

Doubling school success in highest-risk Latino youth: Results from a middle school intervention study¹

Katherine Larson & Russell Rumberger
Education
University of California, Santa Barbara

Abstract

This paper describes the implementation and outcomes of a unique dropout prevention program for Latino students of Mexican descent who attend a large, urban junior high school. Three features make this program unique. First, it focused on the highest-risk students in the school who, because of their academic, attendance, and disciplinary problems, utilized a disproportionate share of school resources and were most at-risk of school failure and dropping out. Second, the project was conducted in a true experimental format with random assignment to experimental and control groups. Third, the intervention model was based on the most recent research data and implemented a comprehensive cluster of interventions which addressed the student directly as well as three different contexts of influence on the student's life and school performance: the *school*, the *family* and the *community*. Results showed that the intervention program had a significant and positive practical impact on student attrition, report card grades, attendance and credits earned toward high school graduation.

¹ This paper was first presented in May 1993 at the 7th Annual Conference of the University of California Linguistic Minority Research Institute (UC LMRI) under the title "Increasing School Success in Truly Disadvantaged Chicano Youth." The project reported in this paper was supported by grants from the U.S. Department of Education, Office of Special Education Programs; the University of California Presidential Grants for School Improvement; and the UC LMRI.

School dropouts: A challenge for America

One of the major challenges facing U.S. education is reducing the number of students who fail to graduate from high school. The urgency of this challenge was recognized by the President and the nation's governors when they adopted the following as one of the six National Goals of Education: "By the year 2000, the high school graduation rate will increase to at least 90%." A related objective was to eliminate the gap in high school graduation rates between minority and non-minority students (U.S. Dept. of Education 1990).

The urgency to reduce dropout rates is predicated on two concerns. The first is economic. Dropouts experience higher rates of unemployment, receive lower earnings, and are more likely to require social services over their entire lifetimes than high school graduates (Rumberger 1987; Stern, Paik, Catterall & Nakata 1989). In short, dropouts are more costly to society than high school graduates. For example, one year's cohort of dropouts from Los Angeles city schools was estimated to cost \$3.2 billion in lost earnings and more than \$400 million in social services (Catterall 1987, Tables 3 and 4). The social costs of failing to complete high school could rise in the future as the demands for low-skilled labor are reduced.

The second reason for an urgent response to the dropout problem is demographic. Demographic changes in the U.S. are increasing the number of persons who have been more likely to drop out of school: minorities, poor children, and children living in single family households (Hodgkinson 1992; Natriello, McDill & Pallas 1990).

An urgent need to reduce school dropouts in the Latino population

Dropouts in the Latino population are of particular concern. Latinos have the highest dropout rate among the major ethnic groups in the U.S. In 1989, the percentage of high school dropouts among persons 16 to 24 years old was 32% for Latinos, 13% for Blacks and 11% for Euro-Americans (U.S. Department of Education 1991). The Latino population is also expected to grow faster than any other major ethnic group. Between 1985 and 2020, the number of Euro-American youth 18-24 is expected to *decline* by 25%, while the number of Latino youth will *increase* by 65% (Rumberger 1990). Thus, based on current dropout rates, the total number of young dropouts could actually *increase* over the next 35 years. These trends are not lost on employers, who are now among the most vocal proponents of educational reform to improve school success for

Latino and other minority populations (cf. Committee for Economic Development 1987).

The need to reduce school dropout rates among Latinos is especially urgent in California. One-third of all Latinos in the U.S. lived in California in 1990 (U.S. Bureau of Census 1992a) and represented 34% of current students in California public schools (California Department of Education 1991). Latinos are projected to comprise 58% of all new students entering the State's educational system between 1990 and the year 2000 (California Department of Finance 1992). If California fails to address the Latino dropout problem successfully, it will have a large portion of the workforce with inadequate education to successfully contribute to the State's economy and to the social fabric of a democratic society.

Although a wide variety of programs and policies have been initiated at the national, state, and local levels to help students finish school, few programs specifically target Latino youngsters. Of the almost 500 school or community based dropout programs surveyed nationwide by the U.S. General Accounting Office, only 26 served primarily Latino youth (U.S. General Accounting Office 1987). Clearly more programs are needed that target this population.

Latino students and their families are unique

Research literature indicates that Latino dropouts display many of the same characteristics as other students: low academic achievement, a dislike for school, discipline problems, and low educational aspirations (Rumberger 1991). Yet, there are some important differences which make this population unique. First, Latinos are more likely to attend large urban schools with high concentrations of poor, minority students (Orfield & Monfort 1988). In such settings, dropping out is more the rule than the exception (Hess & Lauber 1986; Fine 1991). Second, Latino students are more than twice as likely as Euro-American students to drop out *before* reaching high school. National data show that almost 50% of Latino males who left school between October 1984 and 1985 dropped out before the 9th grade (U.S. Bureau of the Census 1988). Thus, dropout prevention for Latino students needs to focus on their middle school years. Third, Latino children and their families appear to have *unique* needs. For example, Veltman (1976) found that with the *exception* of Spanish-speaking Latinos, minority language background per se did not reduce educational attainment. Casas (1984) and Casas and Furlong (1986) have documented that Latino parents are less involved

than other groups in their child's education and that family educational levels seems to have a more significant impact on educational performance of Latino children than on other ethnic or racial groups. Lastly, Steinberg, Greenberger, Garduque & McAuliffe (1982) found, after accounting for home factors positively related to school dropouts, such as many children in the home, lack of reading materials, and single-parent home, that Latino students still showed a dropout rate far in excess of Euro-American or African American students. These studies illustrate the special needs of Latino youth and point out why increased dropout prevention research directed toward this unique cultural group is imperative. Indeed, Valencia (1991), a noted researcher on education, speaks to the exigency in finding answers for educating Latino students when he notes that conditions for educating Latinos seem to be worsening.

