

UC Berkeley

UC Latino Eligibility Task Force

Title

Latino Student Eligibility and Participation in the University of California: Report Number Four of the Latino Eligibility Task Force

Permalink

<https://escholarship.org/uc/item/78x6s18d>

Journal

CLPR, 1(4)

Author

UC Latino Eligibility Task Force

Publication Date

1995-03-05

Peer reviewed

Latino Student Eligibility and Participation in the University of California

REPORT NUMBER FOUR OF THE
LATINO ELIGIBILITY TASK FORCE

March 1995



UNIVERSITY OF CALIFORNIA
LATINO ELIGIBILITY TASK FORCE

University of California Latino Eligibility Task Force

Members

DR. RICHARD DURÁN
Associate Professor of Education
University of California, Santa Barbara

Dr. FRANCISCO J. HERNANDEZ
Vice Chancellor Student Affairs
University of California, Santa Cruz

DR. TROY DUSTER
Professor of Sociology
University of California, Berkeley

DR. REYNALDO MACIÁS
Professor of Education
University of California, Santa Barbara

DR. LEOBARDO ESTRADA
Associate Professor of Urban Planning
University of California, Los Angeles

DR. FLORA ORTIZ
Professor of Education
University of California, Riverside

DR. RICHARD FIGUEROA, Chair
Professor of Education
University of California, Davis

DR. RAYMUND PAREDES
Associate Vice Chancellor for
Academic Development
University of California, Los Angeles

DR. PATRICIA GANDARA
Assistant Professor of Education
University of California, Davis

DR. DANIEL SOLORZANO
Assistant Professor of Education
University of California, Los Angeles

MANUEL GÓMEZ
Associate Vice Chancellor,
Academic Affairs
University of California, Irvine

DR. OLGA VASQUEZ
Assistant Professor of Communications
University of California, San Diego



Richard Durán



Troy Duster



Leobardo Estrada



Richard Figueroa



Patricia Gandara



Manuel Gómez



Francisco J. Hernandez



Reynaldo Maciás



Flora Ortiz



Raymund Paredes



Daniel Solorzano



Olga Vasquez



Aida Hurtado

Resource Persons

DR. AIDA HURTADO, *Research Director*
Associate Professor of Psychology
University of California, Santa Cruz

MARY ANN HULT, *Administrative Assistant*
University of California, Santa Cruz

CAROL McCLAIN
Coordinator, Research Issues
Office of the President

MICHAEL ALDACO
Director, SAA Outreach and Support
Programs
Office of the President

Research Assistants

*University of California,
Santa Cruz*

PATRICIA CRESPO, *Senior, Psychology and
Sociology*

ALEJANDRA DÍAZ, *Senior, Psychology*

ELENA GASCA, *Senior, Psychology and
Sociology*

REYNOLD GONZALEZ, *Doctoral Candidate,
Psychology*

JOSÉ SAHAGÚN, *B.A., Sociology*

SOBEIDA VIZCARRA, *Junior, Psychology*

Research Assistant

*University of California,
Davis*

ADRIANA X. ECHANDIA, *Doctoral Candidate,
Education*

Table of Contents

INTRODUCTION	6
THE HISTORICAL CONTEXT	8
THE UNIVERSITY OF CALIFORNIA AND K-12 EDUCATION: THE ROLE OF RESEARCH	19
EXAMPLES OF UNIVERSITY RESEARCH PROGRAMS IN K-12 EDUCATION	21
CONCLUSIONS AND RECOMMENDATION	30
REFERENCES	33

Introduction

REPORT NUMBER ONE OF THE LATINO ELIGIBILITY TASK FORCE NOTED that eligibility of Latinos for admission to the University of California “will not improve overnight and that the university’s most important long-term role is to serve as partner with the schools and community in understanding and acting on the crisis.” One of the recommendations in that report focused on this issue of partnership:

University of California programs and research units that address Latino concerns should direct some of their resources toward enhancing Latino student eligibility, especially by focusing on improving K-12 teaching and curriculum directed at Latino students.

Report Number Four first concentrates on the historical and contemporary K-12 achievement levels of Latino pupils. There are two reasons for re-visiting the issues associated with elementary and high school outcomes. First, there is a need to examine the knowledge base about how fair, effective, and equitable California schools have been with Latino students. Current concerns about affirmative action programs and about the wisdom of group-specific solutions need to be framed against an historical, factual context. And second, there is a need to examine the university’s role in addressing the educational needs of Latino students given what is known about their K-12 levels of under-achievement and the intervening factors associated with such achievement.

This report recommends specific avenues through which the university can help resolve the educational crises facing Latino children and youth. Specific examples of powerful and innovative University of California (UC) research programs in Education are described. It is proposed that these types of research programs can serve as a basis for the reform of K-12 education for Latino pupils, given a more emphatic degree of institutional support and given greater linkage to public school teachers and to the Education programs in the California State University system. The fundamental premise in this report is that the solution to the underrepresentation of Latino students in the University of California resides in the reform of K-12 education for Latino children and youth.

Based on these considerations, this report makes the following recommendation:

The university should strengthen its role in K-12 education by consolidating and intensifying its efforts through:

- 1) increasing support for basic and applied research in California's public schools by UC Education units and other academic research units;**
- 2) enlarging the funding base and operations of the UC Linguistic Minority Research Institute;**
- 3) establishing a Subject Matter Project on Pedagogy dedicated to students who are at risk because of ineffective educational programs;**
- 4) examining the possible contribution of the Project SMART model for increasing the diversity in UC's teacher-credentialing programs;**
- 5) supporting the expansion of UC-CSU joint degree programs and collaborative efforts in education.**

The Historical Context

THE PUBLIC SCHOOL SYSTEM IN CALIFORNIA IS ESSENTIALLY A PYRAMID, with the K-12 system at the base and the University of California at the top. Given an educational system that provides comparable opportunities to all pupils, the highest achieving 12.5 percent of students graduating from California high schools and eligible to enter the UC should present a reasonable profile of the K-12 population in terms of gender, race and ethnicity. This has never been the case for Latino pupils. Report Number One presented the data showing the levels of Latino underrepresentation in the university. The reasons for this phenomenon are rooted in California's K-12 public education efforts dating back to the early part of this century.

The 1920s and 1930s

In the 1920s and 1930s, "Mexican" and "Spanish" students routinely scored around the 16th percentile level on most academic subjects. They tended to be overage in relation to their grade-level placements, overrepresented in classes for the handicapped, taught in overcrowded classrooms and in segregated schools, and educated by teachers with little familiarity with their cultural and social background (Reynolds, 1933). Many spoke Spanish as their primary language. An early intervention in this regard considered the following:

"The board of directors of the school has approved of an experiment in which it is proposed to teach beginning children in Spanish for one period each day. This action will approach the viewpoint advocated in certain sections of Europe and Africa: 'Let the child from the bilingual home speak his mother tongue and learn to read it during his first 2 or 3 years in school. Then make the change to the official language of the country...' The...educators state that they are not ready to publish conclusions but that results so far are encouraging" (Reynolds, 1933, pg. 29).

The 1960s

In the 1960s, the *Coleman Report* (Coleman, et al., 1966) made the same points about the educational attainment of Latino children in the United States. Using one of the largest national samples of students (645,000) ever collected, the *Coleman Report* noted that the academic gap of Latino students relative to white students tended to increase progressively from the elementary to the high school years.

The 1970s

In the 1970s, the United States Commission on Civil Rights (USCCR) produced a set of studies on the education of Mexican American youth in the Southwest.

