to graduate in four years.

The second story of these data is that the dramatic improvements were not sustained when the participant students went on to senior high school where only the traditional educational approach was provided for them (including alternative and vocational programs). This is a very important finding and speaks to the necessity of sustaining intensive education intervention *throughout* secondary school years if the lowest 40% of low-income Latino youths are to succeed. That intervention must be sustained is not a surprising finding and supports similar findings showing that highest-risk low-income youth cannot be "cured" with some quick or even moderately long fix (this program was three full years) but, rather, require special handling throughout their educational careers. This conclusion must not, however, diminish the hopeful finding that dramatic educational improvements can be made even with our most marginalized students.

Taken together, data on mobility, attendance, failed classes, and graduation credits indicate that the ALAS program had a substantial and practical impact on students who received the intervention. Results appear even more remarkable when the characteristics of the subjects are considered. Subjects in this study represent the most difficult-to-teach students within a pool of students generally viewed as high risk.

The positive differences in outcomes between ALAS students and comparison students can be attributed to the comprehensiveness of the ALAS interventions, which focused simultaneously on the youth, family, school, and community.

The Intervention Directed at the Contexts of Influence

The ALAS model views the family, the school, and the community as contexts of influence that interact with each youth's individual characteristics to help or hinder development. The ALAS interventions focused on contexts in two ways: first, through consultation, to increase the competence of service providers within each context; second, through a case management approach, to increase the communication and cooperation between service providers within each context. Experience demonstrated that both types of interventions were sorely needed.

In terms of skill development, the family often lacked effective parenting skills for living in a high-crime, urban environment. For example, most parents did not monitor their teens for wearing gang-related clothing or for truancy. Within the school context, impersonal disciplinary and bureaucratic procedures generally functioned, inadvertently or otherwise, to exclude students rather than to include them. For example, students were frequently suspended from school for excessive tardiness or truancy. Within the community context, the so called "safety net" of social services most often did not reach the youths and their families because of ineffective outreach and follow-through. For example, agencies did not have provisions for reaching families that lacked transportation and did not follow up on missed appointments.

Collaboration between contexts, with few exceptions, followed a similar pattern: service providers, instead of nurturing, stabilizing, and supporting the adolescent, generally functioned at cross purposes like colliding tectonic plates, destabilizing youths who were required to cross context boundaries on a daily basis. The adults who defined and "managed" each context had personal as well as organizational barriers preventing them from integrating their goals and services with those of others. For example, mental health, probation, and school and protective services did not work collaboratively to form a plan of intervention for an adjudicated youth with emotional problems, but, rather, "passed" the youth along, as one would a baton in a relay race, to the next agency. This procedure fragmented

important information, and often those with least knowledge of the youth made the final decision regarding “disposition of the case.” The ALAS interventions increased both the skill of service providers and collaboration among them. As a result, each context, singularly as well as coherently, increased its ability to positively influence youth behavior.

The message is bittersweet when one looks at the outcomes for the comparison group of youths who did not receive the intervention but instead received a “traditional” secondary school education. These Comprehensively At-Risk Latino adolescents show disastrously poor educational outcomes, with 17% already having dropped out by the end of ninth grade and less than half of those who remained in ninth grade having earned enough credits to be on track to graduate. By the end of tenth grade, 31% had dropped out, and of those still enrolled only 21% were on track to graduate on time. About 75% failed to earn a high school diploma. It does not take much of a leap to predict the long-term outcomes for these youths as adults. These statistics are even more frightening when one considers that the Comprehensively At-Risk students as defined in this study represent 40% of all Latino adolescents.

CHAPTER 3 UNTRACKING LOW ACHIEVING STUDENTS: IMPLICATIONS FOR EDUCATIONAL PRACTICE⁹

INTRODUCTION

AVID, an acronym for Advancement Via Individual Determination, is an "untracking" program designed to help underachieving students with high academic potential prepare for entrance in colleges and universities. The AVID approach to untracking places previously underachieving students (who are primarily from low-income and ethnic or linguistic minority backgrounds) in the same college-preparatory academic program as high-achieving students (who are primarily from middle- or upper-middle-income and "majority" backgrounds).

Mary Catherine Swanson, a member of the English Department, introduced the idea of untracking underachieving students to San Diego in 1980 at Clairemont High School, a predominantly white school. Untracking became a way to educate minority students bused to Clairemont from predominantly ethnic minority schools in Southeast San Diego under a court-ordered desegregation decree. Unwilling to segregate African American and Latino students into a separate, compensatory curriculum, Swanson and the Clairemont faculty placed the bused students who had high test scores but low grades into regular college prep classes. In addition, these students were provided special mentoring through an elective class. AVID soon spread beyond Clairemont High School, and by 1997 more than 500 secondary schools in 8 states and the Department of Defense Dependents Schools overseas had introduced AVID programs.

TARGET POPULATION

Those eligible for AVID are high school students who are members of low-income, ethnic, or linguistic minorities who have average to high achievement test scores but whose grades average C. After these high-potential, underachieving students are identified and selected by AVID coordinators, parents are advised. Those parents who agree to support their children's participation in the academic program sign contracts to have their children participate in AVID in high school.

CONCEPTUAL FRAMEWORK

AVID's untracking effort needs to be understood by contrast to the deep-seated cultural beliefs that support traditional tracking practices. Tracking is a structural manifestation of a meaning system deeply rooted in the culture of schooling and the wider society. Therefore, modifying a few sorting techniques without addressing deep-seated cultural beliefs will not promote equality of opportunity. We must also address cultural beliefs about such matters as human capacities, individual and group differences, fairness, individualism, competition, and the goals of public education.

The pervasive American belief that intelligence is fixed and inherited can be seen in the popularity of a book published in 1994, *The Bell Curve*. Because members of what its authors, Herrnstein and Murray (1994), called the "cognitive underclass" have less intelligence to pass on to their sons and daughters, they said, their place at the bottom of the status hierarchy is relatively permanent. Although their position there is regrettable, it is understandable and unchangeable.

⁹ This chapter is adapted from *Constructing School Success: The Consequences of Untracking Low Achieving Students*. New York: Cambridge University Press, 1996.

Recent research in cognitive development, however, suggests a radically different conception of human capacity, the "universal development" thesis (Cicourel and Mehan, 1983). All normally functioning humans have the capacity to reason sufficiently well to finish schooling and enter the work force (Cicourel and Mehan, 1983; Laboratory of Comparative Human Cognition, 1983; Bruner, 1986; Meier, 1996). Furthermore, standardized tests measure only a limited range of human abilities, and reward only a narrow knowledge base. They do not measure students' higher-order thinking skills, how well they solve new and complex problems, how well they transfer knowledge gained in one situation to another situation, how well they communicate ideas. In addition, business and educational leaders tell us these higher-order thinking skills are needed by the majority of workers in our highly technical and information-based economy.

DESIGN OF THE INTERVENTION

The previously underachieving students who are placed in college prep classes are not left to sink or swim. AVID has arranged a system of supports, or "scaffolds" (Wood, Bruner, and Ross, 1976; LCHC, 1983), to assist students to make the transition from low-track to high-track high school classes. Among the most visible supports in the AVID untracking program is a special elective class that meets for one academic period a day, 180 days a year, for three or four years. In addition to a classroom teacher, students are assisted by college tutors on a 7:1 student to tutor ratio.

AVID Center suggests a basic plan for the weekly instructional activities within AVID classrooms. Two school days are designated tutorial days. On these days students are to work in small groups with the assistance of a tutor. On two other days writing as a tool for learning is emphasized. On these days students are to engage in a variety of writing activities, including essays for their English, social studies, science, and history classes. Other important activities that occur within the classroom are instruction in note taking, test taking, and study strategies. One day a week, usually Friday, is a "motivational day." Guest speakers are invited to address the class, and field trips to colleges are scheduled on these days. By dispensing these academic techniques and exposure to opportunities, AVID gives its students explicit instruction in the implicit or hidden curriculum of the school. In Bourdieu's (1986) terms, AVID gives low-income students some of the cultural capital at school that is similar to the cultural capital that more economically advantaged parents give to their children at home.

Institutional support of students augments this explicit socialization process. AVID coordinators help remove impediments to students' academic achievement by intervening on their behalf with high school teachers, administrators, and college admissions officers. In Bourdieu's (1986) terms, AVID connects its students to social networks, i.e., provides its students with the social capital at school that is similar to the social capital that more economically advantaged parents are able to provide to their students through their family connections. If schools and their agents act collectively in a deliberate, intensive, and explicit fashion to generate a socialization process that produces the same sorts of strategies and resources deployed in privileged homes and institutions, then, working-class and minority youth can enjoy the same advantages as their more privileged peers.

Peer group relations also support untracking. AVID publicly marks the students' group identity. Their notebooks clearly display the AVID logo, as does the AVID classroom that is used for lunch, social gatherings, and academic instruction. Within the social space demarcated for them, AVID students form new academically oriented friendships and develop academic identities. The time that students spend together on field trips to colleges, in collaborative study groups, and in informal discussions with college tutors and guest speakers from local colleges and businesses facilitates this process.

IMPLEMENTATION ISSUES

Even though AVID has been successful in that it has increased the college enrollment of students from underrepresented backgrounds, the implementation of the program is neither automatic nor inevitable. Substantial barriers may be erected that block implementation. Some of these barriers may be

external to the effort and therefore hard to control by program implementers. Others are internal to the effort and therefore, at least in theory, amenable to change by program implementers. For example, if tutors are not available (perhaps because there is no college or university nearby) or they cannot be trained properly, then this delicate element of the program is susceptible to modification or even dilution.

More subtle cultural processes can also influence program implementation. The effort to move previously underachieving students into college prep classes will more readily succeed if the "culture of the school" is amenable to change (Wells and Serena, 1996; Sarason, 1982). Because our cultural beliefs about intelligence, the purpose of schooling, and competition are so deep-seated but often unarticulated, we should not be surprised to learn that efforts to untrack schools have met with an uneven response (Wells and Serena, 1996). On the one hand, efforts to dismantle the tracking system are celebrated by civil rights and desegregation advocates such as the NAACP Legal Defense Fund, the American Civil Liberties Union, the Children's Legal Defense Fund, and the Mexican American Legal Defense Fund. Cooperative learning is especially appreciated by the parents and educators of low-income, ethnic, and linguistic minority students because their academic achievement is enhanced.

On the other hand, other interest groups are more wary of these reform efforts. Vocational education teachers told us they fear they will lose their clientele if low-income and "minority" students are moved to college prep classes. Teachers of mainstream students told us they resented the "special privileges" bestowed on untracked students. The parents of high-achieving students worry that their children will suffer in heterogeneously grouped classrooms because minority-student enrollments will lead to lower educational standards. These parents truly believe that their children will receive a better education in homogeneous classrooms. Their beliefs are certainly bolstered by the research evidence that shows students in high tracks receive a better education than students in low tracks (Oakes 1985).