The Latino population is heterogeneous

Efforts to address the Latino dropout problem must also be sensitive to the vast differences in the Latino population. Lack of success with dropout prevention in the past has, to a great extent, been due to the broad brush approach of programming—too often educators have assumed that at-risk students are a homogeneous group who will benefit from similar dropout prevention program.

"Latino" generally refers to persons of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin, regardless of race (Brown 1980). However, along a variety of educational and economic indicators, the differences among Latino sub-groups are actually greater than differences between Latino and non-Latino populations. For instance, in 1988, differences in dropout rates between Cuban and Mexican origin populations were greater than differences in dropout rates between Latino and non-Latino populations (U.S. Bureau of the Census 1988a). It appears that attention to sub-group differences is as warranted as attention to major differences in characteristics such as income, race and gender.

Mexican Americans (MA), or Chicanos, represent two-thirds of the Latino population in the United States, by far the largest of the Latino sub-groups (U.S. Bureau of the Census 1988a). MA-Chicanos represent an even larger proportion of the Latino population in Texas and California (Orum 1986). Of course, MA-Chicanos themselves are a diverse group who differ in such ways as language use, immigration status, and their own ethnic identities (Matute-Bianchi 1986). Nevertheless, they generally have the lowest socioeconomic status and

the lowest level of educational attainment of all the Latino sub-groups (U.S. Bureau of the Census 1988a) and, consequently, their educational and economic circumstances warrant particular attention by researchers and policy makers.

School dropout prevention efforts

Traditionally, dropout prevention efforts have not addressed the contexts in which youth live and function. Instead, the personal characteristics of students have been the focus of investigations seeking to explain school failure. This line of research eventually targeted income level, race, ethnicity, home language, parent education and immigration status as child characteristics that "cause" school failure and school dropout. Thus, the student and not the contexts of influence were viewed as the problem in need of reform. As a result, dropout efforts have historically been focused on the individual student and just as historically have met with minimal success (Natriello, McDill & Pallas 1990). More recently, dropout prevention efforts have shifted the focus of reform to the school as a context of influence on the youth. During the last decade a plethora of "school reform" efforts have reflected this change of focus. Results from these efforts have been disappointing (Wehlage, Rutter, Smith, Lesko & Fernández 1989). What has emerged, however, from these efforts is a further expansion of the concept of context of influence on youth achievement. The definition of the school itself as a context has been expanded beyond curriculum to school climate, teacher behavior and most recently to management and organization structure. Thus, school reform efforts were recently described as "restructuring" schools so that all of the subcontexts within the school are brought into the process of reform.

It is in this national foray of restructuring schools, that educators and other stakeholders have come to recognize that the school context and all its complexities is inextricably bound to the other contexts of influence on youth achievement. That is, the achievement of a child in the school context is influenced not only by school variables but also by family and community variables and vice versa (National Research Council 1993).

This recognition, that child behavior and development is an interaction between multiple contexts of influence and the individual characteristics of each child, has rendered naive singular interventions directed at just the adolescent or just one context of influence. Indeed, widespread failure of simplistic efforts to reduce school

dropouts in high risk youth as well as recent discussions in the literature point out the critical importance of providing intervention in *all contexts* in which the adolescent functions (National Center for Research on Cultural Diversity and Second Language Learning 1993).

The ALAS Dropout Intervention Project

ALAS (Achievement for Latinos through Academic Success) was a five year research project funded by the U.S. Department of Education, the University of California Presidential Grant for School Improvement and the University of California Linguistic Minority Research Institute. The purpose of the project was to test the efficacy and cost-effectiveness of a multifaceted dropout prevention effort in an urban middle school serving MA-Chicano youth.

The ALAS model was founded on the premise that both the youth and all the contexts of influence must be simultaneously addressed if dropout prevention efforts were to be successful. Thus, ALAS consists of a series of specific *intervention strategies* focused on the adolescent as well as on the three *contexts of influence* on adolescent achievement—the family, school and community. A central assumption of the model was that not only did each context need individual reform to increase its positive influence on youth but, additionally, barriers which reduced or prevented communication and coherence between contexts must be bridged. The intervention strategies of ALAS were designed to increase the effectiveness of each context as well as to increase collaboration between contexts.