The Commission documented the following:

Report I. “[Mexican American] public school pupils...are severely isolated by school district and by schools within individual districts; for the most part, Mexican Americans are underrepresented on school and district professional staffs and on boards of education” (USCCR, 1971a, pg. 59).

Report II. “...Mexican Americans...do not obtain the benefits of public education at a rate equal to that of their Anglo classmates...Without exception, minority students achieve at a lower rate than Anglos: their school holding power is lower; their reading achievement is poorer; their repetition of grades is more frequent; their overageness is more prevalent; and they participate in extracurricular activities to a lesser degree than their Anglo counterparts” (USCCR, 1971b, pg. 41).

Report III. “...[S]chools use a variety of exclusionary practices which deny the Chicano student the use of his language, a pride in his heritage, and the support of his community” (USCCR, 1972a, pg. 48).

Report IV. “The State of Texas has devised a system of school finance by which expenditures on education are strongly tied to the property wealth of the district and the personal income of district residents” (USCCR, 1972b, pg. 29).

Report V. “...The schools of the Southwest are failing to involve Mexican American children as active participants in the classroom to the same extent as Anglo children. On most of the measures of verbal interaction between teacher and student, there are gross disparities in favor of Anglos...teachers praise or encourage Anglo children 36 percent more often than Mexican Americans. They use or build upon the contributions of Anglo pupils fully 40 percent more frequently than those of Chicano pupils” (USCCR, 1973, pg. 43).

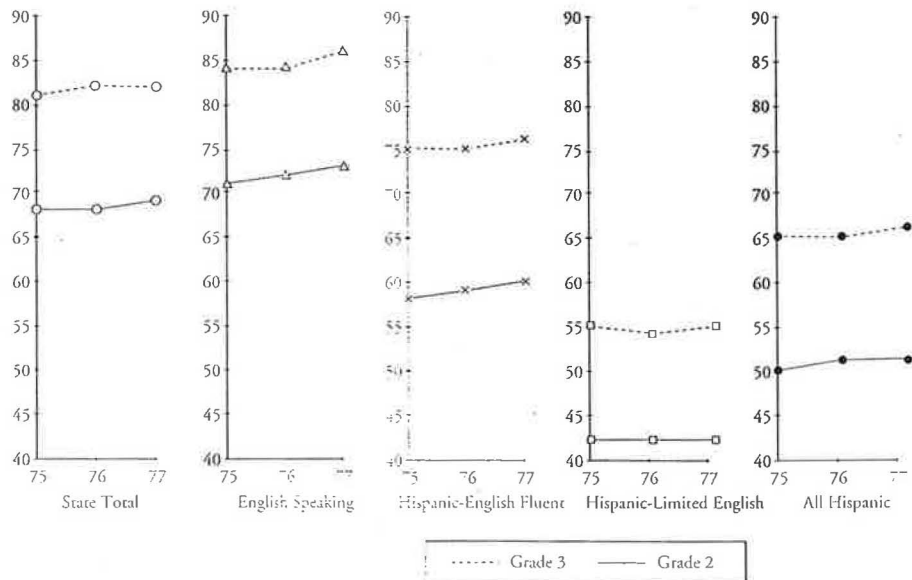
Report VI. “The knowledge and skills [Mexican American students] have gained in their early years are regarded as valueless in the world of the schools...” [pg. 67] “Textbooks used in the teaching of all courses in Southwestern schools either fail to make reference to Chicano culture, history, and participation in the development of the Southwest or distort or denigrate that history and culture.” [pg. 71] “...[O]nly rarely are Mexican American children able to find a Mexican American counselor to confide in or one with some understanding of their background.” [pg.

68] “Chicano children are retained in grade at more than twice the rate for Anglos.” [pg. 68] “Chicano students are grossly overrepresented in low ability group classes and underrepresented in high ability group classes.” [pg. 68] “Chicano children are two and a half times as likely as Anglos to be placed in [classes for the educable mentally retarded]” [pg. 68].

“The six reports of the Commission’s Mexican American Education Study cite scores of instances in which the actions of individual school officials have reflected an attitude which blames educational failure on Chicano children rather than on the inadequacies of the school program. Southwestern educators must begin not only to recognize the failure of the system in educating Chicano children, but to acknowledge that change must occur at all levels — from the policies set in the state legislatures to the educational environment created in individual classrooms” (USCCR, 1974, pg. 69).

In California, during the 1970s, Latino children’s academic achievement levels were significantly below those of state totals. Figure 1 presents these data. The reading scores reported by the California Assessment Program for the 1975-76, 1976-77 and 1977-78 school years (California State Department of Education, 1978) show that Latino second and third graders (“All Hispanic” in Figure 1) were more than one year behind state and “English-speaking” totals. The data also show that “Hispanic-Limited English” speaking children were more than two years behind.

Figure 1. Comparisons of California Assessment Program Average Scores in Reading for Second and Third graders for the 1975-76, 1976-77, 1977-78 School Years.



In 1979, though Latino children in California made up 23 percent of all K-12 public school pupils, the Latino representation rates for school district superintendents was 3 percent, for principals 5 percent, and for classroom teachers 6 percent. Teachers' aides, on the other hand, made up 23 percent of school site staff across the state. For many Latino children in California, it was the high-school educated paraprofessional who managed most of their education.

In a unanimous decision in 1974, the United States Supreme Court initiated an unparalleled reform movement in the education of bilingual children in the United States. Addressing the complaints of some 1,800 Chinese pupils in the San Francisco Unified School District, the Court established that where language factors applied, equal educational opportunity did not mean "the same for all." Something different had to be provided. Though not specifically recommending bilingual education as the sole remedy, the Court's decision in *Lau v. Nichols* ushered in a unique set of inquiries and reforms in the education of Latino children from bilingual backgrounds. In the few places where effective bilingual programs have been instituted, the evidence is consistent. Academic achievement in English is greater than in classrooms where no bilingual instruction is provided. In California, a small percentage of Latino children eligible to receive bilingual instruction actually receive it.

The 1980s

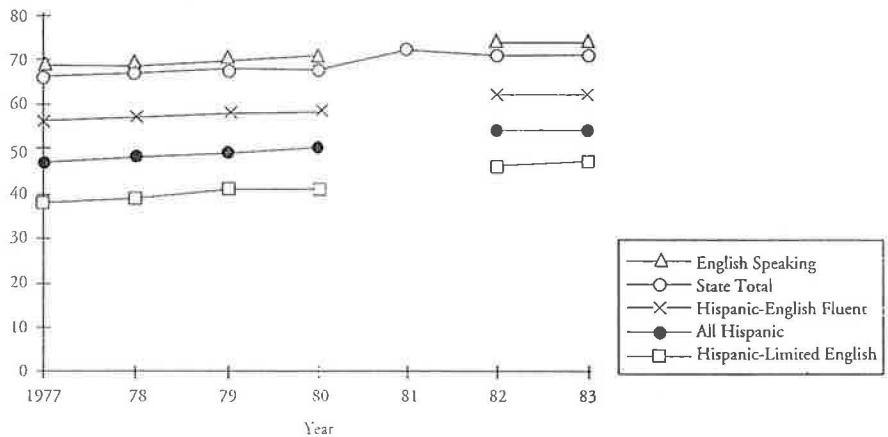
In 1986, a special issue of the *American Journal of Education* concentrated on "The Education of Hispanic Americans: A Challenge for the Future" (Arias, 1986). The empirical data showed: that at the national level Hispanic, K-12 students were schooled in progressively more and more segregated schools; that the more segregated the school the more overcrowded the classrooms (particularly in California) and the lower the academic achievement; that Hispanic students were disproportionately grouped into non-academic tracks; that 45 percent of Hispanic, high school pupils dropped out; and that "Hispanics were not entering the same kinds of colleges as whites...many went to community colleges, where few ever transferred successfully to four-year institutions" (Orfield, 1986, pg. 10).