Well-to-do parents who want their children enrolled in the best classes exert a tremendous political pressure on schools. In most communities, it is the well-to-do white parents who better understand the differentials in a school's offerings and know how to pressure a school into responding positively to their children (Lareau, 1989). Under the current system, white and wealthy parents often lobby to enroll their children in more ethnically and socioeconomically homogenous gifted and talented programs or honors classes within desegregated schools.

School administrators fear that dismantling tracking will drive the parents of high-achieving students—who tend to come from white, middle-income backgrounds—away from their schools. This fear has been fueled by advocates of high-achieving students, (e.g., those in programs for the gifted and talented). They perceive the move to untracking as a threat to the high-quality education their constituents enjoy under the current, tracked system.

The pressure from more affluent and better educated parents to keep schools tracked and to have their children placed in the highest-level courses certainly reflects a competitive and individualistic attitude toward the function of schooling. But in ethnically and racially mixed schools, this view can take on another meaning. Because the race and social class of students correlates with track placement, untracking means ethnic and racial integration in classes where no mixing existed before. A parent's request for a high-quality class, then, can mask a request for a segregated educational program.

These deep-seated cultural beliefs must be changed if untracking is to be widely accepted in our society. Parents and advocates of academically successful students must be convinced that spending class time among those who are socioeconomically and academically less well off does not, in and of itself, reduce competitive advantage. If it is going to be successful, then all parents must come to believe that untracking neither reduces the probability that their children can attain the career of their choice nor hinders their intellectual development. Achieving educational equity, then, will require fundamental changes in the organization of work and the culture of the society, not just technical modifications of the sorting practices of the school.

Heterogeneous grouping, cooperative learning, and higher-order thinking skills are being touted as the newest panacea for students' achievement problems. Although these are commendable

recommendations, and stand in stark contrast to the conventional wisdom of curriculum differentiation, the advocates of curriculum reform often devote scant attention to the "transportation problem"—how to get students from here (compensatory and remedial instruction) to there (rigorous academic instruction). In order to insure that previously underachieving students achieve in demanding courses, we must pay an equal amount of attention to the hidden curriculum of the school and provide the social support systems that will help students adapt to these new, rigorous academic arrangements.

If students do not succeed in these new arrangements, then skeptics will have a new round of ammunition to fire at the ability of low-income and underrepresented students to succeed in academic programs. To blunt that criticism, it appears necessary to treat the academic success of underachieving students as a school-wide issue, because researchers who have studied educational reform (Sarason, 1982; Cuban, 1986; Wells and Serena, 1996) have shown that educational innovations have the greatest chance of success when significant portions of the school culture are mobilized.

EVALUATION

Design

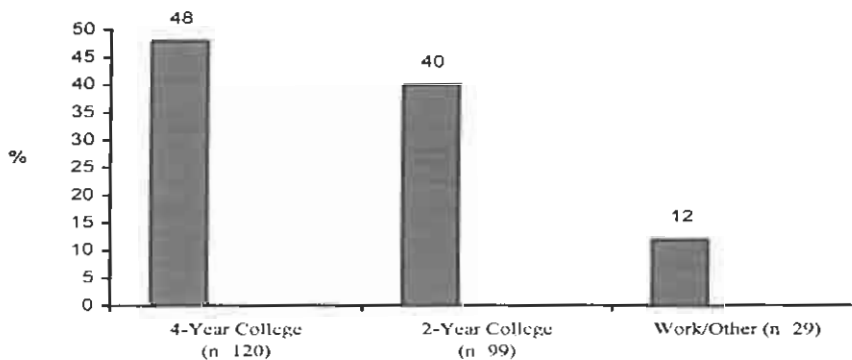
From 1990 to 1992, the AVID program was studied in eight San Diego high schools to see whether previously underachieving students from low-income ethnic and linguistic minority backgrounds who are placed in college-bound courses with high-achieving students benefit academically and socially by the experience (Mehan et al., 1996). During the period of study, 1,053 students who had participated for three years in the AVID untracking experiment graduated from 14 high schools in the San Diego City Schools (SDCS) system. In those same years 288 additional students started the program but left after completing one year or less. Two hundred and forty-eight of the three-year AVID students and 146 of the one-year AVID students were interviewed.

Outcomes

Untracking and College Enrollment

Of the 248 students who "graduated" from AVID, 120 (48%) reported attending four-year colleges, 99 (40%) reported attending two-year colleges, and the remaining 29 students (12%) said they are working or doing other things (see Figure 3.1).

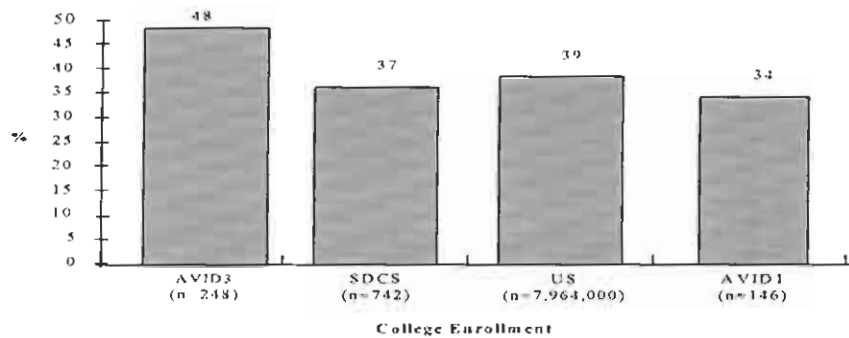
Figure 3.1 AVID Students' Activities Since Graduation



Activities Since High School Graduation

The 48% four-year college enrollment rate for students who have been "untracked" compares favorably with the San Diego City Schools' average of 37% and the national average of 39% (see Figure 3.2).

Figure 3.2. Enrollment of AVID, SDCS, and U.S. Students in Four-Year Colleges



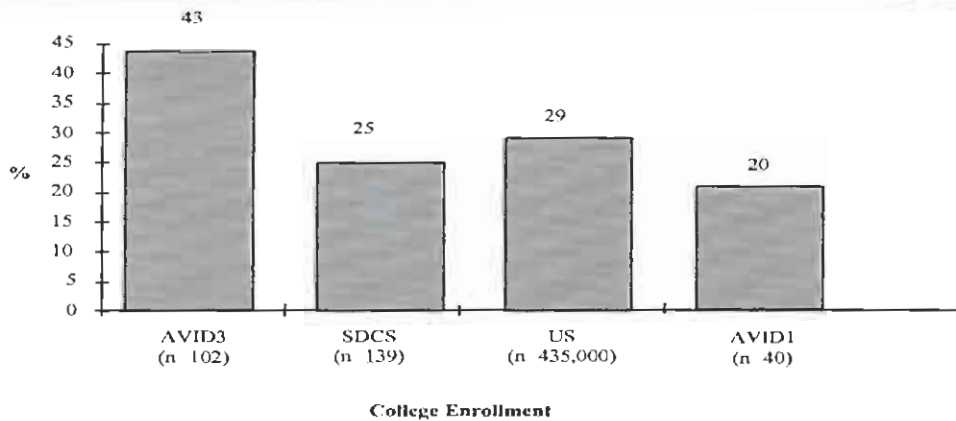
Enrollment of AVID, SDCS, and U.S. Students in Four-Year Colleges

The college enrollment rate of students who completed three years of AVID (labeled AVID3 in figures 3.2-3.5) also compares favorably with the college enrollment rate of students who started but did not complete the untracking program (labeled AVID1 in the figures); 34% of the latter enrolled in four-year colleges within a year of graduating from high school. To some extent the self-discipline evidenced by the students who persisted in the program for three years may have been a contributing factor in these very positive outcomes.

Untracking and Ethnicity

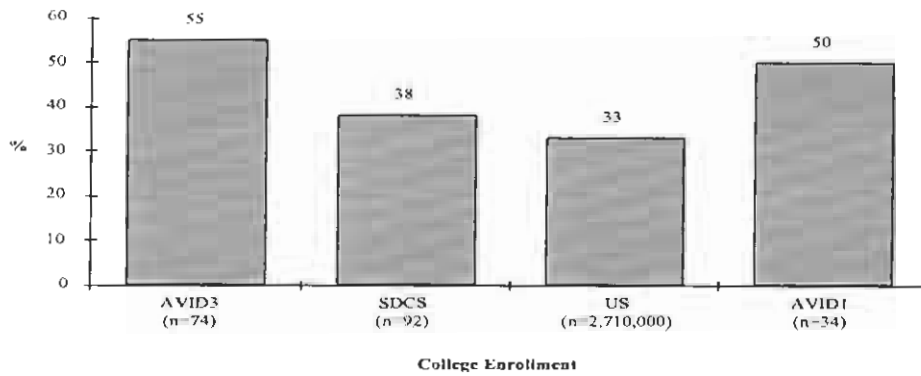
Furthermore, the untracking experiment assists the academic achievement of students who are from low-income families and the two major ethnic groups that are underrepresented in college. African Americans and Latinos from AVID enroll in college in numbers that exceed local and national averages. Of the Latino students who have participated in AVID for three years, 43% enroll in four-year colleges. This figure compares favorably to the San Diego City Schools average of 25% and the national average of 29% (Figure 3.3).

Figure 3.3 Enrollment of Latino Students in Four-Year Colleges



African American students who participate in AVID for three years also enroll in college at rates higher than the local and national averages; 55% of black students from AVID enroll in four-year colleges, compared to 38% from the SDCS and the national average of 33% (see Figure 3.4).

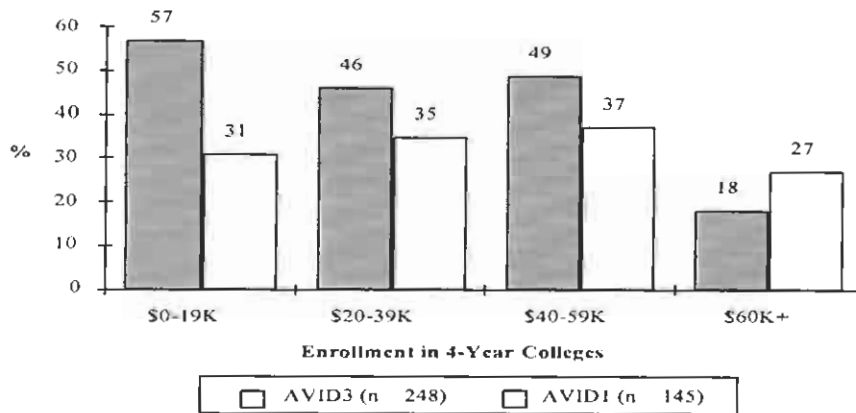
Figure 3.4 Enrollment of African American Students in Four-Year Colleges



Untracking and Socioeconomic Status

AVID students who come from the lowest income strata (parents' median income below \$20,000) enroll in four-year colleges in equal or higher proportion to students who come from higher income strata (parents' median income between \$20,000 and \$65,000). See Figure 3.5.