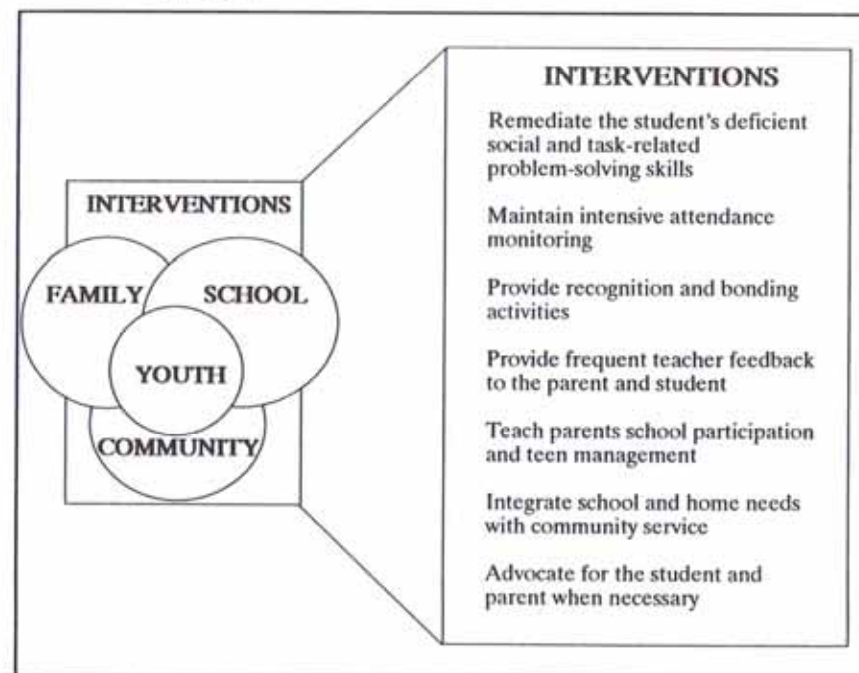
Strategies focused on the *adolescent* included social problem-solving training and counseling, student recognition and enhancement of school affiliation. Strategies focused on the *school* included frequent teacher feedback to students and parents and attendance monitoring. Strategies focused on the *family* included utilization of community resources, and parent training in school participation and in directing and monitoring their adolescent. Strategies focused on the *community* were enhancement of collaboration among community agencies for youth and family services and enhancement of skills and methods for serving the youth and family (see Figure 1). Specific strategies used in the intervention were developed from the existing literature and from prior research of the authors.

(1) *Strengthen the student's social and task-related problem-solving skills*

Disruptive social and task-related behavior is the student characteristic which most disturbs teachers and school staff (Larson,

Lesar & Gao 1990). 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 (Larson 1989). For example, school behavior problems have been shown to be clearly related to dropout and low grades (Pallas 1987) and low-achieving high-risk "stayers" have been distinguished from dropouts primarily on the basis of degree of misbehavior in school (Wehlage et al. 1989). Schwartz (1982) found that low-track students identified with an anti-academic subculture that based social status on defiance of school and teacher norms.

Figure 1 The ALAS Model. The intervention model depicting 3 contexts of influence on youth behavior and development and the intervention strategies directed at the youth and the contexts of influence.



Latino dropouts report more trouble than other students in getting along with teachers (Stern, Catterall, Alhadeff & Ash 1985). In several studies, Larson (1989a, 1989b) found that lowest achieving Latino junior high students, those students who were at greatest risk to drop out of school, had four times the rate of classroom expulsions than other Latino students. Indeed, projections of her figures showed that the lowest-quartile subgroup of students ($n=500$) in this Los Angeles Latino school would have generated nearly 25,000 disciplinary contacts during seventh and eighth grades! Larson concluded that this disproportionate use of staff time for disciplinary events for a minority of students was a major *disincentive* for school staff to try and keep these highest-risk students in school.

To positively enhance students' social and task-related behavior, the student intervention strategy used in the ALAS dropout project was an extension of a large body of research by one of the authors. The intervention was a social metacognitive problem-solving training program (Larson 1989a). This program was previously found effective in significantly reducing truancy and misbehavior incidents in a highest-risk group of Latino junior high school students and has been shown to significantly increase school work habit and academic grades (Larson 1989a). The training program has also reduced gang involvement and delinquency (Larson 1989c). In the current study, students received ten weeks of problem-solving instruction and two years of follow-up problem-solving prompting and counseling. The training also taught school survival problem-solving.

(2) Provide recognition and bonding activities

Studies of dropouts and ethnic and racial minorities indicate that these students feel much less of a membership or bonding to school than do other students. Wehlage and Rutter (1986) found that dropouts felt alienated from school as indicated by their perceptions of lack of teacher interest in them, expressed belief of poor effectiveness of school discipline and unfairness of school discipline. In another ethnographic study, Wehlage et al. (1989) found that virtually every student 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. Ekstrom, Goertz, Pollack & Rock (1986) also concluded that compared to non-dropouts, dropouts were alienated from school life as indicated by feeling less important and less popular and feeling that other students saw them as troublemakers and

by lower levels of participation in extracurricular events and self-reported low interest in school.

Historically, low SES and ethnic and racial minority students show less affiliation for school than middle-class or Anglo students. Latino students were often found to have a difficult time crossing socio-cultural boundaries and, consequently, felt alienated from the norms and values of mainstream education (Delgado-Gaitán 1988). This alienation and resultant poor achievement was not merely a matter of new immigrant status. Studies by Hayes-Bautista, Schienk and Chapa (1989) and Fernández and Nielsen (1986) found that the longer the residence in the United States the lower the academic achievement and school success.

Lack of affiliation to school by Latino students is suggested by various student behaviors. Latinos were found to participate less often in class and to report that teachers disapproved of them and felt they lacked ability (Delgado-Gaitán 1988). Lack of affiliation with school is also sadly seen in the data showing that Latino dropouts have higher self-esteem than Latino adolescents who remain in school (Wehlage & Rutter 1986)!

Wehlage et al. (1989) suggest that for a student to become socially bonded to school he/she must feel attachment, commitment, involvement and belief. When the student feels personal concern and caring from at least one significant adult in the school and when adults express belief in the student and provide ways for the student to feel successful, then the student will become bonded to the school and its goals.