During the 1980s, Latino children's academic achievement levels in the United States for reading proficiency, writing performance, mathematics proficiency, science proficiency, and proficiency in civics show two characteristics: 1) they do not close the gap with the achievement scores of white students, and 2) the older

the Latino student, the more the gap tends to increase (National Center for Educational Statistics, 1993).

In California, Latino students' academic achievement levels continued to be significantly below state totals and totals for English-speaking, non-Latinos. Figure 2 presents data across seven years. The reading scores reported by the California Assessment Program (California State Department of Education, 1985) between 1977-78 and 1983-84 show that Latino sixth graders ("All Hispanic" in Figure 2) never closed the 21-point gap between their reading scores and those of English-speaking, non-Latino students. The data also show that "Hispanic-Limited English" speaking children begin with a 31 point gap in 1977-78 and six years later remain 27 points behind English-speaking non-Latino students.

Figure 2. Comparisons of California Assessment Program Average Scores in Reading for the 1977-78 Through 1983-84 School Years.



Figures 3, 4, 5, and 6 close out the '80s showing the same results for grades 3 (Figure 3), 6 (Figure 4), 8 (Figure 5), and 12 (Figure 6) in the areas of Reading, Written Language, Math, History-Social Science, and Science (California State Department of Education, 1991). The academic gap between Latino and white pupils is depicted by constant parallel lines and the gap widens as students move from elementary through high school grades.

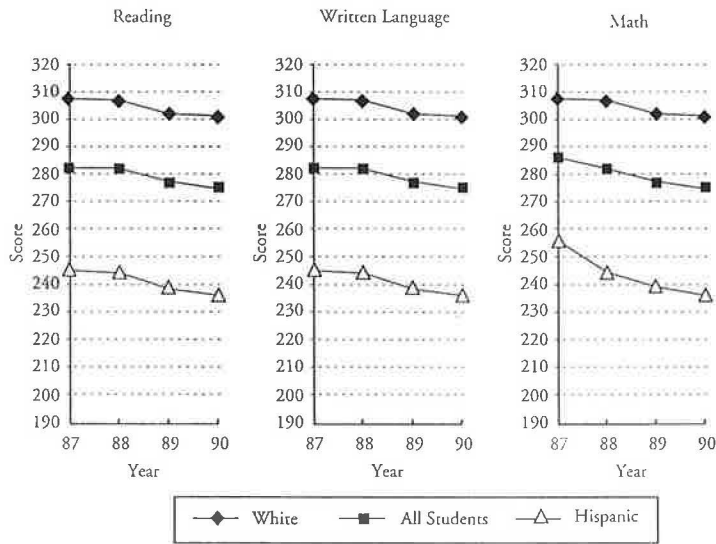


Figure 3. Comparisons of California Assessment Program Average Scores in Reading, Written Language, and Math for Grade 3 from 1987 Through 1990.

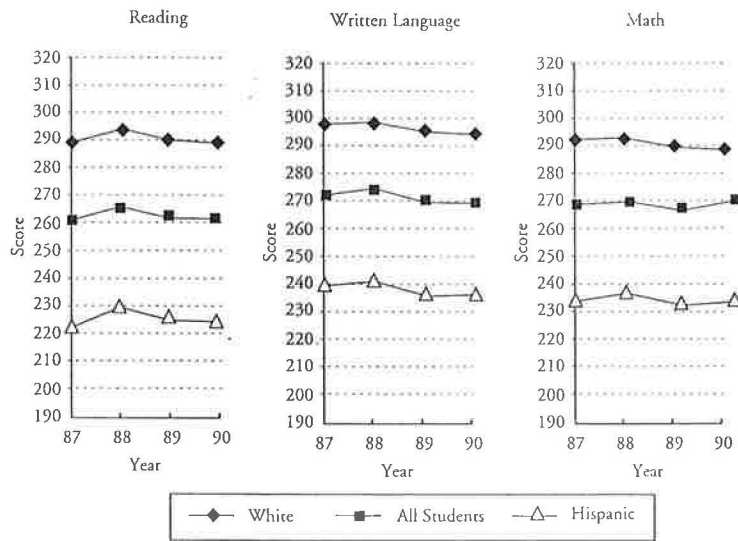


Figure 4. Comparisons of California Assessment Program Average Scores in Reading, Written Language, and Math for Grade 6 from 1987 Through 1990.

Figure 5. Comparisons of California Assessment Program Average Scores in Reading, Math, History-Social Science, and Science for Grade 8 from 1986 through 1990.

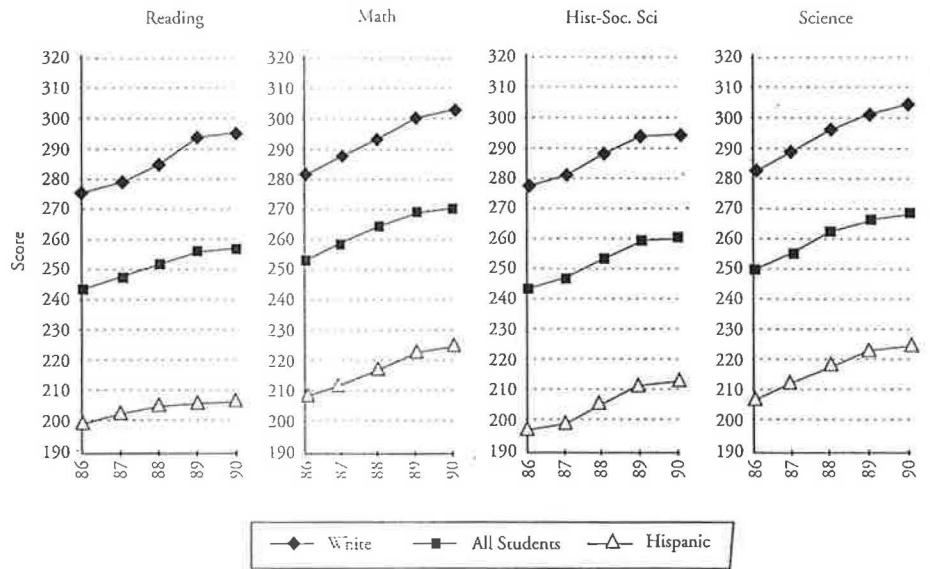
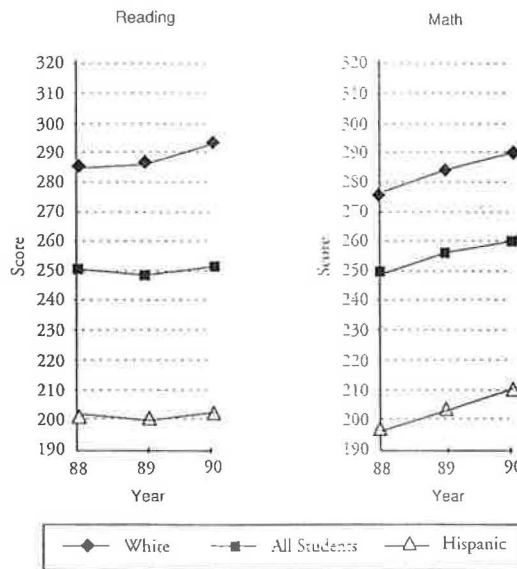


Figure 6. Comparisons of California Assessment Program Average Scores in Reading and Math for Grade 12 from 1988 Through 1990.