Figure 3.5 Parents' Income and AVID Students' College Enrollment



More AVID students whose parents have less than a college education enroll in four-year colleges than students whose parents have a college education. The longer students stay in the untracking program, the better their college enrollment record. This relationship holds regardless of the

students' family income level, a finding that gives us a further indication that the program, and not the students' socioeconomic background or previous academic record, is influential.

Students who completed three years of AVID enrolled in college in greater proportion than students who completed one year or less of AVID regardless of their family's income level: 57% of three-year AVID students from families who earned less than \$20,000 enrolled in college, compared to 31% of one-year AVID students whose families were in this income bracket; 46% of three-year AVID students from families in the \$20,000-\$39,000 income range enrolled in college vs. 35% of one-year AVID students whose families were in this range; 49% of three-year AVID students whose families were in the \$40,000-\$59,000 range and 37% of the one-year AVID students whose families were in this income range enrolled in college (see Figure 3.5).

Untracking and Persistence in College

Increasing the college enrollment of African American and Latino students is an important component in closing the achievement gap between underachieving and achieving students. But students must complete college if they are to enter managerial and professional occupations. With this concern for college completion in mind, AVID students who graduated from the San Diego City Schools were interviewed in 1990, 1991, and 1992 after they had been out of high school for one and then two years. Of particular interest are the career trajectories of students who had enrolled in two-year and four-year colleges right out of high school. The objective was to find out whether the students who had enrolled in four-year colleges were still enrolled and whether students who had enrolled in two-year colleges had transferred to four-year colleges or planned to do so.

The research plan, while well conceived, has methodological flaws. Because students moved without leaving forwarding addresses, we were not able to interview many students after they had been out of school for one or two years. The small size of our cohort prohibits attaching any statistical significance to the following statements, but a few descriptive observations will be informative because longitudinal data of any quality on the topic of persistence in college are difficult to obtain.

Of the 168 students interviewed after they had been out of high school for one year, 54 (or 32%) were enrolled in four-year colleges, 74 (or 44%) were enrolled in two-year colleges and 40 (or 24%) were working or "doing other things" (such as church missionary work). All the students enrolled in four-year colleges had been in college the year before; that is, no students had moved up from two-year colleges to four-year colleges, which is not surprising, because students seldom transfer from community college until they complete two years. In addition, no students stopped working to enroll in four-year colleges. Of the 74 students in two-year colleges one year after high school, 54 had started in two-year colleges and continued there, 12 began in four-year colleges but were now enrolled in two-year colleges, and eight who had begun working after leaving high school now attended two-year colleges. In short, there was little upward mobility; only 5% (8 of 168 students) went from work to two-year colleges. More troubling is the downward mobility in this cohort; 7% (12 of 168) left four-year colleges to attend two-year colleges.

These trends persist after students have been enrolled in college for two years. Of the 46 students which were interviewed in 1993, 16 (35%) were enrolled in four-year colleges; 18 (39%) were enrolled in two-year colleges, and 12 (26%) were working or doing "other things." Of the 35 students enrolled in community colleges, 14 had attended them the year before, two transferred from two-year colleges to four-year colleges, and three had attended four-year colleges the previous year.

That is, there is not much mobility from two-year to four-year colleges; only 11% (two of 18) transferred after two years of community college. That figure is not very encouraging, and suggests that policies and procedures, such as "tag" programs (which direct students from an untracking program like AVID to community college with the idea that they will transfer to four-year colleges after two years) need to be examined closely. Likewise, the fact that three students dropped out of four-year colleges

during the 1992-93 school year (which is 11% of the 27 students who were enrolled in four-year colleges in 1992) gives pause for concern.

The Social Consequences of Untracking

In addition to these educational consequences, there are social consequences of this untracking effort. The African American and Latino students in AVID developed a reflective system of beliefs, a critical consciousness about the limits and possibilities of the actions they take and the limitations and constraints they face in life. While acknowledging the importance of academic achievement for success later in life, AVID students did not subscribe to a romantic version of the achievement ideology. Having experienced the pain of prejudice and discrimination, Latinos and African Americans in AVID realized that their individual effort and hard work would not inevitably lead to success. Furthermore, the African American and Latino students in AVID recognized that they must develop linguistic styles, social behavior, and academic skills that are acceptable to the mainstream. And they did develop these skills, but without sacrificing their cultural identity, which they nurtured at home and displayed in the neighborhood.

AVID students come from friendship groups that are not always academically oriented. To manage the tension created by their participation in academics during school with their participation in life with friends after school, AVID students adopted a number of strategies. Some hid their academic activities entirely, both at school and with their local friends; but most worked to manage two identities. They engaged in academic pursuits with their AVID friends at school, and engaged in recreational pursuits with their neighborhood friends after school and on weekends. These "border crossing strategies" seem to be effective for the Latino and African American students in AVID, just as they have been effective for recent immigrants to the United States.

COSTS

The start-up and continuing costs of a typical AVID high school outside of San Diego county are displayed in Figure 3.1. The cost per student is computed at \$625.40. This figure is based on the costs associated with assigning a teacher for one period per day to teach each class of 30 students, tutors assigned to students at a ratio of 7:1, professional development, and curriculum and evaluation costs.

Table 3.1 Start-Up and On-Going Costs for an AVID High School (outside San Diego County) (based on one class of 30 students)

| | Resources | Costs |
|---|--------------------------|--------------------|
| Personnel | | |
| AVID teacher | 1/6 of \$48K | \$6,000.00 |
| Tutors | \$7/hr 3 hrs/wk | |
| (7:1 student/tutor ratio) | 36 weeks x 4 tutors | \$3,024.00 |
| Training (Summer Institute) | | |
| registration/materials | 8 x \$275 | \$2,200.00 |
| travel/hotel/food | | \$1,875.00 |
| Materials/Supplies | | |
| Classroom materials | AVID "libraries" | \$3,155.00 |
| Classroom telephone | \$8.00 mo x 12 mos | \$96.00 |
| Follow-up staff development | | |
| Substitute teachers | \$90.00 x 8 days | \$720.00 |
| Registration | \$12 x 8 x 2 conferences | \$192.00 |
| Evaluation | | |
| Personnel, travel, supplies by AVID Center to school site | | \$ 1,500.00 |
| Total | | \$18,762.00 |
| Cost per student per year | | \$625.40 |

SUMMARY AND CONCLUSIONS

In sum, the outcomes cited here for AVID, even though preliminary, point to the power of academically oriented programs for the educational improvement and social development of previously underachieving students. The college enrollment record and critical consciousness of students who have

participated in AVID's untracking program give us reason to believe that rigorous academic programs can serve the educational and social needs of underachieving students better than remedial, compensatory education programs.

The generalizability of this untracking effort is a crucial concern. It is appropriate for educators, parents, and policy makers to ask if this program can be expanded to include more students, especially those with weaker academic records. The answer to the question of generalizability is straightforward: To assist more students, build stronger scaffolds. At the present time, AVID selects students with high potential and midrange grades and places them in college prep classes starting in ninth or tenth grade. Students are provided social supports in the form of 180 hours of an elective class with college tutors. These academic practices are supported by social scaffolds—exposing the hidden curriculum, teacher advocacy, and institutional sponsorship. This academic arrangement with its accompanying social support system is apparently adequate to elevate students with average to high GPAs and CTBS scores to college eligibility, but is apparently not adequate to elevate students with average to low GPAs and test scores to this status. To enhance the opportunities of students with average to low academic records, the academic and social program would have to be deepened and broadened. The academic program would need to be deepened so that students would spend more time in academic subjects. Instead of the current practice of spending three to five hours per week on laboratory sciences, three to five hours in trig, geometry, or algebra, perhaps two or three times that amount of time would need to be spent with students who enter the program with weak academic records. This could be accomplished by extending the school day, the school year, or both.

The social support system accompanying this expanded academic activity would have to be broadened so that students would receive more preparation in test taking, study skills, essay writing, and the like. Students who enter the program with low grades and low test scores would need more than a 180 hours per year of mentoring and tutoring. Perhaps twice that amount would be required. Basically, we are proposing a sliding scale of academic enrichment and social support. Students who begin an untracking program with a high academic record will need less support than students who have a weak academic record at the start of the program.

In sum, the social scaffolds, institutional supports, and academically oriented peers constitute the possibility of academic success for AVID students. Although the academic and curricular dimensions of the untracking effort are vital, they cannot exist without institutional supports. In fact, removing any of the components supporting academic placement—exposing the hidden curriculum, bridging, advocacy—can derail the career of the untracked student.



CHAPTER 4 THE HIGH SCHOOL PUENTE PROJECT

INTRODUCTION

Puente means *bridge* in Spanish; the Puente Project was conceived of as a bridge from one segment of education to another. The Puente High School Project is an outgrowth of Puente's successful community college program, which was begun at Chabot College in Hayward, California, in 1981 to address the problem of the low transfer rate of Latino students to four-year colleges and universities. The program combines innovative teaching and counseling methods with community involvement to provide a focused, supportive, and culturally sensitive learning environment to foster student success. The academic focus is on the development of critical analysis and writing skills, areas in which Latino students consistently underachieve. Since 1981, the program has expanded to 38 community colleges throughout California.

The High School project began in 1993 with a four-year pilot to be tested in 18 schools in California. The goal of High School Puente is to increase the number of Latinos graduating from high school and enrolling in college. At each pilot high school, Puente students, who represent a wide range of skill and motivation levels, are enrolled in a Puente college prep English class for their ninth and tenth grades. The course is taught by a Puente-trained English teacher and integrates community-based writing, portfolio assessment, and Latino-authored literature into the regular core curriculum. The Puente counselor works closely with the Puente students and their parents to ensure that students are enrolled in college prep courses and that parents have the information they need to support their children's academic progress. In addition, a community mentor liaison (CML) both recruits mentors from the community to work directly with students and seeks resources from the business and professional communities to help support the program.

Transfer of the community college model into the high school setting has required some adaptations and raised important issues about developmental readiness for various activities. It has also shifted the focus of the program considerably toward issues of school reform because many aspects of the program have significant implications for reorganizing curriculum delivery and reforming educational practices in the schools.

TARGET POPULATION

High School Puente was designed to target non-immigrant, English-speaking Mexican American students as they enter high school in the ninth grade. This population of students is the largest group of Latinos in California and the most at risk for dropping out of school (De la Rosa and Maw, 1990). Within this group, however, the program attempts to serve a broad range of learners. As the community college program has attempted to do, High School Puente tries to focus its efforts on students who demonstrate a sincere desire to improve or excel in school and who "buy into" a college preparatory ideology. However, high school counselors are more restricted in the ways they can test out this "sincere desire" on the part of the students. Generally, students are nominated by teachers and counselors from

Table 4.1 Student Selection Matrix

| Category | Effort | Performance |
|----------|--------|-------------|
| 1 | High | High |
| 2 | Lower | High |
| 3 | High | Lower |
| 4 | Low | Low |

the sending middle schools, and students are selected on the basis of fitting one of four "types": See Table 4.1.