To increase school affiliation, students in the ALAS project were given frequent positive reinforcement such as praise, outings, recognition ceremonies, certificates, and positive home calls to parents for meeting goals or improving behavior, attendance, and school work. Students were given a sense of membership by being allowed to "hang-out" during recess in the ALAS lounge and to bring friends to ALAS lunch parties.

(3) Maintain intensive attendance monitoring.

Clearly, all dropout research shows that dropouts have poor school attendance prior to dropping out (Ekstrom, et al. 1986; Rumberger 1983; Wehlage & Rutter 1986). In many large secondary schools, attendance is not closely monitored and students quickly get the message that school staff do not really care whether they are in school or not. The National High School and Beyond data show that

twice as many Latino dropouts admitted to cutting classes compared to non-dropout Latinos (Wehlage & Rutter 1986).

Patterns of truancy were gradual, occurring over an extended period of time beginning in junior high school. Larson (1989b) found that highest-risk junior high school Latino youth started out 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 junior high school these students never returned to their entry level attendance patterns.

On the basis of this research, an additional component of the ALAS intervention was school monitoring of period-by-period attendance. Parents were contacted daily about student truancy or extended absence. Students were required to make up missed time and were provided with *positive* adult contacts communicating a personal interest in the student's attendance.

(4) Provide frequent teacher feedback to the parent and student

Everyone needs feedback in order to learn. A basic principal of behavior change is specific and frequent feedback to the performer. Low-achievers need clear and frequent feedback regarding their performance—what they are doing well and what they need to improve.

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 than this. Larson (1989a) found that lowest-achieving junior high school students were not able to accurately predict school grades at five-week intervals without interim feedback reports from teachers.

Larson's previous work (Larson 1988; 1989a) found that students who received feedback with parent notification improved classroom performance and attendance. However, students who received weekly feedback without parent notification did not improve attendance or school performance. Larson found that low-income Latino parents in this study consistently expressed appreciation for being informed weekly and the students reported that the teacher feedback reports and home notes made a positive impact on their school behavior. Similarly, Delgado-Gaitán (1988) found that Latino parents were angry when the school did *not* notify them of their adolescent's poor school performance, even though the parents did not initiate any school contacts themselves.

The ALAS intervention provided weekly and, if needed, daily feedback reports to students *and* parents. Students were taught to use this teacher feedback for focusing thinking and decision making during problem-solving maintenance training. The ALAS project sent home regular notes (or telephones) to parents on a daily, weekly, or bimonthly basis depending upon student need.

(5) Teach parents school participation and teen management

The fact that parental values and attitudes play an important role in academic achievement has long been substantiated by researchers (cf. Rumberger, Ghatak, Poulos, Ritter & Dornbusch 1990). For adolescents, parental monitoring of their behavior has a marked positive impact on grades and homework (Fehrmann, Keith & Reimers 1987).

Social class has a powerful influence on parent school participation. For example, between 40% and 60% of low SES parents fail to attend parent-conferences compared to 20% to 30% for middle class parents (Van Galen 1987). Low SES parents attend school events less, make fewer complaints to the principal and enroll their child less often in summer school than do middle class parents (Stevenson & Baker 1987).

Rumberger, et al. (1990) found that parents of school dropouts were less involved in their child's education than other parents including parents of graduating low-achieving students. They 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 than parents of high school graduates.

Not surprisingly, parental involvement was also found related to achievement in Latino students (Casas & Furlong 1986). Moreover, research has clearly shown that Latino parents interact significantly less than non-Latino parents with teachers and school personnel (Casas & Furlong 1986; Delgado-Gaitán 1992). However, the stereotyped belief that Latino parents give little value to education has been recently challenged by research findings which show that values, attitudes, and aspirations concerning education are not very different in Latino and Anglo households (Delgado-Gaitán 1988).

It appears that Latino parents fail to participate in their child's school due to lack of understanding the role that parents can and are expected to play in their child's school, due to lack of confidence and due to lack of skills in how to interact with teachers and other school staff (Casas & Furlong 1986; Delgado-Gaitán 1988/1992). Addition-

ally, the need for parent-child problem-solving training is supported by previously cited studies showing that parents of dropout and "least adjusted" adolescents do not participate with their child in decision making or joint problem-solving.

Thus, the fifth component of the ALAS intervention program trained parents in two skills: (1) parent-child problem-solving; and (2) parent participation in the schools. Parents in the project received direct instruction and modeling in how to reduce their child's inappropriate or undesirable behavior and how to increase desirable behavior. Parents were monitored for follow-through and prompted to use newly learned parenting skills. Additionally, parents received instruction in *how* and *when* to participate in school activities and when and how to contact teachers and administrators.

(6) *Integrate school and home needs with community services*

Families living at the margin of society; families whose primary language is different from the majority culture; families which are dysfunctional due to substance abuse and/or mental health problems; and families living below the poverty line, are families which, in general, do not have the skills or strategies for seeking out and getting help from community services such as parenting classes, family counseling, special youth programs, and training programs (National Research Council 1993; Natriello, McDill & Pallas 1990). Moreover, these families are not helped by simply being given a referral name and phone number. Rather, the parents and youth need specific guidance and liaison support to make contact with, and begin participation in, a community program.

The community component of the ALAS intervention functioned 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 were not simply referred to these community agencies by ALAS staff but were directly helped with making appointments, transportation, letters of reference, reminders, and so forth. Parents were given knowledge and rationale about how a particular service could benefit them or their child and were monitored for keeping commitments to participate in the community service.