The 1980s produced a large body of published work on the under-achievement of Latino pupils. What is unique about these reports is their focus on the factors that seem to go hand-in-hand with the largely ineffectual efforts of the K-12 system with Latino students. Schools continue to be segregated (The Achievement Council, 1984). Latino students are disproportionately held back a grade (Assembly Office of

Research, 1985). Latino schools are among the most severely underfunded (The Achievement Council, 1988) and the most overcrowded (Assembly Office of Research, 1990). Latino faculty and administrators continue to be largely absent in California's public schools (California State Department of Education, 1985, 1988). Tracking into vocational programs is the *modus operandi* for many school districts (Assembly Office of Research, 1985) and so is tracking into special education programs for the learning disabled (Mitchell, Powell, Scott, and McDaid, 1994). Latino students are seldom exposed to enriched curricula or pedagogy (National Commission on Secondary Education for Hispanics, 1984a; The Achievement Council, 1984). Latino families are increasingly falling below the poverty line (Southwest Voter Research Institute, 1988) forcing Latino youth into the world of work before graduation (Assembly Office of Research, 1985; National Commission on Secondary Education for Hispanics, 1984b).

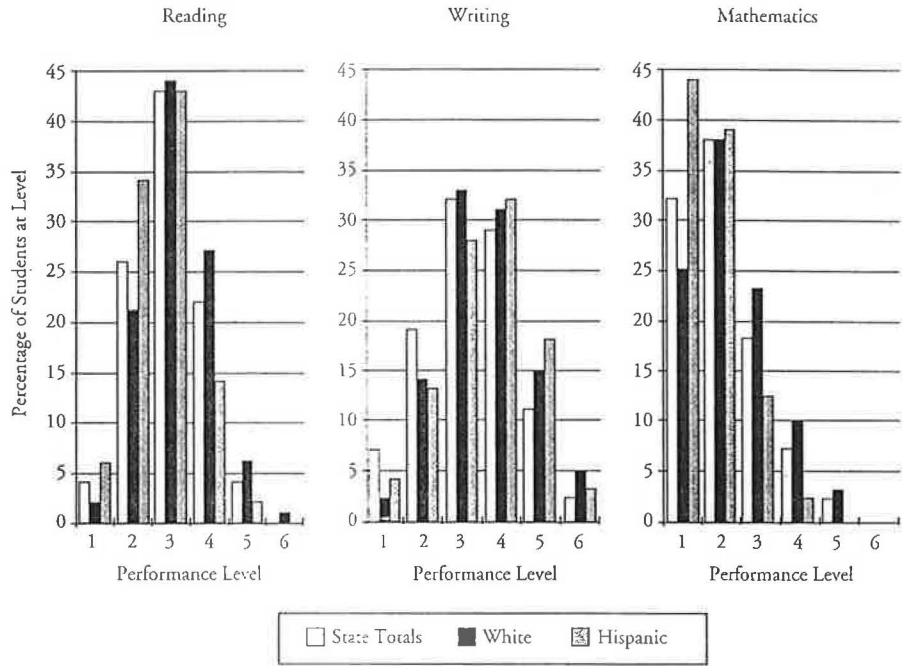
As the Achievement Council noted in the 1980s:

For most minority and low-income students...elementary schools...are but the starting point in a long process of educational erosion that will, over the course of the next 12 to 13 years, gradually wash them out of the mainstream of American education and of American life (The Achievement Council, 1984, pg. 12).

The 1990s

In the 1990s, the California Assessment Program (CAP) was replaced by the California Learning Assessment System (CLAS). CLAS was an attempt at measuring actual, thinking performance through more authentic tasks and problems. During the latter's short life, data on high school student performance levels in the areas of Reading, Writing, and Mathematics were collected in 1993. Figure 7 presents the comparison among performance levels for State Totals, and for white and Latino pupils at the 10th grade. As before, the low performance of Latino high school students relative to the other two groups continues (California Department of Education, 1993).

Figure 7. Comparisons of California Learning Assessment System (CLAS) High School Performance Scores in Reading, Writing, and Math for 1993.



The CLAS “test” was part of a broad set of reforms begun in the late 1980s involving a new set of curriculum frameworks (standards) and efforts at improving textbooks and pedagogy in California’s schools. The eight curriculum frameworks (Mathematics, Science, English-Language arts, History-Social sciences, Foreign Language, Fine Arts, Health, and Physical Education) “are considered models nationwide, as they emphasize reading, writing, problem solving, and more challenging student work. They articulate a vision of quality, and there is widespread agreement on their content, despite the state’s tremendous diversity” (California Department of Education, 1993, pg. 1).

Some evidence is beginning to suggest that very modest progress is being made in some aspects of Latino pupils’ academic outcomes. There is an increase in the percentage of Latino high school graduates who complete a-f requirements over the last decade (California Department of Education, 1993). The rate of Latino dropouts has decreased by nearly 10 percentage points between 1986 and 1992 (from 35 percent to 25 percent) (California Department of Education, 1994). More Latino students are graduating from California high schools. More are taking SAT and ACT tests. More are becoming eligible for the California Community College, State University and University of California systems.

But these are modest improvements. They do not really keep pace with the demographic growth of California's Latino population. Although they signal increased participation (such as in the number of those taking SAT's), they do not always reflect an increase in academic performance (Verbal SAT scores for Latinos in 1988 averaged 378 and in 1992 they averaged 366; Math SAT scores in 1988 averaged 426 and 418 in 1992) (California Postsecondary Education Commission, 1993, pg. 18). Official publications seldom note these caveats. Often they ignore the issue of ethnic differences in school effectiveness altogether (e.g., California Department of Education, 1991).

Important research literature and programs have begun to explain why progress has been so minimal at the K-12 level for Latino children and youth (Valencia, 1991). Many of these "explanations" were noted by Reynolds (1933) more than half a century ago. Other explanations are more contemporary. In one study, "Voices From The Inside: A Report on Schooling From Inside The Classroom," Poplin & Weeres (1992) surveyed four urban/suburban, K-12 schools in southern California. Virtually the entire set of communities (students, teachers, custodians, secretaries, security guards, administrators, parents, day-care workers, cafeteria workers, school nurses, and others) in these four schools were engaged in an eighteen-month dialogue with researchers on the problems in schools. The report notes that "the heretofore identified *problems* with schooling (lowered achievement, high dropout rates and problems in the teaching profession) are rather *consequences* of much deeper fundamental problems" (Poplin & Weeres, 1992, pg. 11). They note that "Seen through multiethnic students' eyes and the eyes of other participants inside schools, the problems of public education in the U.S. look vastly different than those issues debated by experts, policy makers, academicians and the media" (pg. 11).

Seven issues were identified. Three are particularly relevant.

Relationships: "Students of color, especially older students, often report that their teachers, school staff, and other students neither like nor understand them. Many teachers also report that they do not always understand students ethnically different than themselves...This theme was predominantly stated by participants and so deeply connected to all other themes in the data that it is believed this may be one of the two most central issues in solving the crisis inside schools."

Race, Culture and Class: "Many students of color and some Euro-American students perceive schools to be racist and prejudiced, from the staff to the curricu-

lum. Some students doubt the very substance of what is being taught. Most middle and high school students describe instances of racism they have seen on campus and can relate it to racism in the larger society. In elementary schools, these same issues are more frequently referred to as issues of racially related name calling.”