Type 1 students are high achievers with good grades, generally good test scores, and other evidence of good effort; type 2 students are commonly referred to as "high potential," demonstrated by high test scores, grades, or recommendations, but with lower motivation than a type 1 student (e.g., erratic school performance); type 3 students are those with high effort, but with lower grades. For example, this student demonstrates a desire to excel, but may not have been consistently successful in school. Finally, type 4 students commonly have a history of low performance and low effort, but show a desire to turn things around and are recommended by their teachers or counselor as a student who is capable of performing at a higher level.

The single academic criterion is that the student not score lower than two years below grade level in reading (although this requirement has not always been strictly adhered to). This should serve as both a screen for serious learning disabilities as well as a means to ensure that reading skills will be equal to the fairly rigorous college preparatory curriculum that Puente provides. Puente also requires that parents attend an orientation interview in which they are asked to sign a statement promising to support their child in his or her academic endeavors as a part of participation in the program. Both parent and student must promise to do everything possible to complete the program, which is essentially a four-year commitment. The interview is the counselor's principal opportunity to assess the level of motivation of both the student and the parent.

In sum, High School Puente attempts to serve the broad range of Latino high school students in fairly equal numbers, from high achievers to low performers, based on a philosophy that all students can learn and all can master a basic college preparatory curriculum if they are sufficiently motivated and provided with supportive, targeted instruction.

CONCEPTUAL FRAMEWORK

The High School Puente Project has emphasized three major components: writing and literature instruction in a two-year English class (ninth and tenth grades) in which the class cohort is kept intact for two years with the same teacher, intensive college preparatory counseling, and assignment to a mentor who introduces the students to opportunities and roles that they may have never envisioned.

A substantial literature exists to support these three elements as critical emphases in a program for Latino students. Students who come from bilingual backgrounds (whether or not the students are true bilinguals) face unique issues in writing (Valdés, 1992), and both verbal and writing skills test scores are commonly depressed (Valdés and Figueroa, 1994; Durán, 1985). Moreover, the heterogeneous grouping of students within the classroom has been shown to expand access to higher-level curricula and increase learning outcomes, especially for students who have traditionally been denied such opportunities (Oakes, 1985).

Access to an appropriate curriculum that can prepare a student for college, and information about post-secondary educational opportunities—two activities that are generally conducted by the high school counselor—have been cited as critical "gates" or barriers for Latino students who might otherwise go on to college (Gándara, 1995; Mehan, et al., 1996). Finally, a number of studies have cited the importance of "cultural capital," that is, knowledge of *the system*, how it works, and how to access opportunities, for the academic and economic fortunes of students (Lareau, 1989; Farkas, 1996), and have cited as well as the positive effects of mentoring on long-term academic outcomes for those students who are mentored (Freedman, 1993; Tierney, 1995).

Importantly, the Puente Project also assumes that the great majority of Latino students, like all students, are capable of mastering a college preparatory high school curriculum and are going to college, *if they are equipped with the necessary information and provided access to a high-quality college preparatory curriculum*. Hence, with this belief as a foundation of the program, Puente accepts a full range of students, from those with grade point averages (GPAs) that are barely above 1.0 to those with

4.0 GPAs. The only restrictions on admission have been that students have regular school attendance and that they not test excessively below grade level in reading on a standardized achievement test. For the pilot study, each classroom of Puente students has been composed of relatively equal proportions of low-, medium-, and high-achieving students, as well as low and high levels of motivation and effort.

What has become increasingly apparent as the school reform movement matures into its second decade is the importance of staff development efforts in realizing the goals of reform (Purnell, 1995). This is a critical aspect of the High School Puente Project that has been downplayed in the discussion about the program's transfer from the community college setting, where it was anchored in an ideology that was student focused. Not only has the program had to adapt to a different reality posed by high schools, but its focus has also changed in this transition from an intervention that affects one student at a time to one in which the essential goal is school-wide reform and a fundamental change in the way students are educated. Considerable data have been collected on Puente's potential for affecting school-wide reform and are reported in recent evaluation reports (see Gándara, et al., 1996; 1997). Nonetheless, student outcome data can and do speak to the task of preparing specific students for entry into four-year colleges and to the extent to which the program has been able to realize its goals in this area.

DESIGN OF THE INTERVENTION

The High School Puente model is "front-ended" in its resource allocations. Students are placed in the Puente classroom for the first two years of high school with the hope that this will provide the foundation to successfully mainstream them into the core college preparatory English classes. Counselors work most intensively with the students during these first two years, and the assigned mentor is asked to maintain the relationship with the students for the first two years. It would be ideal, though not required, if the mentoring relationship lasted longer than two years, but to date most have not done so. Hence, the first two critical years of high school are carefully monitored by adults associated with the Puente program. In subsequent years, students are encouraged to maintain the relationship with their Puente counselor, and where possible, with the Puente teacher. The Puente Club is also an avenue for maintaining the Puente connection. The counselor—and in some cases the teacher—works to maintain the club and its activities in an attempt to preserve the integrity of the Puente group and encourage the students to support each other. Another strategy used by counselors to monitor the Puente students is to group them into one or more classes in the junior and senior years where the counselor can maintain contact with the students, and organize activities, through a single visit to the classroom. The design of the program emphasizes a strong start in the first two years, with continued counseling and monitoring of students in the final two years of high school.

Intervention Components

The Puente intervention has three major components: instructional, counseling, and mentoring. Associated with each component is a cluster of activities and interventions.

Instructional Component

The instructional component consists of a two-year long class in which students are enrolled in the ninth and tenth grades. The class is composed entirely of the heterogeneous Puente cohort of 30 students. A specially trained Puente teacher focuses on intensive process writing instruction, the interweaving of acclaimed Latino literature into the regular ninth and tenth grade literature curriculum, and training and experience in the use of writing portfolios so that students may learn to critique writing, assess their own progress, and set their own (high) performance standards. Each year that they are in the program, Puente teachers receive several weeks of training in Latino literature and cultural awareness, process writing, heterogeneous classroom instruction, and portfolio assessment. A portion of this training is provided during summer vacation, but an important element of the staff development is also continual contact and training throughout the school year. These sessions are of shorter duration than the summer

program, but occur at frequent intervals during the year and may occur on-site or regionally, generally for one or two days at a time. The importance of these sessions is seen not only in providing continuous instruction for teachers (and counselors and community mentor liaisons), but also in monitoring implementation of the program and allowing local staff to more broadly disseminate practices that are developed at the site level.

Students generally are required to write daily, in journals and in other forms; they cover the regular English curriculum in addition to the Latino literature component, and they must maintain their own writing portfolios and assist fellow students to polish their work by providing helpful critiques of their written work. Learning to read and skillfully critique the work of others is seen as an important element in becoming a good writer. The Puente class is also an important forum for cultural discussions as well as frequent presentations and conversations about colleges, careers, and personal aspirations.

Counseling Component

The counseling component provides oversight of the student's high school program, assuring that the student will be placed in college preparatory classes, that any deficiencies will be quickly noted and addressed, and that the student is supplied with the information necessary to prepare himself or herself for post-secondary education. Counselors also participate in some Puente classroom activities to integrate themselves into the daily activities of the Puente students. These activities may include a planned writing experience, a session on university admission requirements (known as "a through f" in the California system), or some other focused activity. Counselors also arrange for college visits and other field trips and parent and mentor meetings and events; and most oversee the Puente Club, an extramural club where students get together for social events that support their college preparatory activities (e.g., plan for car washes and bake sales in order to support a field trip).

Mentoring Component

The mentoring component is coordinated by a Community Mentor Liaison (CML) who seeks out appropriate mentors from the community for the students, trains them, and matches these mentors to students in the program. The CML also works with the counselor to arrange for appropriate activities for the students and mentors, and monitors these relationships. Mentors are encouraged to maintain relationships with students for a minimum of two years, during which the goal is to meet with students, either individually or in groups, at least monthly. Mentors are also urged to meet with the students' families, preferably in the family home in order to get to know more about the student. Ensuring that these meetings occur regularly and that they are productive and satisfying for both the mentor and the student is a labor-intensive activity.

In addition to locating, training, and monitoring mentors, the CML is also charged with a more vaguely defined community relations role—making presentations to local community groups and raising the profile of Puente in order to encourage greater community participation in the program in the form of donations, resources, and mentors. For example, the CML may find companies that are willing to sponsor field trips, site visits, or even internships for Puente students. Some of these companies may be willing to make cash or in-kind donations to Puente activities. However, the primary role of the CML is the rather arduous task of locating and training Latino professionals to mentor, and provide role models for high school students.

IMPLEMENTATION ISSUES

Training of Puente personnel is extensive and intensive. Each member of the Puente team can expect to spend at least two weeks a year in staff development, with teachers devoting the most time to these activities. This generally occurs in an eight-day session during the summer, followed by several one- and two-day workshops during the year. Those facilitating each of the components have struggled to develop a curriculum that fits the needs of its constituents. There is general agreement among Puente

participants that the instructional component has been the most successful in achieving this aim. In part this success is due to the fact that the content is highly specified, and Puente has been exceptionally fortunate in attracting nationally renowned experts in the fields of ethnic literature, process writing, and portfolio assessment to build and deliver this curriculum. Those running both the counseling and mentoring components have struggled more with the definition of their roles and the vagaries of their contexts. The instructional component of schooling, while it may vary somewhat from school to school, is essentially the same in its form. On the other hand, counseling, and certainly mentoring, are roles that are defined very differently across campuses and within communities. Mentoring in schools, in fact, is a new role that lacks definition in the public school context. It is in these latter two areas that the Puente Project has introduced new roles into the schools and contributed significantly to defining the role of high school mentor and redefining the role of high school counselor. Hence, staff development has been a critical element in the High School Puente experiment, and one that has necessarily required a substantial investment of time.

A recurring issue has been the fluctuating support for the program in the schools as district and school staff turn over. At all three of the intensive case study sites, principals and other top administrative staff were replaced over a three-year period. In some cases, principals who were highly supportive of the program were replaced by individuals who were less enthusiastic or knowledgeable, placing a heavy burden on Puente personnel to maintain program consistency in the face of wavering support. Likewise, political support for the program has been affected by changes in district administrations and by the general political climate in the state. Propositions 187 and 209, and the legal maneuvering that has accompanied these movements in California, have had a chilling effect on programs that serve largely minority students. Nervousness about what is legal and acceptable has had an unsettling effect on school administrators, which filters down to the classroom. Nonetheless, the program has remained vibrant at all of the implementation sites, due in large part, to the extraordinary dedication and sense of mission shared by the staff.