Methods

The program was implemented at a middle school (grades 7-9) in a large urban school district. The barrio in which the school was located was a high crime, gang infested, and graffiti blighted area. The school enrolled 2,000 students, 94% of whom were Latino. Average student performance was at the 25th percentile rank on the Comprehensive Test of Basic Skills (CTBS). Absenteeism averaged 20%. In addition, almost two-thirds of the student's parents had not graduated from high school and 75% spoke only Spanish in the home (U.S. Census Bureau 1992). Per capita income of the local community was half that of the state and county average, approximately \$8,000 versus \$16,000 (U.S. Census Bureau 1992).

Subjects in the ALAS study were targeted using a six-item teacher rating which Larson (1989) showed to reliably differentiate low-income Latino youth into highest-risk and lower-risk groups. Categorization into highest and lower risk groups based on these ratings predicted 73% of the variance in eighth grade *classroom expulsions*, 80% of the *truancy*, 50% of the *cooperation grades*, 67% of *whole day absences*, 30% of the *work habit grades*, and 50% of the variance in *grade point average*. That is, *two years after* the students were rated, the sixth grade teacher ratings explained a significantly large proportion of the variance in middle school performance.

In the ALAS study, highest-risk subjects were selected on the basis of how they compared to their peers on the sixth grade teacher rating scale evaluating (1) need for supervision, (2) level of motivation, (3) academic potential, (4) social interaction skills, (5) teachability, and (6) need for special education services. All sixth grade students attending 11 elementary schools (approximately 625 students from 23 classrooms) surrounding the middle school were rated by their teachers on the six-item scale. Approximately 30% of the students from each classroom were targeted as highest-risk using this method and, of these, 60% were male. All other students were targeted as lower-risk (albeit compared to state and national criteria they were also at risk of dropping out).

Previous research by Good and Brophy (1986) showed the critical importance of school site as a controlling variable in student adjustment, behavior and school drop out. Consequently, because school differences were a threat to internal validity, we chose to compare treatment and control students from the same school and cohort. Therefore, highest-risk students who entered the targeted middle school were randomly assigned into either the treatment or control

group. Of the 625 sixth grade students originally rated, 149 highest-risk students entered the middle school as seventh graders. Of these, 51 students were excluded from consideration because they spoke no English (non-English proficient) and resources were insufficient for including them in the intervention as designed. The remaining 98 students were randomly assigned to a highest-risk control or highest-risk treatment group. Gender was equated in the two groups with two-thirds of the subjects being male. Approximately 25% of each group were officially classified by the school district as Limited English Proficient (LEP), approximately 40% were classified English-only and the remaining were classified as fluent English proficient (with a non-English home language, or bilingual).

Beginning in the 1990-1991 school year, treatment students received the regular school program in conjunction with the ALAS intervention program for all three years of junior high school. ALAS staff were based at the school site every day for three years and accessed the community and home contexts as needed. All treatment students received all of the intervention strategies. The control group received only the regular (i.e., traditional) middle school program.

Results

The efficacy of the intervention was measured by comparing the treatment and control groups on: (1) attrition from the original middle school (mobility); (2) attendance; (3) school grades; and (4) high school credits earned during ninth grade. Although the intervention lasted three years, there were several reasons the efficacy of the intervention was evaluated using only ninth grade data. First, it was assumed from the outset that one goal of the intervention was to change longstanding school-related behavioral patterns in both the students and parents and that such changes developed slowly over time as they are practiced and integrated into existing life experiences. Second, although students remained at the middle school, the ninth grade was officially the first year of high school and critically important for accruing credits toward high school graduation. Third, ninth grade seemed to be a milestone for Latino students inasmuch as 60% drop out during this time.

Mobility

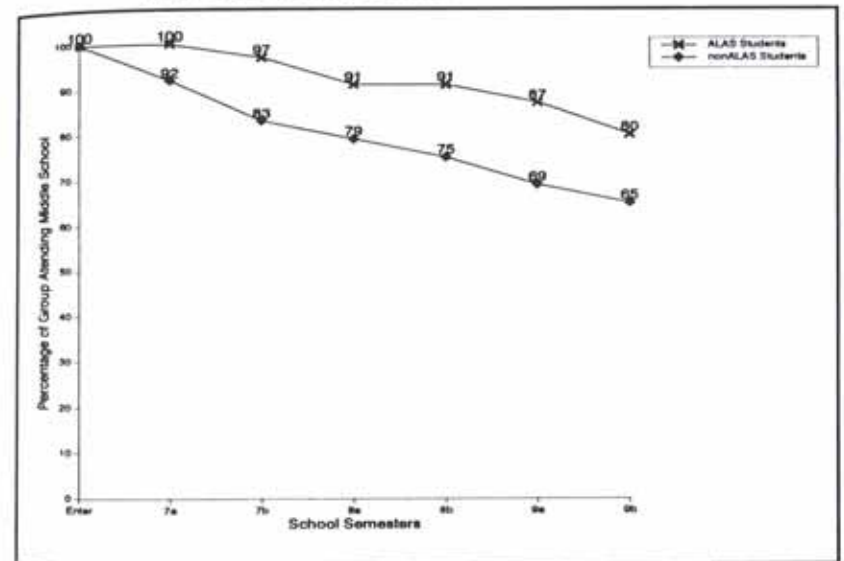
The ALAS intervention reduced mobility of experimental students. That is, by the end of 9th grade 20% of the experimental

students had left the school as compared to 35% of the control students. This is a 43% improvement (see Figure 2).