Teaching and Learning: “Students, especially those past fifth grade, frequently report they are bored in school and see little relevance of what is taught to their lives and their futures...Teachers also are often bored by the curriculum they feel they must teach...They [students] express enthusiasm about learning experiences that are complex but understandable, full of rich meanings and discussions of values, require their own action and those about which they feel they have some choice” (Poplin and Weeres, 1992, pgs. 12-15).

The University of California and K-12 Education: The Role of Research

FOR NEARLY A CENTURY, THE EDUCATIONAL IMPACT OF THE CALIFORNIA K-12 public school system has been marginal for Latinos. The conditions of their education have changed very little. As a key component in this state's public education system, the university can either impose its eligibility criteria without regard to the fact that the K-12 "playing field" for Latinos has never been "level," or it can serve as a partner with the schools and community in understanding and acting on the crisis.

However, over the last decade, the university's interest and involvement with K-12 education has not been a consistent priority item. In its efforts in Education, there is much room for the university to boost its national reputation in meeting the needs of minority pupils, who now constitute the majority in California's public schools. We believe that there are multiple bases for increasing the university's contributions to K-12 education and that research is one of the most critical of these bases.

Within the university there are a modest number of multi-year research projects that are making powerful contributions towards improving the education of ethnic pupils. Their generalized application within the K-12 system would be an important contribution of UC to K-12 education. Taken as a whole many of the current and recent efforts have started with financial and collegial support from UC intercampus research programs including, prominently, the UC Linguistic Minority Research Institute, UC MEXUS, and the California Policy Seminar. For example, with the support from the Linguistic Minority Research Institute, UC Santa Cruz was awarded a five-year grant to operate the National Center for Research on Cultural Diversity and Second Language Learning under sponsorship of the U.S. Department of Education. In turn, the Center has continued to support numerous UC faculty on collaborative projects with schools.

These research projects point towards practical strategies for improving the educational progress of Latinos. Yet these efforts pale before the magnitude of the education problems faced by California given the historical levels of under-education of Latinos and many other educationally underserved groups. We believe that the research programs in K-12 education for minority students can help guide the university towards improving the eligibility and access of Latino students.

This report highlights a small sample of such exemplary research projects that are making a difference in schooling outcomes for Latino students. The existence and success of these projects stand in bold relief to those who would argue that

Latino and other minority students are inherently incapable of demonstrating high levels of academic achievement because of cultural and social deficits in their upbringing. The projects described here have direct relevance for increasing the presence of underrepresented students from all backgrounds in the university.

Examples of University Research Programs in K-12 Education

WE BEGIN THE DESCRIPTION OF EXEMPLARY K-12 EDUCATION research projects by focusing on two projects concentrating on Latino children in the early and middle elementary school grades.

School Improvement and a Model for School Change

A team of investigators at UCLA over the past 11 years has conducted a major research program on strategies for creating school-wide change in an elementary school in Los Angeles county populated mainly by Latino students, many of whom are limited-English proficient. The ongoing project has received three-year start-up support from the UC Linguistic Minority Research Institute and subsequently gained support from private foundations, the California Department of Education and the National Center for Cultural Diversity and Second Language Learning, UC Santa Cruz.

Project activities were guided by an explicit school change model with four elements designed to impact on changes in teaching and learning practices in the classroom (Goldenberg & Sullivan, 1994). These elements included: *goals* that are set and shared by school staff and other project participants; *indicators* that are objective ways to measure success and progress towards goals; *assistance* by capable others to staff implementing various kinds of school change; and *school and project leadership* that supports and provides impetus for attaining school goals.

At the school site in question, during the early phase of the project teachers and school staff engaged in a reflective process to plan school improvement. This led to the stipulation of a set of grade-level goals and expectations for students and for each classroom teacher. The process of establishing grade level goals and expectations was responsive to the state curriculum standards. Most importantly, the process led to the staff's appropriation of these standards as a way to make sense of day-to-day schooling activity.

Subsequently, school teachers and staff went on to establish a clear set of agreed-upon indicators of students' progress towards goals. Emphasis was placed on identifying multiple indicators of student progress and on indicators requiring teacher evaluation and interpretation of complex student products and performances at grade level. Interestingly, teachers and school staff focused on achievement indicators such as the quality of work shown in students' portfolios. They did not focus on standardized test scores as a resource for understanding student progress and as ways to improve instruction. Just as interestingly, Spanish and

English standardized test score data over a four-year period have shown marked gains in student achievement at the school.

The third element of the school change model is to provide assistance to school teachers and staff by more capable others. This element of school change drew systematically on pioneering research by one of the project investigators on ways to improve the literacy learning of culturally diverse children. This involves improving assistance to children as they learn, and to teachers and school staff on how to support children's learning. The support of teachers' everyday instructional performance has come about through a system of on-going staff development meetings between teachers, project staff, and goals and assessment committees at the school. These efforts differ radically from traditional one-shot teacher workshops. Instead, they constitute a network of long-term communication and problem-solving activities.

The fourth element in the change model involves school and project leadership that supports school teachers and staff towards attaining school goals for student learning. An effective leadership climate has supported teachers' and school staff's awareness and accountability for progress. Data from teacher attitude questionnaires indicate that teachers have raised their expectations for their own and their students' performances and that teachers perceive positive changes in their teaching performance.

With support from the National Center for Cultural Diversity and Second Language Learning, UC Santa Cruz, the School Improvement and a Model for School Change project has also made an important contribution to research regarding the nature of effective communication between teachers and students (Tharp and Gallimore, 1989). Effective communication between a teacher and students is often (but not exclusively) in the form of an *instructional conversation*. Such interaction involves a teacher's careful and deliberate probing of what a student knows and the teacher's application of judgment about how to help a student learn more.

The research program on instructional conversations is examining the conditions under which instructional conversations are possible and the ways that teachers might be assisted in developing strategies to engage students in instructional conversations. Other UC researchers are actively investigating the limits of instructional conversations as effective tools for teaching and learning. They are investigating alternative social arrangements and activities in the classroom that promote effective, advanced learning by language minority and other students.

The next project involves the use of technology in culturally and linguistically powerful ways. It also demonstrates how parental-university-cultural linkages can create powerful impacts on academic learning.

La Clase Mágica: A Model of Institutional Linkages

La Clase Mágica (Vasquez, 1994, 1993) is one of three university-community satellites that form part of the Distributed Literacy Consortium, a regionally dispersed nine-team research collective, funded by the Andrew Mellon Foundation. Sponsored by the Laboratory of Comparative Human Cognition (LCHC) at UC San Diego, the Consortium builds on more than a decade of effort by LCHC's collaborators to create innovative educational activities in after-school settings. These activities provide local children with a wide variety of literacy practices mediated through computer and telecommunication technology. La Clase Mágica builds on this effort by shaping the after-school activities to serve the educational needs of Latino children and by incorporating a strong parent component.

La Clase Mágica is located in a small Catholic Mission that ministers to working-class, Mexican laity. It offers local, bilingual children a safe place to gather and "play computers" after school, three times a week for an hour and a half each day. La Clase Mágica runs in ten-week sessions. With help, children negotiate their way through a task-laden maze consisting of 70 games and activities, many of which incorporate Mexican culture and the use of Spanish. The goal for the children is to complete a 20-room maze and advance to the Wizard Assistant Club. At this level, there are special privileges and responsibilities for the children.