The second biggest implementation issue concerns the functioning of three-person teams. The program design specifies that the teachers, counselors, and CMLs form teams, meet regularly, and plan jointly for activities with the Puente students. However, struggles over turf and personality clashes can impede the optimum functioning of the teams. Moreover, turnover in any of these positions requires a renegotiation of relationships and task assignments. The great majority of teams, however, have functioned effectively and been successful in meeting the challenges of the program.

The mentoring component of the Puente program holds some of the greatest potential for making a significant contribution to our understanding of how to guide Latino students toward college aspirations. At the same time, it is perhaps the most difficult program element to implement in a high school setting. The community college model paired a student with a mentor from the community who had already completed college and achieved substantial status in his or her career. The idea was that this person could be a guide, a motivator, and a role model. However, ninth grade students—the initial targets of the High School Puente Project—are quite different from community college students who are hoping to transfer to a four-year college and feel the immediacy of making decisions about major areas of study, college entrance requirements, and career opportunities. Most ninth graders are not yet ready to seriously discuss careers, nor to form close relationships with adults who may appear to be the age of their own parents. Developmentally, the ninth grader is still most concerned with establishing an identity and place for himself or herself within the social order of the high school. Future careers are largely peripheral to these concerns. Hence, it became clear after a couple of years into the pilot phase that there was need to experiment with new mentoring models.

Among the variations on the community college model that are being tested in the high school are (1) two or more students paired with an adult mentor in order to increase the comfort level of students, (2) older high school "peer partners" who are paired with ninth and tenth graders, and who focus on more immediate concerns of the students, and (3) providing more structured group activities

with students and mentors of all ages to facilitate communication and provide opportunities for mentors to interact with a larger number of students.

EVALUATION

Design

The High School Puente Project has at least two major aims: (1) to increase the numbers of Latino students completing high school and matriculating into four-year colleges; and (2) to reform a variety of practices in the schools in which the program is located. Consequently, the evaluation attends, somewhat independently, to each of these objectives. To measure success in meeting those aims, both quantitative and qualitative data are collected.

Quantitative data are collected for samples of Puente and non-Puente students through annual surveys. At the case study schools, Puente students from the 1994 entering cohort have been matched with non-Puente students on grade, ethnicity, gender, general SES, and eighth grade reading scores and GPAs in order to compare the two groups on grades, courses taken, SAT scores, and college matriculation. This allows for a careful comparison of students who began high school with similar skills and aptitudes, but for whom participation in Puente would be a significant independent variable. Some data are also collected on all students in the program across the 18 sites. These data include student retention, GPA, course-taking patterns, and eventual matriculation into four-year colleges.

Qualitative data are collected from three case study sites that are selected to be representative of all Puente sites demographically and with respect to the types of challenges they each face. The three case study sites are located in distinctly different parts of the state, one each in an urban, suburban, and ex-urban setting with Latino populations that range from 38 to 76% of the total school population.

Attitudinal data are also collected on students from across the state to aid in understanding *how* the program affects students. For a closer look at the program's effects on students and their families, focus groups are held with case study site students and parents, focusing on elements of the program and major issues facing high school students. Finally, to truly understand the role that the program plays in the lives of Puente students, and the kinds of challenges they face and overcome in the process of preparing themselves for post-secondary education, 27 students are followed intensively (nine at each of the three case study sites). These students are interviewed several times a year; they also complete survey instruments and attitudinal measures, and respond to writing prompts designed to elicit information about how they make important decisions about their lives and their schooling.

All findings reported for students in this paper are based on the spring 1997 data collection that included six schools—the three case study sites plus three additional schools in different parts of the state in order to augment the number of respondents. Additional sites were chosen largely on the basis of the schools' ability to reliably collect and transmit data.

The effects of the program on schools and how they function were identified through interviews which were conducted with principals, district personnel, Puente staff, and other persons associated with the high school at each of the three case study sites. Observations of the campuses and the Puente and non-Puente classes are also part of this data collection.

Interviews with a representative sample of mentors and parents of Puente students from across the state are also conducted annually to address the broader questions of parenting and mentoring and how High School Puente interacts with these fundamental tasks. Information on these broader implementation issues is published elsewhere and can be found in Gándara, et al., 1996; 1997.

Target Schools

Puente pilot schools were selected on the basis of several factors: (1) commitment of the principal and district personnel to implement the program faithfully and collect data on its effectiveness; (2) the existence of a supportive community that could provide resources to the program; (3) a high percentage of at-risk Latino youth in the school; and (4) low rates of college attendance for graduating

seniors. No specific cutoff criteria were used to select schools, so considerable variation exists on all of these dimensions, yet most Puente high schools are located in lower-income and working-class communities with large percentages of Latino youth who are failing to make the transition from high school to college, but who also enjoy some core of school and community support to improve their outcomes.

Outcomes

The cohort of students that is being followed intensively in the evaluation study is now in its senior year; hence college matriculation is one outcome measure that is still pending. However, we identified six additional areas in which Puente may be seen to have an impact on student outcomes: retention, academic achievement, attitudes toward schooling, preparation for college, aspirations, and academic identity. Data on school performance and outcomes of the 1994 cohort were collected for both Puente students and non-Puente matched controls, carefully equated at eighth grade and followed throughout high school. Attitudinal as well as retention comparison data rely on samples of similar students from similar classrooms at each grade level in the Puente schools who did not receive the Puente intervention. We caution the reader, therefore, that since we could not equate the distributions of achievement for each comparison group, we cannot know to what extent differences in distributions of achievement between Puente and non-Puente comparison groups could influence the reporting of attitudinal and retention data. We would argue, however, that this would likely operate against the Puente program as often as it may operate in its favor, since the attitudinal comparison groups contained substantial percentages of white and Asian students who consistently outperformed the Latino students in these schools. Moreover, when data were analyzed by ethnicity, the differences between Puente and non-Puente students remained large.

High School Retention

It is extremely difficult to maintain accurate records on student enrollment. When a student withdraws from a particular high school, that school generally notes where the student has gone if he or she re-enrolls elsewhere. If no other school requests a student's records, the assumption is that he or she has not re-enrolled and is therefore a dropout. However, for many students the first step in dropping out is to move to another school or alternative program (usually because things are not working out at the original school) and then leave school shortly thereafter. Nonetheless, if records are transferred to a new setting, these students are usually considered enrolled in school for purposes of retention statistics. Similarly, many students exit the regular high school program and enroll in "learning centers" or independent study programs in which they engage in studies part-time and often erratically. Although these students are difficult to classify, they are generally counted as enrolled in school for purposes of computing retention statistics. Hence, dropout or retention figures may vary greatly among institutions, depending largely on the assumptions that are made about what constitutes "enrollment," and official retention figures almost certainly overestimate the numbers of students still in school.

Not surprisingly, we found numerous discrepancies between our data and the retention data reported by school districts, and because it is difficult to know if students are really still in school after they withdraw from their initial high school, we have chosen to use only *same-school retention* figures to compare Puente and non-Puente student retention. While an additional percentage of students in both the Puente and non-Puente groups are no doubt still in school somewhere, the figures in Table 4.2 allow us to make unbiased comparisons between the groups on the basis of certain knowledge. At the end of the junior year of high school, an average of 78% of Puente students remain in their original high schools, while only 54% of non-Puente Latino students, on average, are still enrolled at their original high school.

Table 4.2. High School Retention: Puente vs. All Latinos

| | Number of Puente Students | | | Number of Latino Students | | |
|---------------------|---------------------------|------------|------------------------|---------------------------|------------|------------------------|
| | Fall '94 | Spring '97 | Retained in School (%) | Fall '94 | Spring '97 | Retained in School (%) |
| Northern California | 30 | 23 | 78% | 174 | 117 | 67% |
| Southern California | 32 | 25 | 78% | 69 | 34 | 49% |
| San Diego Area | 34 | 27 | 79% | 371 | 170 | 46% |

The residual of the retention rate (i.e., the *student mobility rate*)—22% versus 46%—is also important: Although some of these missing students may still be enrolled in school, *student mobility* is itself a risk factor. Students who move frequently are less likely to form close school bonds and are more likely to fall behind in their subjects, and therefore drop out of school at much higher rates than students who remain enrolled in one school (Larson and Rumberger, 1995).

While we do not know the fate of the other Latino students who are no longer enrolled in the case study schools, careful data have been collected on those Puente students who drop out of the program. Although each Puente cohort is composed of students from all four categories (high achievers to lower achievers), attrition from the program, or from school, is not equally distributed across the categories. Of the 22 students initially enrolled in the program who are no longer in Puente, 12 or 55% are from category 4—the lowest achieving group. The great majority of these students simply moved to another school. These moves are often, though not always, preceded by difficulties at the original school. The remaining 45% of students are distributed relatively equally across the other three categories. Clearly, category 4 students have posed a challenge to the Puente program and have represented a risky investment, yet for those who stay in the program, the payoff may be greatest, as the achievement data suggest.

Academic Achievement

Table 4.3 displays data from the 1993-94 entering freshman Puente cohort and their matched controls. Each Puente student was matched with another student in the same school or district on ethnicity, school SES, gender, reading score and GPA. These pairs of students have been followed over the succeeding years and are now in their final year of high school.

Table 4.3. Puente vs. Non-Puente Matched Controls, 8th & 11th Grade GPA, Total A-F and Honors by Student Category

| | 8th Grade | | 11th Grade | | |
|----------------------------|---------------|-------------|-------------|--------------|-------------|
| | Reading | GPA | GPA | A-F | Honors |
| Category 1 (N = 38) | | | | | |
| Puente | 748.50 | 3.56 | 3.05 | 12.80 | 2.70 |
| Non-Puente | 749.00 | 3.46 | 3.02 | 12.40 | 3.10 |
| Category 2 (N = 52) | | | | | |
| Puente | 699.70 | 3.05 | 2.55 | 11.80 | 1.20 |
| Non-Puente | 698.50 | 3.03 | 2.68 | 10.90 | 1.10 |
| Category 3 (N = 36) | | | | | |
| Puente | 703.10 | 2.53 | 2.15 | 10.50 | 0.35 |
| Non-Puente | 702.90 | 2.59 | 2.36 | 10.80 | 0.35 |
| Category 4 (N = 24) | | | | | |
| Puente | 727.80 | 1.79 | 1.90 | 9.50 | 0.36 |
| Non-Puente | 727.90 | 1.89 | 1.20 | 8.50 | 0.31 |
| Total (N=150) | | | | | |
| Puente | 717.30 | 2.85 | 2.50 | 11.40 | 1.30 |
| Non-Puente | 717.10 | 2.86 | 2.57 | 10.80 | 1.30 |

At the end of the junior year, there are no *statistically significant* differences between the two groups in grades, numbers of college preparatory courses (a through f), or honors courses taken. This is not to say that there are no differences between the groups. While GPA and honors courses are almost exactly the same for the two groups, Puente students are substantially ahead of the control group in college preparatory courses taken and successfully completed, indicating that they have taken a somewhat more rigorous curriculum or alternatively that they have been more successful in an equally rigorous curriculum. Three of the four categories of Puente students have completed more a-through-f courses than non-Puente, and category 4 Puente students have successfully completed one college preparatory course more than their controls. Moreover, while the category 4 Puente students have increased their initial GPA by about two-tenths of a point (the only category of student to actually *increase* GPA since the eighth grade), the non-Puente controls have lost nearly seven-tenths of a point in GPA. Hence, while category 4 students are more likely to drop out of school and/or move away, the greatest value-added in the program may accrue to the students in this category. Overall, the data suggest that the students with whom the Puente students were matched are indeed their "academic doubles," but by the end of the junior year, Puente is having a perceptible impact on their academic profiles.