Attendance

The ALAS intervention reduced excessive absenteeism. Data indicate that about four times as many control students, as compared to ALAS students, were absent more than a quarter of the time during 9th grade (See Figure 3).

Figure 2 Attrition rates from original middle school as a function of the ALAS dropout intervention

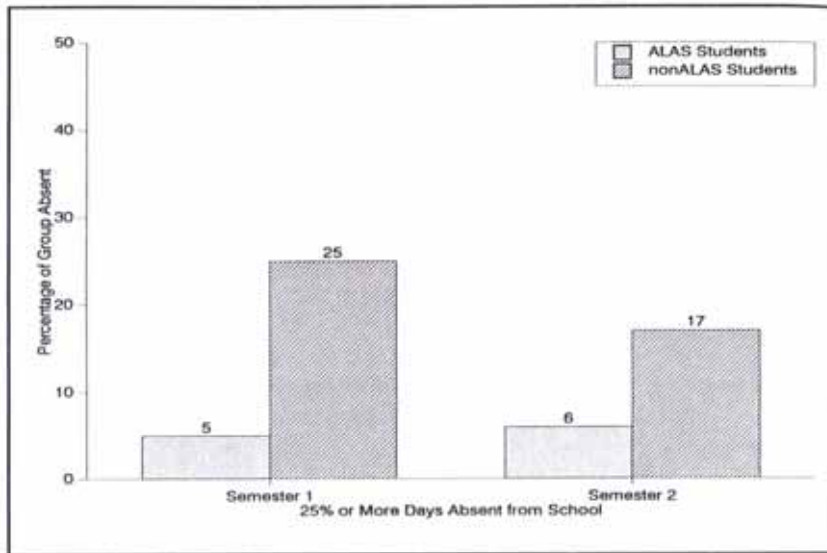


Report card grades

Data indicate that the ALAS intervention improved school grades, especially reducing the number of failed classes. Over all grades received, control students received about twice as many fails (101 versus 54) as ALAS students. Of all grades issued during 9th grade, 31% of control student English grades versus 15% of experimental student English grades were fails; in math 32% versus 15% were fails; in history 33% versus 22% were fails; in elective A 18% versus 9%

were fails; in elective B 18% versus 3% were fails; and in physical education 22% versus 5% were fails (see Figure 4).

Figure 3 Absences from school during ninth grade as a function of the ALAS dropout intervention



Graduation credits

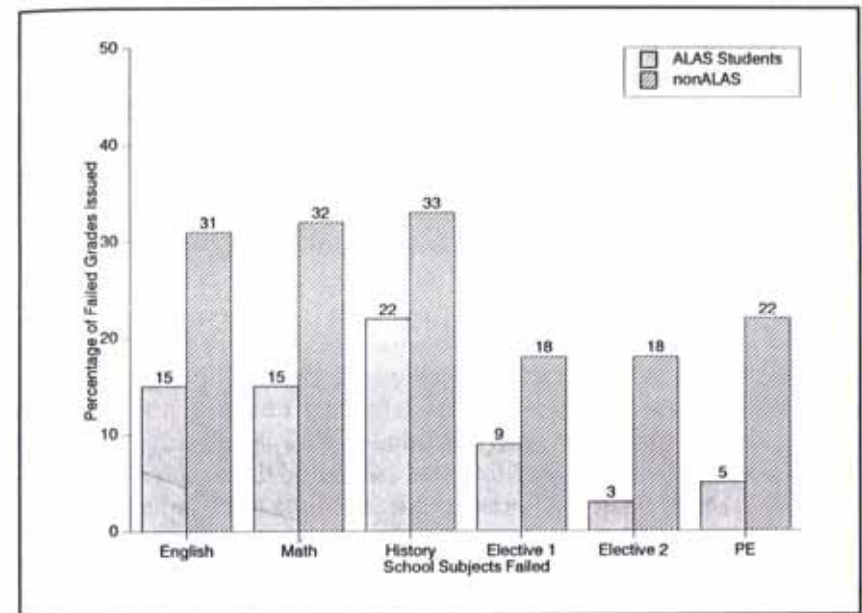
The ALAS intervention increased credits earned toward high school graduation. This was most apparent when comparing the groups on students who were moderately to seriously behind in possible earned credits. That is, the two groups had similar proportions of students who earned all possible credits during 9th grade; however, twice as many control students (47% versus 22%) were behind a quarter or more of their credits and nearly three times as many control students (28% versus 10%) were behind half or more of their credits (see Figure 5).

Discussion and significance of results

The significance of this intervention is in both the *magnitude* of improvement of single outcome variables and in the *breadth* of impact over many outcome variables. That is, data show that the intervention, on average, doubled or tripled school success on virtually every

measure of school performance and engagement. Students in the control group had 43% greater mobility or attrition from the school, had twice the number of failed classes, 101 versus 54, were four times more likely to have excessive absences and were two or three times more likely to be seriously behind in high school graduation credits by the end of ninth grade.