Based on a theoretical framework that mixes play and educational activity, the organizational structure of La Clase Mágica creates a cooperative environment where children and adults collaborate on a pre-arranged series of computer and telecommunication activities. In meaningful interactions around immediate and real-life situations, adults, mostly undergraduate students enrolled in a Child Development course at UCSD, collaborate with the children and move them through the games and activities. These interactions provide a window for observing and studying the children's process of adaptation and the role of language and culture in their social and cognitive development.

La Clase Mágica has provided powerful theoretical and applied insights about the impact of culturally relevant activities on learning. University students not only have a real-life setting in which to apply theories of learning and development but they also have an opportunity to examine, study, and understand the role of

language and culture. In dynamic interactions during research activities faculty, post-doctoral fellows, graduate and undergraduate students, and elementary school-age children and their parents acquire new knowledge and skills for adaptation in California's information-based society.

At the local site level, La Clase Mágica has reinforced the principle that native language and culture are powerful building blocks to new knowledge and new languages. By making the Spanish language and Mexican culture viable resources in problem-solving, researchers have created an environment that parallels the cultural and linguistic foundations of bilingual children's development. Results show that the children acquire their second language, English, and maintain their first language, Spanish, at a higher and more stable rate than their counterparts in a transitional bilingual education program. Observational data show that this use of native language and culture scaffolds to higher levels of social and cognitive development. With access to either language in the comprehension and expression of difficult concepts, children perform at higher levels of intellectual functioning. They also learn to use language creatively and deliberately for their own purposes and in different contexts.

The non-hierarchical nature of relationships fostered by the organizational structure of La Clase Mágica makes it possible for adults and children to see themselves as equal members in the educational process. While undergraduate students contribute their knowledge of the academic world, children and their parents do likewise about life in a Mexican community. Latino children learn the sociolinguistic conventions, problem-solving techniques and the norms and expectations that are key to academic success. Their parents, in turn, observe the kinds of literacy practices and verbal strategies that form part of the learning outside the home. In a meaningful and unobtrusive way, they learn to become partners in their children's academic learning.

University-community partnerships like La Clase Mágica and its counterparts the Fifth Dimension (linking UCSD and a community center) and Club Proteus (linking UCSB and a local elementary school) provide powerful, systematic and organized models for UC to address the underachievement of minority students and their underrepresentation in UC.

We next turn our attention to two UC research projects assisting Latino and other minority group students at the high school level. Like the two previous projects, these next projects actively investigate the restructuring of schooling

activity so that they systematically support students' learning and self-perception as effective learners—in this case learners *en route to college*.

Evaluation of the San Diego School AVID Project and Investigation of Social Influences on Schooling Success

Faculty in the areas of Sociology and Teacher Education at UC San Diego are conducting a multiple-year study of the “Achievement Via Individual Determination Program” (AVID) being implemented in high schools in the San Diego Unified School District. Going beyond statistical evaluation of program effects, investigators have probed institutional and social identity factors that contribute to the program's success. The project received three-year start-up support from the UC Linguistic Minority Research Institute and subsequent five-year support from the National Center for Cultural Diversity and Second Language Learning, UC Santa Cruz.

The AVID program tracks low income, ethnic-minority children who show evidence of underachievement into college preparatory courses. In order for students to participate in AVID, parents are required to sign contract agreements indicating their endorsement and support of their children's involvement in the program. Participation of AVID students in the regular college-prep curriculum is coupled with attendance in a special elective class emphasizing instruction in college-related skills. In effect, AVID *untracks* its participants from remedial and vocational oriented education programs, *retracking* students into a curriculum leading to college preparation.

The elective class taken by AVID students focuses on instruction in three areas: *writing*, *inquiry*, and *collaboration*. Writing activities include classroom note-taking strategies, notes for homework, self-generated study questions, learning logs, and practice quick-write summaries of information. In inquiry activities college student tutors help AVID students carry out academic tasks; the role of tutors is explicitly to have AVID students actively participate in arriving at answers to academic problems rather than having tutors simply provide answers to students' questions. In addition, AVID students carry out many academic activities in small collaborative groups requiring them to actively probe each other's understandings and strategies for carrying out assignments. Supplementary to these activities, guest speakers are periodically invited to AVID classrooms to support students' academic motivation and aspiration for a college education.

.....

Data for 1990-91 indicate that 50 percent of AVID students completing high school enrolled in a four-year college. In comparison, local district data indicated that only 37 percent of non-AVID students outside the college prep track went on to four-year colleges. Other analyses indicate that AVID is equally effective for students from the lowest and highest family income strata—a dramatic finding in light of extensive national research showing a consistent negative relation between parental income level and student access to college.

AVID researchers have begun a more intense study of its impact on students' social identity (Mehan, Hubbard, and Villanueva, 1994). Interviews have been conducted with previous AVID students who completed or did not complete the program. The results of this research indicated that successful AVID students showed a commitment to their own academic success and a belief that racial and ethnic background are not impenetrable barriers to academic attainment. AVID students attending college also showed a sensitivity to the multiple social identities required in their pursuit of college aspirations and the need to develop social strategies in maintaining relationships with peers and family with less formal education. Altogether this research suggests that programs such as AVID can facilitate Latino and other students' wider participation in society and may also help peers to become aware of higher education and its benefits.

The ALAS Dropout Intervention Project

Achievement for Latinos through Academic Success (ALAS) is a five-year research project on the Santa Barbara campus funded by the U.S. Department of Education, the University of California Presidential Grants for School Improvement and the University of California Linguistic Minority Research Institute (Larson & Rumberger, 1993). The purpose of the project is to test the efficacy and cost-effectiveness of a multifaceted dropout prevention effort in a high-risk, urban, middle school serving Mexican American-Chicano youth. Three features make this program unique. First, it focuses on the highest-risk students in the school who because of their academic, attendance, and disciplinary problems utilize a disproportionate share of school resources and who are most at-risk of school failure and dropping out. Second, the project is conducted in an experimental format with random assignment to experimental and control groups. Third, the intervention model is based on a comprehensive cluster of interventions which address the student directly as well as three different contexts that influence the student's life and school performance: the *school*, the *family*, and the *community*.

The ALAS model is founded on the premise that both the youth and all the contexts of influence must be simultaneously addressed if dropout prevention efforts are to be successful. A central assumption of the model is that not only does each context need individual reform to increase its positive influence on youth but, additionally, barriers which reduce or prevent 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 that focused on the *adolescent* include social problem-solving training and counseling and enhancement of school affiliation. Strategies that focused on the *school* include frequent teacher feedback to students and parents and attendance monitoring. Strategies that focused on the *family* include utilization of community resources, and parent training in school participation and in directing and monitoring their adolescent. Strategies that focused on the *community* include enhancement of collaboration among community agencies for youth and families and enhancement of skills and methods for serving the youth and families.

The program is implemented at a middle school (grades 7-9) in a large urban school district. The barrio in which the school is located is a high crime area. The school enrolls 2,000 students, 94 percent of whom are Latino.

Treatment students included 50 randomly assigned highest risk students and approximately 75 special education students. 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) secondary school program.

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 non-treatment group had 43 percent 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 the ninth grade.

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.

We believe that the positive differences in outcomes for ALAS students compared to control students is a function of the comprehensiveness of the ALAS interventions which focused simultaneously on the youth, family, school, and community.

The next project features a research-based model of teacher training that concentrates on the recruitment of minority teacher-candidates. As already documented, the lack of Latino faculty at the K-12 level has been a consistent, negative trait of California's public education system.

Project SMART: Science and Mathematics Articulated Roads Toward Teaching

Most minority students are hindered from pursuing careers in science and mathematics because they have few role models, experience poor elementary and middle school instruction, and stop taking science and mathematics courses early in high school.