Attitudes Toward Schooling

One of the hard lessons that adolescents must learn is that doing well in school involves making choices among a number of competing interests. In an effort to determine to what extent Puente students were internalizing the idea that succeeding academically requires choosing school over other distractions, we asked a series of questions about what they were willing to give up in order to do well in school. Included in this list of items from which to choose were: giving up a friend who was holding you back, giving up a job that was taking too much time, giving up hanging out with friends, and giving up a sport or special activity that was important to them. Table 4.4 displays the responses of Puente students compared to non-Puente students from randomly selected, heterogeneously grouped English and History classes at the same grade level.

Table 4.4. Attitudes: What Would You Give Up?

| | 9th Grade | | 10th Grade | | 11th Grade | | 12th Grade | | Overall | |
|----------------|-----------------|---------------|-----------------|---------------|-----------------|---------------|----------------|--------------|-----------------|---------------|
| | Puente N=171 | Comp N=166 | Puente N=184 | Comp N=129 | Puente N=106 | Comp N=111 | Puente N=57 | Comp N=85 | Puente N=520 | Comp N=492 |
| Friend | 49% | 50% | 53% | 57% | 66% | 48%** | 70% | 52% | 56% | 52% |
| Job | 76 | 55** | 82 | 76 | 88 | 65** | 86 | 69 | 82 | 66** |
| Hanging out | 71 | 61* | 76 | 67 | 75 | 65 | 88 | 69** | 76 | 65** |
| Sport/activity | 48 | 37* | 47 | 43 | 62 | 30** | 59 | 50 | 52 | 39** |

*X² P<.05
** X² P<.01

Consistent with the literature on adolescent development, no more than half of ninth grade students in both the Puente and comparison groups would not give up a friend in order to improve their academics. However, this figure changes dramatically for Puente students over the course of high school, culminating in 70% of the Puente students saying they would give up a friend by the twelfth grade. The increase in willingness to give up a friend is less steep for the comparison students, with only a little more than half being willing to do so at any point in the high school career. For all other options (across grade levels), Puente students are significantly more willing than non-Puente students to give up something important in order to perform well in school. Evidently, the majority of the Puente students are internalizing the important message that to succeed academically they must make difficult choices.

Preparation for College

A critical element in moving students through the academic pipeline and into college is providing the resources and preparation to make college a viable option. We have found in other work¹⁰ that the single biggest impediment to getting more Latino students into college is the lack of information about what is required to prepare for college application. We have also observed that high school counseling centers often have much of this information readily available, but most California high schools have only skeletal counseling staffs that are commonly unable to provide personal attention to students beyond class scheduling. Hence, we asked both Puente and non-Puente comparison students how confident they were that they knew what was needed in order to apply to college. Table 4.5 displays the students' responses to this question by grade level.

Table 4.5. Preparation for College: Percent Who Know All, or Almost All, Needed to Apply to College

| | 9th Grade (N) | 10th Grade (N) | 11th Grade (N) | 12th Grade (N) |
|------------|---------------|----------------|----------------|----------------|
| Puente | 42% (182) | 65% (198) | 75% (110) | 78% (58) |
| Non-Puente | 26 (171) | 41 (141) | 36 (113) | 62 (93) |

Differences between Puente and non-Puente students at all grade levels are dramatic. By the end of eleventh grade, three-quarters of Puente students feel confident they have the information necessary to apply to college, compared to only a little more than one-third of the non-Puente students. While this percentage grows to 62% for non-Puente seniors, even for these students it is unfortunately too little, too late. Students applying to four-year colleges need this information far earlier if they are to make a successful college application. Of course, some of the students in both groups who report not knowing what is required to apply to college are students who have little or no intention of going to college. The differences between Puente and non-Puente students with respect to post-secondary aspirations shed further light on this issue (as will be seen in Table 4.7).

Another aspect of college preparation is human resources and students' willingness to engage in conversations about their post-secondary options with parents, teachers, counselors, and others. We asked both Puente and non-Puente students, *Who helps you make decisions about: (1) how hard I work at school; (2) going to college; and (3) future goals?* Puente students were significantly more likely to report that they were influenced in these decisions by teachers, their own parents, and especially counselors. See Table 4.6.

Table 4.6. Preparation: Percent Who Marked Each Category: Who Influences...
Puente (N=513) vs. Comparison Students (N=453)

| | Parents | | Friends | | Teachers | | Counselors | | Mentor/Adult | |
|------------------|---------|-------|---------|-------|----------|-------|------------|-------|--------------|-------|
| | Puente | Comp. | Puente | Comp. | Puente | Comp. | Puente | Comp. | Puente | Comp. |
| How hard I work | 69% | 58%* | 26% | 20% | 41% | 30%* | 34% | 8%* | 12% | 8% |
| Going to college | 80 | 65* | 20 | 19 | 43 | 28* | 55 | 15* | 24 | 10* |
| Future Goals | 50 | 41* | 19 | 16 | 19 | 15 | 26 | 7* | 11 | 6* |

*X² p<.01

Most notable in Table 4.6 is the extraordinary difference between Puente and non-Puente students with respect to the influence that their counselors have on the important school decisions they make. While Puente students are also significantly more likely than non-Puente students to rely on their

¹⁰ See A. Hurtado and E. Garcia, Final Report of the Latino Eligibility Task Force, Office of the President, University of California, 1997.

parents for advice, and to a lesser degree on their teachers, the discrepancies between the two groups' use of counseling advice is striking. Note, for example, that 55% of Puente students say counselors influence the decision to go to college versus only 15% for the non-Puente group.

One could question whether the differences between Puente and non-Puente students might be attributable to ethnicity; perhaps Latino students are more likely to discuss these issues with adults than other ethnic groups. In fact, when the differences between ethnic groups (Latinos, African Americans, whites, and Asians) were tested, students of Mexican American background were somewhat less likely than other groups to engage others in their decision making. Moreover, since comparison students were randomly selected from heterogeneously grouped English or history classes there were no differences in curricular track; nor should the Puente and non-Puente students differ in general skill level. Hence, the differences would appear to be due to exposure to Puente rather than to any particular cultural or skill-level influence.

Another important way in which high schools prepare students for college entrance is by ensuring that they take the necessary college entrance examinations—in California this is most commonly the Scholastic Achievement Test (SAT) and its practice version, the PSAT. In fact, other research (Ludwig and Kowarsky, 1994) has found that a primary reason that many Latino students do not qualify for admission to the University of California (UC) is their failure to complete all of the admissions requirements, such as taking the SAT. Hence the Puente program has placed particular emphasis on ensuring that Puente students who aspire to a four-year college take the exams. Table 4.7 displays the rates of exam taking for both Puente and comparison students.

Table 4.7. Preparation for College: Percent Who Have Taken College Exams Puente and Comparison Students

| <i>Percent who have taken</i> | 9th Grade (N) | | 10th Grade (N) | | 11th Grade (N) | | 12th Grade (N) | |
|-------------------------------|----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|------|
| <i>the PSAT</i> | | | | | | | | |
| Puente | 7% | (178) | 69% | (201) | 80% | (110) | 91% | (58) |
| Non-Puente | 6 | (172) | 31 | (142) | 42 | (110) | 35 | (92) |
| <i>the SAT</i> | | | | | | | | |
| Puente | 11% | (178) | 7% | (197) | 33% | (109) | 72% | (58) |
| Non-Puente | 9 | (172) | 8 | (142) | 19 | (111) | 34 | (92) |

It is difficult to interpret the ninth grade data on test-taking other than to assume there was a confusion in the students' minds about what the PSAT and SAT tests were since these tests are not normally administered in their high schools until the 10th grade. However, after the first year of high school, when the Puente program begins to place emphasis on preparation for college entrance exams, the discrepancy between the two groups is huge. By the tenth grade, 69% of the Puente students have taken the PSAT, compared to 31% of the non-Puente students. By eleventh grade, one-third (33%) of Puente students have taken the SAT, compared to only 19% of non-Puente students. Finally, in the twelfth grade 72%—or almost three-fourths—of Puente students have taken the SAT exam that will help them meet eligibility requirements for the University of California (UC), while only 34% of non-Puente students have done so—effectively excluding the remaining 66% of students from eligibility to UC. Students who do not take the SATs may still be eligible for admission to the State University system, and may have already made the decision to apply to this sector; however, for those students with SAT scores more options are available.

Aspirations

Puente also attempts to affect the aspiration level of the students in the program. Through mentors, presentations, the visiting of college campuses, and constant messages that "you can do it," the program prods students into setting higher goals for themselves. Table 4.8 displays the responses of both Puente and non-Puente students, across grade levels, to the question, *What do you plan to do when you finish high school?*

Table 4.8. Aspirations: Puente and Non-Puente Comparisons

| | 9th Grade | | 10th Grade | | 11th Grade | | 12th Grade | |
|-------------------|-----------------|---------------|-----------------|---------------|-----------------|---------------|----------------|--------------|
| | Puente N=185 | Comp N=178 | Puente N=196 | Comp N=142 | Puente N=106 | Comp N=114 | Puente N=57 | Comp N=92 |
| Job | 1% | 13% | 3% | 6% | 3% | 11% | 4% | 12% |
| Military | 3 | 8 | 2 | 8 | 4 | 11 | 4 | 5 |
| Community College | 7 | 12 | 15 | 18 | 17 | 33 | 35 | 45 |
| Four-year College | 74 | 41 | 67 | 54 | 61 | 26 | 53 | 25 |
| Other | 16 | 26 | 14 | 14 | 15 | 20 | 5 | 13 |

Table 4.8 is an excellent illustration of the developmental process of adolescents as they go about deciding on future goals. At the end of the ninth grade Puente students are substantially more likely to see themselves as headed for a four-year college than are the non-Puente students. Nonetheless, this goal is selected by the largest percentage of students in both groups. Aspirations remain relatively steady or continue to grow in the tenth grade, where the majority of both groups say they will go to a four-year college. However, by eleventh grade, reality has begun to set in, especially for those students who are not in Puente and not receiving special support to prepare for college admission. Among these students there is a dramatic decline in those selecting four-year colleges, and a shift to the community, or two-year, colleges. By the spring semester of twelfth grade, non-Puente students have readjusted their earlier expectations and many state that they plan to go to a two-year college; only 25% are intending to enroll in a four-year college. On the other hand, while Puente students, too, have readjusted their expectations, and many more intend to go to two-year colleges, still, the majority of Puente students are intending to enroll in four-year colleges. Moreover, only 5% of Puente students are still not sure what they will do versus 13% of non-Puente students. The aspiration levels of the two groups are dramatically different.