Figure 4 Percentage of failed classes during ninth grade as a function of the ALAS dropout intervention



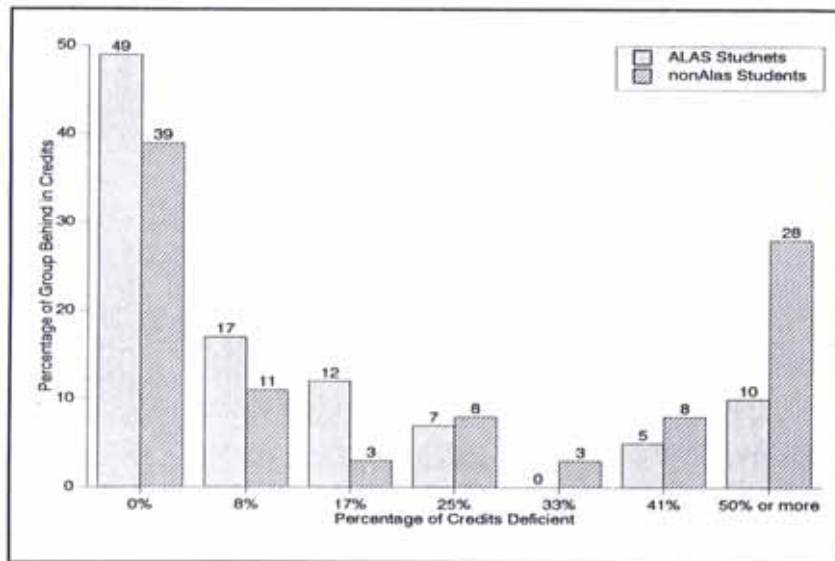
Taken together, data on mobility, attendance, failed classes and graduation credits indicated that the ALAS program had a substantial and practical impact on students who received the intervention. Results achieved appeared even more remarkable when the characteristics of the subjects were considered.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

We believe that the positive differences in outcomes for ALAS students compared to control students was a function of 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 which 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 each context's procedures and services. Second, through a case management approach, to increase the communication and cooperation between contexts. Experience demonstrated that both types of interventions were sorely needed.

Figure 5 Percentage of high school credits below expectancy as a function of the ALAS dropout intervention



In terms of skill development, we found that within the family context effective parenting skills for living in a high crime, urban environment were weak or nonexistent. For example, most parents did not monitor their teens for wearing gang related clothing. Within the school context, impersonal disciplinary and bureaucratic procedures generally functioned, inadvertently or otherwise, to exclude students rather than to embrace or include them. For example, students were 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 youth and their families because of ineffective outreach and follow through. For example, agencies did not have provisions for reaching families with no transportation and did not follow-up on missed appointments.

In terms of collaboration between contexts, we found, with little exception, that the contexts of influence, instead of providing a cradle to nurture, stabilize and support the adolescent, generally functioned at cross purposes like colliding tectonic plates destabilizing youth who were required to cross context boundaries on a daily basis. The adults who defined and "managed" each contexts had personal as well as organizational barriers preventing them from integrating goals and services of their reference context with the goals and services of other contexts. For example, mental health, probation, school and protective services did not work collaboratively to form a plan of intervention for an adjudicated youth with emotional problems but rather "passed" each 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 served both to increase the skill of each context to provide effective service to youth as well as to increase the collaboration between contexts. As a result, we believe that each context singularly, as well as cohesively, increased its ability to positively influence youth behavior. By creating a cohesive and consistent action plan between contexts, the capability of each context to positively influence a youth was enhanced and results from this study demonstrate the benefits which can ensue.

References

- Alpert, G. & Dunham, R. 1986. Keeping academically marginal youth in school. *Youth and Society*, 17:4, 346-361.
- Brown, G. B. 1980. *The Condition of education for Hispanic Americans*. Washington, DC: Government Printing Office.
- California Department of Education. 1991. *Racial or ethnic distribution of staff and students in California public schools*. Sacramento, CA: Author.
- California Department of Finance. 1992. *School enrollment projections*. Mimeo.
- Casas, J. 1984. Educational expectations of Mexican-American parents: A Realistic perspective. Paper presented at Symposium on Research efforts to enhance understanding and services to Hispanic children, Annual Convention of the American Psychological Association, Toronto, CAN.
- Casas, J. & Furlong, M. 1986. *Santa Barbara student success story: A Final report*. Available from Santa Barbara School Districts. Santa Barbara, CA.
- Catterall, J. S. 1987. On the social costs of dropping out of school. *High School J.*, 71:11, 19-30.
- Committee for Economic Development. 1987. *Children in need: Investment strategies for the educationally disadvantaged*. NY: Author.
- Delgado-Gaitán, C. 1988. Socio-cultural adjustment to school and academic achievement. *Journal of Early Adolescence*, 8:1, 63-82.
- Delgado-Gaitán, C. 1992. *Literacy for empowerment: The Role of parents in children's education*. NY: Falmer Press.
- Ekstrom, R. B., Goertz, M. E., Pollack, J. M. & Rock, D. A. 1986. Who drops out of high school and why? Findings from a national study. *Teachers College Record*, 87:3, 356-373.
- Fehrmann, P. G., Keith, T. Z. & Reimers, T. M. 1987. Home influence on school learning: Direct and indirect effects of parental involvement on high school grades. *J. of Educational Research*, 80:61, 330-337.
- Fernández, R. & Nielsen, F. 1986. Bilingualism and Hispanic scholastic achievement: Some baseline results. *Social Science Research*, 15:1, 43-70.