There is a need for a coordinated, higher education system of teacher preparation programs in science and mathematics. Over two-thirds of the minority students in higher education attend two-year colleges. Only through innovative intersegmental recruitment and transfer programs will minority students enter the teaching profession.

Project SMART (Science and Mathematics Articulated Roads Toward Teaching) is a new model of collaboration among universities, community colleges, and K-12 schools in the recruitment and preparation of minority science and mathematics teachers. The project is located at the University of California, Irvine campus. It builds on the leadership of the campus in collaborative partnerships with public education, innovative teacher preparation programs involving arts, sciences and education faculties, and successful initiatives fostering minority students' success in science and mathematics.

The research base for the Project SMART model comes from two primary sources. During the 1980s the RAND Corporation undertook a review of innova-

tive methods for recruiting and training outstanding science and mathematics teachers. The key dimensions of the most successful models provided the foundation for Project SMART (Carey, Mittman & Darling-Hammond, 1988; Darling-Hammond, Hudson, & Kirby, 1989). Similarly, Educational Testing Services, with funding from the Ford Foundation, undertook a longitudinal study of the MAT Model of Teacher Education and its graduates. The model involves significant instructional involvement for university faculty who are highly regarded scholars in science and mathematics. This approach ensures that new teachers are exceptionally well prepared in their disciplines as well as in pedagogy. It is highly effective in recruiting and training the best and the brightest for the teaching profession (Coley & Thorpe, 1985).

Project SMART has produced a new design for training outstanding science and mathematics minority teachers. Recruits are given a solid knowledge base in: (a) their academic discipline, (b) the distinctive needs of minority students, (c) reforms in science and mathematics curricula, and (d) the most current applications of technology to K-12 teaching. The program offers substantial amounts of field experience, summer institutes, and internships in exemplary schools. Novice teachers are supported during their initial years of teaching through continued involvement with the campus and with faculty mentors.

Project SMART attempts to create, institutionalize, and disseminate a significant reform strategy in minority teacher preparation. The project is currently training a cadre of outstanding minority teachers who are highly qualified in science and mathematics teaching at the elementary, secondary, and community college levels. In 1994, 79 percent of the trainees in the project were Latino.

Conclusions and Recommendation

THE FIVE UC PROJECTS DESCRIBED ARE A SAMPLE OF A RELATIVELY SMALL but potentially very powerful set of research-based activities currently undertaken by UC faculty in Education and related fields. Such activities, however, represent a small percentage of UC's efforts and involvement in Education. They need greater institutional and financial support in order to meaningfully contribute toward meeting the challenge of California's growing ethnic student population. One current program, the Linguistic Minority Research Institute, could easily yield many more applied and research outcomes given a substantially greater level of support.

The research projects described above and the others currently in existence within the university have no structural avenue by which to disseminate their results or their policy implications for K-12 education. It is precisely at this juncture where the university can help, where it can exercise a major leadership role. It has unique experience and expertise in this arena.

One of the most successful efforts at K-12 reform is the Subject Matter Projects directed out of the President's Office. These Projects involve UC, the California State University, the California Community Colleges, the California Department of Education and the K-12 system. The primary clientele are credentialed teachers already working in the public schools. The Projects provide teachers with intensive inservice experiences involving the best pedagogical techniques and the latest curriculum frameworks, standards, and reforms. The Projects are very successful. The one area in which they are weak is in addressing the needs of California's student diversity. They are not well connected to UC faculty research on successful programs for Latino students.

Many of the findings of UC researchers on strategies to overcome educational barriers of culturally and socially diverse children are congruent with many of the successful strategies for teacher development pursued and disseminated by the Subject Matter Projects. The Projects are on record as being committed to contributing "to a higher quality education for students of all cultural, ethnic, and linguistic backgrounds" (California Subject Matter Projects, 1994, pg. 2). However, it is fair to state that the existing network of Subject Matter Projects does not provide focal attention, with a few notable exceptions, on how teachers might improve the subject matter learning of students who are the most at-risk socioeconomically and at-risk for dropping out of school.

Enhancement of the current Subject Matter Projects to include more attention to *pedagogies* for at-risk students is a desirable and worthwhile goal. The Latino

Eligibility Task Force recommends that the university establish a specific Subject Matter Project tied to improving *instruction* for economically and academically at-risk students from Latino and other sociocultural backgrounds who are underrepresented in the university. The Task Force recognizes that this would be a unique “Subject Matter Project” insofar as it would not present a different curricula or subject matter. However, such an emphasis on pedagogy would provide a powerful, necessary knowledge base for teachers on how to change and reform “minority” schools and on how to expose underrepresented children to California’s curriculum frameworks. Such a project could work collaboratively with other Subject Matter Projects developing the entire network’s capacity to train teachers on effective pedagogies for Latino and other underrepresented students. For the university, this type of effort might also help its faculty. As the university becomes more and more diverse in its student body, the teaching practices of its faculty may benefit from the knowledge and pedagogical strategies disseminated by such a project.

Finally, the university should consider examining its current commitments to Education. Together with the Goodlad (1984), Frazer (1984), and Oakes (1993) Reports, this report of the Latino Eligibility Task Force also calls for a “fundamental re-orientation of the University’s schools and programs of education — a re-orientation that would direct considerable systemwide and campus attention, energy, and resources toward the improvement of K-12 schools” (Oakes, 1993, pg. 34).

Clearly, the university’s current role in the training of new teachers is quite modest, accounting for only 5.3 percent of all teaching credentials issued in the 1993-94 academic year in California. This cadre of new teachers is not very diverse. A model such as Project SMART can help UC credential programs reverse the historical pattern of ethnic underrepresentation among California teachers.

The California State University system, on the other hand, has a robust program in the teacher training area, accounting for 60 percent of all credentials issued in 1993-94. It would make sense, given both the financial realities facing the state and the demographic ones facing K-12 education, to enhance the burgeoning collaborative efforts between UC and the California State University systems in the area of Education. More joint degree programs, such as those with the Fresno, San Francisco and Los Angeles CSU campuses, could certainly create a powerful research and applied basis for helping to reform California’s K-12 system.

Given the historical and contemporary educational experiences of Latino students in the K-12 system, the existence of powerful research programs in the University of California that could alter and reform the K-12 system for Latinos and other underrepresented groups, and the available avenues through which the university can affect change and reform, the Latino Eligibility Task Force recommends the following:

The university should strengthen its role in K-12 education by consolidating and intensifying its efforts through:

- 1) increasing support for basic and applied research in California's public schools by UC Education units and other academic research units;**
- 2) enlarging the funding base and operations of the Linguistic Minority Research Institute;**
- 3) establishing a Subject Matter Project on Pedagogy dedicated to students who are at risk because of ineffective educational programs;**
- 4) examining the possible contribution of the Project SMART model for increasing the diversity in UC's teacher-credentialing programs;**
- 5) supporting the expansion of UC-CSU joint degree programs and collaborative efforts in education.**

From the perspective of the Latino Eligibility Task Force, the more focused and effective that the involvement of higher education systems is with the K-12 system, the greater the eligibility of Latino students for the university.