Academic Identity

Finally, we also looked at the issue of academic identity. One of the primary goals of Puente is to help students see themselves as scholars. There is a substantial literature on the problem of blacks and Latinos stereotyping academic achievement in students of color as "acting white," and failing to see the possibility that they can be both proud of their ethnicity and high achieving students. Puente is designed to counteract this phenomenon. The introduction of Latino literature not only serves the purpose to capture the students' attention, but to present the idea that Latinos and Chicanos can be writers of quality and renown. Mentors provide advice and counsel, but they also represent the image of college-educated, Latino professionals—something many of these of these students have never before encountered first-hand. And by mixing high achieving and lower achieving students in the same class, Puente endeavors to provide models of peers who both identify with their ethnic group and excel in school. To test the students' value for being a "good student," we gave them four attractive options from which to choose: (1) a really good student who is always willing to help others with their school work; (2) a really cool student who is funny and fun to be around; (3) a really nice person who will always listen to your

problems; (4) a really popular student who gets invited to all the best parties. We then asked the students (1) which would you like for a friend? and (2) which would you like to be? Table 4.9 displays the students' responses.

Table 4.9. Value for Being a Good Student

| | Good Student | Cool Student | Nice Person | Popular Student |
|-----------------------------|--------------|--------------|-------------|-----------------|
| <i>Choose for a friend*</i> | | | | |
| Puente (N=551) | 22% | 39% | 38% | 2% |
| Non-Puente (N=537) | 18% | 37% | 40% | 4% |
| <i>Like to be**</i> | | | | |
| Puente (N=549) | 35% | 31% | 31% | 3% |
| Non-Puente (N=529) | 25% | 37% | 28% | 10% |

* $\chi^2=8.83$, $p=.03$
 ** $\chi^2=32.8$, $p<.00$

Significantly more Puente students would choose a good student for a friend, and by an even wider margin, more Puente students would choose to be a good student themselves than the non-Puente students (35% vs. 25%). Given that almost half of the non-Puente sample was non-Hispanic white or Asian, these statistics are particularly notable. Even when compared to large portions of white and Asian students, the Puente students, who are all Latinos, place a higher value on being a "good student." Note also that being a "good student" is chosen by more Puente students than any other descriptor, while it ranks third of the four categories for non-Puente students. This finding is especially heartening given the entrenched problem of overcoming the social stigma of "acting white," or being a high achiever in a peer culture that does not value "eggheads" and "brains," as reported in the literature (Fordham and Ogbu, 1986; Matute-Bianchi, 1986; Steinberg, 1996). If Puente is able to effectively counteract the anti-achievement messages of the peer culture and simultaneously introduce students to Latinos who are achievers, this may be its most valuable contribution for large numbers of students.

In sum, while measures of academic achievement of Puente students and matched controls do not differ significantly by the end of the 11th grade, all other aspects of college readiness differ quite dramatically from non-Puente students in the same schools. Puente students are more likely than non-Puente students to stay in school, and at the same school; they take and pass more college preparatory courses; their attitudes toward school are significantly more positive; their preparation for making college applications is stronger; their aspirations are higher; and they are more eager to identify with the label of a "good student." Because we know that willingness to put forth effort makes the greatest difference in long-term academic success (see for example Simonton, 1987; Steinberg, Dornbusch & Brown, 1992; Gándara, 1995), the reported willingness of Puente students to give up other things in favor of school, their openness to the positive influence of important adults in their lives, their high and sustained levels of aspiration, and their readiness to identify themselves as good students are especially compelling evidence that Puente can make a difference in the lives of these students over the long run. A more positive attitude toward schooling combined with enhanced preparation for college would appear to be providing the Puente students with a substantial advantage as they look toward their futures.

COSTS

While costs may vary somewhat from school to school, and sources of revenue to support the program may also vary by year and by availability of grant funding, it is possible to demonstrate the typical costs for a typical year of the Puente program. The following assumes that a school has one cohort of approximately 30 students each year, for a total of 120 students in grades 9 to 12; the school assigns one teacher to teach two Puente classes, one counselor (half-time) to work with 120 Puente students, and one Community Mentor Liaison (half-time) to work with each school. Additionally, a one quarter-time clerical person is assigned to the program. Start-up costs in the first year of the program are higher than in subsequent years, so these figures have been averaged to reflect a "typical" year. Hence, staffing costs, plus operational costs equal \$58,250 per year per school, or approximately \$485 per year per student served in the program. See Table 4.10.

Table 4.10 Typical Year's Expenses for High School Puente

| Expense | Cost |
|---|------------------------|
| Training | |
| Sub days (4) | \$400.00 ¹¹ |
| Direct costs | \$3,200.00 |
| Certified Personnel | |
| Counselor (.5 FTE) | \$20,000.00 |
| Teacher (stipend) | \$1,800.00 |
| Other Staff | |
| Clerical (.25 FTE) | \$6,550.00 |
| CML (.5 FTE) | \$17,500.00 |
| Program Materials | |
| Field trips (includes teacher subs) | \$2,500.00 |
| Supplies, communications, etc. | \$4,900.00 |
| Computer (one-time expense) | \$1,400.00 |
| Total | \$58,250.00 |
| Per Student Cost (@120 students) | \$485.41 |

Table 4.10 does not take into account the costs of salaries for program trainers, nor for travel expenses associated with their training. The costs of training can vary greatly depending on a number of factors, including the personnel used—whether these are trained Puente personnel in the local district or region, or Oakland-based staff—the length of training; and the number of days and amount of travel associated with training. Different scenarios can be envisioned and probably should be if Puente is to continue growing. To date, these additional costs of training have been borne by grants, but this could change.

SUMMARY AND CONCLUSIONS

To a large extent, High School Puente is still an unfinished story. The evaluation is now in its final year and data on college-going rates—the final test of the effectiveness of the program for the students—will be available in summer 1998. By that time, if Puente students continue on the same trajectory, they should have moved significantly ahead of the non-Puente control students. Interviews with the students provide some insights into how the program operates to effect changes in students' attitudes toward school. Perhaps one of the most important findings in the student interviews is the description of the Puente classroom as a "safe place" where students can share deeply held feelings and experiences through their writing and their oral presentations without fear of being misunderstood or seeming different. In over 15 days of observation of the Puente classrooms, never once did the researchers witness a student who was unwilling to stand up and read his or her most personal writing to the class. This was an astounding observation, given what we know about adolescent development and the need to protect one's identity and not stand out as "different." A level of trust was built among students and teacher over the intensive two-year period that allowed students to express differences,

¹¹ While extensive training occurs, most is conducted during the summer when classroom teachers and counselors do not require a substitute. Both teachers and counselors have viewed the training as one of the "perks" of the job. Direct costs associated with the training include housing, meals, and transportation for the participants.

perhaps in part because they openly acknowledged their commonality in sharing the same cultural background.

No less important, however, is the finding that students—even the higher achieving ones—in such risky environments remain vulnerable throughout the high school years. We have seen students falter late in their high school careers. Unfortunately, dropping out also remains a phenomenon up to graduation day. Much of the effectiveness of Puente clearly lies in its ability to marshal significant human resources to monitor students throughout high school.

Individual student outcomes are only part of the Puente agenda; the other major agenda item is school reform—helping schools to envision a plan for untracking, teaching teachers to work with broadly heterogeneous groups of students, providing every student with a program that will make college a viable option upon graduation from high school, teaching students language and writing skills that will make them competitive in rigorous college preparatory courses, and bringing significant human resources from the local community onto the campus and into the lives of "at risk" youth. Puente's progress on this front is reported in the series of annual reports of the High School Puente Evaluation (Gándara, et al., 1996; 1997) and will be summarized in the forthcoming Final Report of the High School Puente Evaluation in late 1998.



CHAPTER 5 SYNTHESIS AND CONCLUSIONS

Two of the three programs reported on in this document have undergone a complete cycle of evaluation. The third is in the fourth year of a four-year cycle. We chose to "jump the gun" a little in this report, rather than waiting for all of the data to be in, because important decisions are being made in the State of California right now about the future of outreach programs, the shape of student admissions procedures at the university, and the viability of programs that target specific groups of students. The three programs we describe yield experiences that address three major questions being raised in these times: (1) What are the key elements of an effective outreach program that reduces dropout rates and increases post-secondary opportunities for under-represented students? (2) What are the unique aspects of a program that targets *particular* students that could not be undertaken in a more globally inclusive program? (3) What is the cost of such intervention?

KEY PROGRAM ELEMENTS

Each program targets a somewhat different audience, from comprehensively at-risk junior high schoolers to the entire spectrum of Latino high school students. However, the programs have a number of

commonalities that are key to meeting their objectives. Table 5.1 lists key elements and the programs in which they are found. As the table shows, at the heart of all of the programs is the task of reducing the institution of the school to a human scale, providing and nurturing human bonds, and closely monitoring students across the secondary school continuum. All of the programs have at least one specific person who is responsible for the academic and personal welfare of the student, and all programs place a strong emphasis on raising the aspirations of students and providing them with the tools to achieve academic goals. Puente attempts to link aspirations

Table 5.1 Critical Components of Hispanic Educational Interventions

| Intervention Component | ALAS | AVID | Puente |
|---|------|------|--------|
| Building social capital, developing social problem solving and coping skills | X | X | X |
| Providing specific support for high expectations; scaffolding | X | X | X |
| Raising aspirations; instilling vision of possible future | X | X | X |
| Closely monitoring student progress | X | X | X |
| Providing strong adult-student bonds | X | X | X |
| Providing family advocacy within the social welfare system | X | no | no |
| Creating social networks; developing school affiliation, group cohesion among peers and a sense of membership | X | X | X |
| Cultural-centered curriculum; bringing the community into the school | no | X | X |
| Specific academic tutoring component | X | X | no |
| Active parent involvement | X | no | X |
| Extensive training of school staff | no | X | X |

with self-concept by introducing students to literature with roots in their own communities, helping the students to become aware of the creative genius that exists within people from their own community.

AVID and ALAS raise aspirations through consistent messages that "you can do it," and through specific tutoring activities that equip the students to turn that message into reality.