- Fine, M. 1991. *Framing dropouts*. Albany, NY: State University of New York Press.
- Good, T. L. & Brophy, J. E. 1986. School effects. In M. C. Wittrock, Eds. *Handbook of research on teaching* (pp. 570-602). NY: Macmillan.
- Hayes-Bautista, D., Schienk, W. O. & Chapa, J. 1989. *The Burden of support: Young Latino in an aging society*. Stanford University Press.
- Hess, Jr., G.A. & Lauber, D. 1986. *Dropouts from the Chicago public schools*. Chicago, IL: Chicago Panel on Public School Finances.
- Larson, K. A. 1988. *Social thinking skills: A Social problem-solving training program for adolescents*. Ventura, CA: Clear Pointe Press.
- Larson, K. A. 1989a. Early secondary school adjustment for at-risk and highest-risk students. Paper presented at the Annual Meeting of the American Educational Research Association, San Francisco, CA.
- Larson, K. A. 1989b. Problem-solving training for enhancing school achievement in high-risk young adolescents. *Remedial and Special Education*, 10:5, 32-43.
- Larson, K. A. 1989c. Youthful offender's success on parole: The Efficacy of teaching social problem-solving skills. In S. Duguid, Ed. *Yearbook of correctional education*. British Columbia, CAN: Simon Fraser University & the Correctional Education Assoc.
- Larson, K. A., Lesar, S. & Gao, X. 1990. The importance of discipline incidents: Differentiating students at highest risk for school dropout. Unpublished manuscript, *Middle school dropout: The Pushout-walkout phenomenon*.
- Matute-Bianchi, M. E. 1986. Ethnic identities and patterns of school success and failure among Mexican-descent and Japanese-American students: An ethnographic analysis. *American J. of Education*, 95, 233-255.
- National Research Council. 1993. *Losing generations: Adolescents in high-risk settings*. Washington, DC: Commission on Behavioral and Social Sciences and Education, National Academy Press.
- Natriello, G., McDill, E. L. & Pallas, A. M. 1990. *Schooling disadvantaged children: Racing against catastrophe*. NY: Teachers College Press.

Orfield, G. & Monfort, F. 1988. *Racial change and desegregation in large school districts: Trends through the 1986-87 school year*. Washington, DC: National School Boards Association.

Orum, L. S. 1986. *The Education of Hispanics: Status and implications*. Washington, DC: National Council of La Raza.

Pallas, A. 1987. *School dropouts in the United States*. Washington, DC: Nat'l. Center for Education Statistics.

Rumberger, R. W. 1983. Dropping out of high school: The Influence of race, sex and family background. *American Educational Research J.*, 20:2, 199-220.

Rumberger, R. W. 1987. High school dropouts: A Review of issues and evidence. *R. of Educational Research*, 57:2, 101-121.

Rumberger, R. W. 1990. Second chance for high school dropouts: The Costs and benefits of dropout recovery programs in the United States. In D. Inbar, Ed. *Second chance in education: An Interdisciplinary and international perspective* (pp. 227-250). Philadelphia, PA: Falmer Press.

Rumberger, R. W., Ghatak, R., Poulos, G., Ritter, P. L. & Dornbusch, S. M. 1990. Family influences on dropout behavior in one California high school. *Sociology of Education*. 63:4, 283-299.

Rumberger, R. W. 1991. Chicano dropouts: A Review of research and policy issues. In R. Valencia, Ed. *Chicano school failure and success* (pp. 64-89). NY: Falmer Press.

Rumberger, R. W. 1992. Why students drop out of middle school: A Comprehensive, multilevel analysis. Paper presented at the Annual Meeting of the American Educational Research Association, San Francisco, CA.

Schwartz, F. 1982. Supporting or subverting learning: Peer group patterns in four track schools. *Anthropology and Education Q.*, 12, 99-121.

Steinberg, L., Greenberger, E., Garduque, L. & McAuliffe, S. 1982. High school Students in the labor force: Some costs and benefits to schooling and learning. *Educational Evaluation and Policy Analysis*, 4:3, 363-372.

Stern, D., Paik, I., Catterall, J. S. & Nakata, Y. 1989. Labor market experience of teenagers with and without high school diplomas. *Economics of Education R.*, 8, 233-246.

Stevenson, D. L. & Baker, D. P. 1987. The Family-school relation and the child's school performance. *Child Development*, 58, 1348-1357.

U.S. Bureau of Census. 1988. *School enrollment-Social and economic characteristics of students: October 1985 and 1984*. (Current Population Report, Series P. 20, No. 462). Washington, DC: U.S. Government Printing Office.

U.S. Bureau of Census. 1992a. *Statistical Abstract of the United States*, 112th ed. Washington, DC: U.S. Government Printing Office.

U.S. Bureau of Census. 1992b. *Decennial Census, 1990: Summary social, economic, and housing characteristics*, Report CPH-5-6. Washington, DC: U.S. Government Printing Office.

U.S. Department of Education. 1990. *National goals for education*. Washington, DC: U.S. Government Printing Office.

U.S. General Accounting Office. 1987. *School dropouts: Survey of local programs*, GAO/HRD-87-108. Washington, DC: U.S. Government Printing Office.

U.S. National Center for Education Statistics. 1991. *Digest of education statistics*. Washington, DC: U.S. Government Printing Office.

Valencia, R. 1991. *Chicano school failure and success*. London: Falmer Press.

Van Galen, J. 1987. Maintaining control: The Structuring of parent involvement. In G. Noblit & W. T. Pink, Eds. *Schooling in social context: Qualitative studies*. Norwood, NH: Ablex.

Veltman, C. 1976. *Relative educational attainment of minority language children*. Washington, DC: National Center for Education Statistics.

Wehlage, G. G. & Rutter, R. A. 1986. Dropping out: How much do schools contribute to the problem? *Teachers College Record*, 87, 374-392.

Wehlage, G. G., Rutter, R. A., Smith, G. A., Lesko, N. & Fernández, R. R. 1989. *Reducing the risk: Schools as communities of support*. NY: Falmer Press.