References

- The Achievement Council (1984). *Excellence for Whom?* Oakland, CA: The Achievement Council.
- The Achievement Council (1988). *Unfinished Business: Fulfilling Our Children's Promise*. Oakland, CA: The Achievement Council.
- Arias, M.B. (1986). Special Issue: The Education of Hispanic Americans: A Challenge for the Future. *American Journal of Education*, 95.
- Assembly Office of Research (1990). *Educating Minority Students in California: Descriptive Analysis and Policy Implications*. Sacramento, CA: Assembly Office of Research.
- Assembly Office of Research (1985). *Dropping Out, Losing Out: The High Cost for California*. Sacramento, CA: Assembly Office of Research.
- California Department of Education (1993). *California Public Education: A Decade After A Nation At Risk*. Sacramento, CA: California Department of Education.
- California Department of Education (1994). California's School Dropout Rate Continues to Decline. *News Release*, REL #94-33. Sacramento, CA: California Department of Education.
- California Department of Education 1990-91 (1991). *Fact Sheet 1990-91*. Sacramento, CA: California Department of Education, Public Relations Office.
- California Department of Education (1995). *Grade 10 CLAS Sample Report*. Sacramento, CA: California Department of Education.
- California Postsecondary Education Commission (1993). *The State of the State's Educational Enterprise: An Overview of California's Diverse Student Population*. Sacramento, CA: California Postsecondary Education Commission.
- California State Department of Education (1985). *Racial or Ethnic Distribution of Staff and Students in California Public Schools, 1984-85*. Sacramento, CA: California State Department of Education.
- California State Department of Education (1988). *Racial or Ethnic Distribution of Staff and Students in California Public Schools, 1987-88*. Sacramento, CA: California State Department of Education.
- California State Department of Education (1978). *Student Achievement in California Schools: 1977-78 Annual Report*. Sacramento, CA: California State Department of Education.

- California State Department of Education (1985). *Student Achievement in California Schools: 1983-84 Annual Report*. Sacramento, CA: California State Department of Education.
- California State Department of Education (1991). *Student Achievement in California Schools: 1990-91 Annual Report*. Sacramento, CA: California State Department of Education.
- California Subject Matter Projects (1994). *The California Subject Matter Projects: Professional Development by and for Teachers*. Oakland, CA: Office of the President, University of California.
- Carey, N., Mittman, B., & Darling-Hammond, L. (1988). *Recruiting Mathematics and Science Teachers Through Nontraditional Programs: A Survey*. Santa Monica, CA: RAND Corporation.
- Coleman, J.S., et al. (1966). *Equality of Educational Opportunity*. Washington, D.C.: U.S. Office of Education.
- Coley, R. & Thorpe, M. (1985). *A Look at the MAT Model of Teacher Education and Its Graduates: Lessons for Today*. Princeton, NJ: Educational Testing Service.
- Darling-Hammond, L., Hudson, L., & Kirby, S. (1989). *Redesigning Teacher Education: Opening the Door for New Recruits to Science and Mathematics Teaching*. Santa Monica, CA: RAND Corporation.
- Frazer, W.R. (1984). *The University and the Schools: Educational Excellence, A Joint Responsibility*. A Report to the President from the Committee on Student Preparation. Berkeley: University of California, Berkeley.
- Goldenberg, C. & Sullivan, J. (1994). *Making Change Happen: The Search for Coherence*. Los Angeles, CA: University of California, Los Angeles.
- Goodlad, J.I. (1984). *The Role of the University of California in Precollegiate Education. Report of the University-Wide Program Review Committee for Education*. Berkeley: University of California, Office of the President.
- Larson, K. & Rumberger, R. (1993). *Doubling Success in Highest-risk Latino Youth: Results from a Middle School Intervention Study*. Paper presented at the Seventh Annual Conference of the University of California Linguistic Minority Research Institute.
- Lau v. Nichols* 414 U.S.563 (1974).

- Mehan, H., Hubbard, L., & Villanueva, I. (1994). *Tracking Untracking: The Consequences of Placing Low Track Students in High Track Classes*. Santa Cruz, CA: The National Center for Research on Cultural Diversity and Second Language Learning, University of California.
- Mitchell, D. E., Powell, R.J., Scott, L.D., & McDaid, J. L. (1994). *The Impact of California's Special Education Pre-referral Intervention Activities and Alternative Assessments on Ethno-Linguistically Diverse Students: Final Report of a Federal-State Joint Agreement Evaluation Feasibility Study*. Riverside, CA: California Educational Research Cooperative, University of California, Riverside.
- National Center for Educational Statistics (1993). *Digest of Educational Statistics*. Washington, D.C.: U.S. Department of Education.
- National Commission on Secondary Education for Hispanics (1984a). *"Make Something Happen": Hispanics and Urban High School Reform, V. I*. Washington, D.C.: The Hispanic Policy Development Project Inc.
- National Commission on Secondary Education for Hispanics (1984b). *"Make Something Happen": Hispanics and Urban High School Reform, V. II*. Washington, D.C.: The Hispanic Policy Development Project Inc.
- Oakes, J. (1993). *Educational Initiatives for Troubled Times: A Call to Action. Report of the Advisory Committee for Planning Professional Programs in Education*. Oakland, CA: University of California, Office of the President.
- Orfield, G. (1986). Hispanic Education: Challenges, Research, and Policies. *American Journal of Education*, 95, 1-25.
- Poplin, M. & Weeres, J. (1992). *Voices From the Inside: A Report on Schooling From Inside the Classroom*. Claremont, CA: The Institute for Education in Transformation at the Claremont Graduate Schools.
- Reynolds, A. (1933). *The Education of Spanish-speaking Children in Five Southwestern States*. Washington, D.C.: United States Department of the Interior.
- Southwest Voter Research Institute (1988). *Gap in the Number Below Poverty Grows Between Whites and Minorities in 1987*. San Antonio, TX: Southwest Voter Research Institute.
- Tharp, R. & Gallimore, R. (1989). *Rousing Minds to Life*. New York: Cambridge University Press.

- United States Commission on Civil Rights (1971a). *Mexican American Education Study: Report I: Ethnic Isolation of Mexican Americans in the Public Schools of the Southwest*. Washington, D.C.: U.S. Government Printing Office.
- United States Commission on Civil Rights (1971b). *Mexican American Education Study: Report II: The Unfinished Education: Outcomes for Minorities in the Five Southwestern States*. Washington, D.C.: U.S. Government Printing Office.
- United States Commission on Civil Rights (1972a). *Mexican American Education Study: Report III: The Excluded Student: Educational Practices Affecting Mexican Americans in the Southwest*. Washington, D.C.: U.S. Government Printing Office.
- United States Commission on Civil Rights (1972b). *Mexican American Education Study: Report IV: Mexican American Education in Texas: A Function of Wealth*. Washington, D.C.: U.S. Government Printing Office.
- United States Commission on Civil Rights (1973). *Mexican American Education Study: Report V: Teachers and Students: Differences in Teaching Interaction with Mexican American and Anglo Students*. Washington, D.C.: U.S. Government Printing Office.
- United States Commission on Civil Rights (1974). *Mexican American Education Study: Report VI: Toward Quality Education for Mexican Americans*. Washington, D.C.: U.S. Government Printing Office.
- Valencia, R. (1991). *Chicano School Failure and Success*. London: The Falmer Press.
- Vasquez, O. (1993). A Look at Language as a Resource: Lessons from La Clase Mágica. In M. B. Arias and U. Casanova (Eds.), *Bilingual Education: Politics, Practice, and Research: Ninety-Second Yearbook of the National Society for the Study of Education, Part II* (pgs. 199-225). Chicago, IL: The University of Chicago Press.
- Vasquez, O. (1994). The Magic of La Clase Mágica: Enhancing the Learning Potential of Bilingual Children. *The Australian Journal of Language and Literacy*, 17, 120-128.