All three programs also acknowledge the importance of peer relationships and their impact on the choices that students make. There is ample evidence that peers, particularly in low-income communities and communities of color, can foster oppositional beliefs about school success: that doing well in school is equivalent to "selling out." Likewise, peers can provide a supportive network for success when they share common goals of educational achievement. ALAS, AVID, and Puente all have program components directed toward the building of healthy peer relations that support academic achievement. Clubs, group activities and field trips, and cooperative learning settings are among the strategies that the programs use to foster a sense of membership and shared goals among the students.

Connections to the community in which the school is located are important for all of these programs. However, each program has a different focus in this regard. Because ALAS focuses specifically on the most at-risk students and families (many of whom are immigrants), the program necessarily provides significant social welfare support—ensuring that families are able to provide for the basic needs of their children. Both AVID and Puente incorporate healthy models of success from the surrounding community to help support the program—Puente through its mentoring model, and AVID through workshops and tutoring relationships.

To be effective over the long run, programs must become institutionalized in their context: They must become an integral part of the fabric of the school. Failure to connect in this way not only isolates the program politically, making it a constant target for resource reallocation, but may hinder its ability to accomplish its goals. AVID and Puente have attacked this challenge by staffing the program with teachers in the schools who have already established their own interpersonal networks. Puente also attempts to reinforce this institutionalization through strong connections into the immediate school community. However, in schools where the Puente counselor is hired specifically for the program, institutionalization of this role has been more difficult. ALAS attempted to institutionalize itself through the connection to students' homes—becoming an integral support to the family; but this does not necessarily result in institutionalization in the school because parents are not typically an integral part of a secondary school. An important challenge for these programs is to connect with politically powerful teachers and administrators at the school site.

In sum, depending on the specific sub-population, and the needs identified within the communities they serve, the three programs have employed different strategies and have developed somewhat different emphases. Yet, underlying all three of the programs is the consistent theme of building human connections and caring relationships so that no student falls through the cracks.

The Issue of Targeting

While AVID serves a variety of low-income and underachieving students, it was developed as a way to address what is primarily a "minority" education problem; and in San Diego, where it was developed, this is largely a Latino problem. Both Puente and ALAS were designed to specifically target the Latino community in response to the entrenched problem of underachievement and lack of social supports among Latino youth in California. Certainly, to be successful in the communities in which they operate, the programs have to build relationships with the community; each has approached this in a somewhat different way. ALAS built relationships with families and social service providers, Puente with community leaders and families, AVID with community members who devote time to tutoring and working with the students. At a minimum, those who establish these programs in the schools must understand the culture of the community and, hopefully, incorporate members of that community into its staff as well as incorporate cultural resources in the classroom. Within the Latino community it is also important to know the language. Programs cannot effectively interact with families unless staff members can speak the language of the parents, and parents are not comfortable coming to a school if everything is conducted in a language they do not understand. We have also found that Latino parents are much

more likely to attend school-sponsored events if they know that the invitees are other Latino parents with whom they can communicate and share common experiences. In many ways, programs that target specific communities are creating a "zone of comfort" for their participants.

As citizens, we are all learning to live in this new multicultural California. For all of us there are challenges in understanding cultural practices that are different from our own, and learning how to interact with people in new ways. Moreover, most Americans, of whatever background, are experiencing a crisis in trust of public institutions and in the public schools in particular (Bellah et al., 1985; Berliner and Biddle, 1995; Grant, 1989). Parents worry that the schools are not adequately preparing their children for the increasingly competitive world that they are entering; and many can be appalled by the discrepancy between the best public schools, which generally serve the upper income students of the suburbs, and the schools that serve the poor, the disenfranchised, and the immigrants in the inner cities and rural communities can be appalling (Kozol, 1991; Olsen, 1997). For immigrants, for people with limited experience with U.S. schools and institutions, and for low-income people who seldom interact with persons outside their own communities, multicultural California can be a frightening place. It is especially forbidding for people who have been stereotyped as underachievers and outsiders in the mainstream culture. To the extent that these programs have been able to create a zone of comfort for marginalized students and families, incorporating their language, culture, and community into the fabric of the program, they have seen great success in attracting and retaining actively engaged participants. Low-income Latino parents generally have notoriously low participation rates in mainstream school activities, yet up to 70% of the parents of Puente students attend most or all of the parent activities associated with the program. This kind of involvement translates into closer monitoring of students at home, and closer ties to the school.

The majority of high school students in ethnically mixed schools choose their close friends from among their own ethnic group (Puente data show that this is true for 94% of the students). Hence, most of the peer interactions at school will occur among students of the same cultural background. Therefore, it is important that Latino students have a supportive group of students like themselves who also value academic achievement from which to form friendships. While many Latino students will retreat to the comfort of the homeboys and girls when they return to their neighborhoods in the afternoon, a school-based group of peers who share achievement values is essential for the success of most of these students. AVID, Puente, and ALAS are designed to support and nurture these groups through their program structures.

As California continues to diversify, it is likely that social attitudes will change and differences between ethnic groups will begin to blur, but California is still an immigrant-receiving state, and one with strong and vital cultural groups. Each group has its own strengths and resources as well as needs. To fail to attend to the *particular* needs and risk factors, and to capitalize on the special resources of these communities confuses our focus, squanders our resources, and diminishes our chances of improving conditions for the students from these communities.

How Much Does Effective Intervention Cost?

There is a saying that nothing good comes cheap. In actuality, however, the additional costs for these programs, while not low, are hardly very high when weighed against the alternative of maintaining the status quo. The average cost of the three programs is approximately \$550 annually per student, or about 10% of the state's per child educational allotment. All three of these programs capitalized on the human resources available in nearby universities and educational agencies. All three have also supported their initial development through foundation grants. Hence, the costs associated with building the programs and their curricular elements are not borne by the schools, and training of staff to implement the programs has, to a large extent, been subsidized by the budgets of universities and county offices of education.

Because professional development and follow-up monitoring of the programs is so critical to their success, this topic bears a little more discussion. Each of the programs has paid for its teacher education in different ways and according to a different set of assumptions. In fact, the professional development component is responsible for a large part of the variation in costs between programs. Because two of these programs had their inception as a grant-subsidized experiment, much of the cost of developing training models and conducting professional development has been supported by funding outside of the schools. As that funding runs out, this financial burden must be shifted. On the other hand, with most of the teacher training and curriculum developed, and with a cadre of experienced people in the schools, costs of training and implementation can be reduced significantly to adapt to the resources available to support the program.

From the perspective of the schools, the argument can be easily made that they may reclaim their costs through the Average Daily Attendance (ADA) funds they receive for the students who do not drop out of school. From the perspective of universities, these programs represent a cost-effective method of increasing the pool of eligible university students. And from the perspective of the taxpayer, data we presented in Chapter 1 make the case that the state recovers its costs in increased taxes from better-educated, and better-paid workers.

These three programs exhibit certain commonalities that other programs serving any kind of student should incorporate. Among these are personal attention and careful monitoring of a student's progress. But not all students and communities share the same histories, conditions, and risk factors, nor do they all have the same specific needs, or respond in the same ways to the demands of institutions such as schools. We have found that it is critically important for Latino students (and parents) to experience a "safe place" within the school where they can deal with issues of identity, aspirations, and skills without the fear of ridicule from others who do not share their particular circumstances. Latino students also need to see models of achievement from within their own communities; they need to be challenged to higher aspirations; and they need school personnel who understand the cultural dimensions of their responses to schooling, such as a work ethic and strong sense of family responsibility that can often compete with school demands. Programs that attend to the special circumstances of the particular population group may well be key to moving many Latino students through the educational pipeline. Sometimes the fastest way to move people into the mainstream is to provide a safe and secure place from which to jump in.

POLICY IMPLICATIONS FOR THE DESIGN AND SUPPORT OF OUTREACH PROGRAMS

The findings of the three programs discussed here have several policy implications for programs that seek to retain Latino students and move them successfully through the educational pipeline:

1. All three evaluation efforts point to the critical importance of interventions that are consistent, intensive, and well-articulated from grade to grade and that provide consistent monitoring of students throughout the secondary years. We find no point at which it appears safe to let down one's guard. Students growing up in risky environments remain at risk throughout adolescence, even when they may appear to be "on track." Sustaining gains requires that the special intervention be sustained. ALAS students arrived at senior high with good credit standing and 91% of them remained for the first year; however, when extra help was not forthcoming, virtually all of the gains were lost by the traditional school's "dropping the ball." The students fell back into old failure patterns.

2. All three programs attribute much of their success to the fact that at least one adult in the school setting takes personal responsibility for each student in the program. This adult may be a teacher, counselor, social worker, or mentor, but he or she must know and understand the student and his or her family situation and be ready and able to intervene on the student's behalf. Adolescence is not too late a period to make a substantial difference in kids' lives; even highest-risk low-income youth can be educationally engaged and can dramatically improve their achievement if provided with a comprehensive program that involves caring adult advocates.

3. All three programs have designed intervention components that address the issue of locating students in supportive peer groups that reinforce achievement-oriented behavior. It is essential that students receive consistent messages about the importance of staying in school and doing well, and program effects are strengthened when students band together to support a shared achievement ideology.

4. Both ALAS and AVID findings point to the need for increased time to achieve high academic goals. These findings are consistent with Puente's focus on providing supportive resources for students outside of school hours. We cannot overestimate the beneficial effects of increasing the quantity of instructional time for students with weak academic records. Even before we consider modifying or improving the quality of classroom practices, we need to increase the amount of time previously low-achieving students spend on math, science, literature, and history. In effect, this is the approach that the highly celebrated Garfield High School teacher, Jaime Escalante, took with his previously underachieving Latino calculus students. Although he was rightfully applauded for his charismatic motivational efforts, we cannot overlook the fact that Escalante increased exponentially the number of hours, days, and weeks that his students spent in the classroom. Instead of spending 180 hours in business or consumer math in one academic year, his students spent three times that amount each year in advanced math courses (Escalante and Dirmann, 1990).

5. Both Puente and AVID have relied extensively on heterogeneous, cooperative grouping practices ("untracking") both to provide models of high achievement and to create access to a college

preparatory curriculum that increases post-secondary options for Latino youth. Cooperative learning—the classroom practice of grouping students heterogeneously for the purpose of accomplishing tasks collaboratively—seems to help underachieving students improve their classroom performance while helping high-achieving students maintain their. Furthermore, cooperative learning seems to work as well for students from linguistic and ethnic minority backgrounds as it does for "majority"-background students (Kagan, 1986; Slavin, Karweit, and Madden, 1989).

6. Successes experienced by all three of these programs have been built on a sensitivity to the particular circumstances of the students and families they serve and the creation of "safe" places for them to interact in the school. The personal connection that Puente and ALAS create with parents brings them into closer contact with their children's schooling. The personal connections, however, must be predicated on honoring the cultural and linguistic practices in the students' homes. These programs have shown that parents can be recruited, if given respect and care, as powerful allies for enhancing the educational outcomes of their children and, by virtue of increasing the aspirations and achievement of significant numbers of at risk students, strengthening the schools that they attend.

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