

Education Policy Analysis Archives

Volume 2 Number 8

May 16, 1994

ISSN 1068-2341

A peer-reviewed scholarly electronic journal.

Editor: Gene V Glass, Glass@ASU.EDU. College of Education,
Arizona State University, Tempe AZ 85287-2411

Copyright 1994, the EDUCATION POLICY ANALYSIS
ARCHIVES. Permission is hereby granted to copy any article
provided that EDUCATION POLICY ANALYSIS ARCHIVES is
credited and copies are not sold.

Choosing Higher Education: Educationally Ambitious Chicanos and the Path to Social Mobility

[Patricia Gandara](#)

University of California-Davis

pcgandara@ucdavis.edu

Abstract:

This is a study of high academic achievement found in the most unlikely places: among low-income Mexican Americans from homes with little formal education. It examines the backgrounds of 50 persons, male and female from one age cohort, who met most of the predictors for school failure or "dropping out." All came from families in which neither parent completed high school or held a job higher than skilled labor; the average father finished grade four and most were sons and daughters of farmworkers and other unskilled laborers. Most began school with Spanish as their primary language, yet all completed doctoral-level educations from the country's most prestigious institutions. This study investigates the forces that conspire to create such anomalies. Its aim is to suggest how such outcomes might be the product of design rather than accident.

Introduction

High academic achievement among low-income Mexican Americans is anomalous in our society. While Mexican American students have been shown to aspire to the same high levels of achievement as their non-Chicano peers (Rumberger, 1983; Delgado-Gaitan, 1988), few actually realize these aspirations. This paper reports on a study of some of that small percentage of Chicano students, coming from backgrounds of poverty and low education, who carve out a place for themselves in higher education. It is an examination of the forces that conspire to create such anomalies, and its aim is to suggest how such outcomes might be the product of design rather than accident.

The paper that follows is excerpted from a book entitled *Over the Ivy Walls*, to be

published in 1995. Many issues that are not dealt with here are included in that longer work. Gender differences in experience is a particularly compelling issue that is barely touched on in this article, because it was too important to deal with in a cursory fashion. That issue, too, is addressed in the book and in a separate article to be released later this year. Hence, I beg the reader's indulgence for seeming to skirt important topics; perhaps the choices I have made for what to include and what to leave out are different than the choices others would have made. If that is the case, I apologize in advance, and extend an invitation to read the longer work.

The Context of Education for Hispanics

Hispanics are the least educated major population group in the United States (Chapa, 1991). They are the least likely to graduate from high school, enroll in college, and receive a college degree (Carter and Wilson, 1993). For example, in California and Texas, where more than one-third of the college age population is Hispanic, only 11 to 13 percent are enrolled in four year colleges.

The disproportionately low representation of Hispanics in four year colleges and universities throughout the nation is the product of several circumstances: extremely high drop out rates in high school, inadequate preparation for continued study, and the failure of four year institutions to attract many qualified Hispanic candidates (California Postsecondary Education Commission, 1986; Rumberger, 1991). Most Chicano students who do commit to postsecondary education, begin and end their college careers in two year institutions without obtaining a degree. This low level of education for Hispanics is related to their poor performance in the American economy, with nearly 40 percent of Hispanic children living in poverty (Chapa, 1991). Given that ten percent of the nation's labor force will be Hispanic by the year 2000, their undereducation portends potentially grave consequences for the economy and social structure of the United States, and especially the American Southwest where most Hispanics reside and where they comprise the largest single population group in a number of urban areas.

This study focuses on the educational mobility of one Hispanic group, the most numerous: Mexican Americans or Chicanos. Already established in the American Southwest before the territory was ceded to the United States, Chicanos have a legacy distinct from other Hispanics, which has resulted in different patterns of opportunity and achievement. Of all the Hispanic groups, Mexican Americans experience the greatest educational risk (De la Rosa and Maw, 1990), making their situation all the more urgent.

Whether the educational situation has been improving or deteriorating for Chicano students over the past several years remains a debatable issue. One measure of academic progress is statewide achievement scores. Between 1987 and 1990, results from the California Assessment Program (CAP) show a widening in the gap between the scores of Hispanics and those for the state as a whole (PACE, 1991). However, some scholars have contended that the number of years of education completed increases substantially with each successive generation for Mexican Americans, and that educational statistics can be misleading because of high levels of immigration of poor and undereducated Mexicans (McCarthy and Valdez, 1986). On the other hand, another scholar compares rates of immigration against trends in achievement and concludes that the data do not support high levels of immigration as a plausible explanation for the achievement gap between Mexican Americans and non-Hispanic whites (Chapa, 1991). Whether or not things are improving for Mexican Americans in school generally, there is widespread agreement that a ceiling remains on college-going behavior, which has not yielded substantially to various intervention strategies (Gandara, 1986a; McCarthy and Valdez, 1986).

Although education is not the only road to social mobility, it has become increasingly important as the primary avenue into the middle class for underrepresented groups. Meanwhile, qualifications inflation has placed more and more jobs out of the reach of individuals who lack

appropriate academic credentials (Rumberger, 1981; McCarthy and Valdez, 1986). In areas where a large percentage of the student population is Mexican American, the significant underachievement of this group constitutes an impending crisis. Moreover, it has become abundantly clear that real educational reform and improvement are likely to remain illusive until all population groups can be drawn into the mainstream of educational achievement. How to meet this challenge, however, continues to be an unanswered question for education policymakers.

Research on Chicano School Failure

Since the 1960s, when specific data began to be collected on Mexican American school performance, a host of studies have focused on the causes of school failure for Chicanos. Their presumption is that by understanding why some students fail, changes can be made in the system, or the student, that will result in improved educational outcomes. The literature on Chicano school failure can be described as having evolved through several stages, roughly paralleling the ethos of the past several decades.

During the 1960s, which saw the most impressive gains in the history of civil rights for minorities, the scholarly literature focused on deprivation theories and ways to ameliorate disadvantage. Minorities, such as Mexican Americans, were viewed as having fundamental deficits which schools and government could overcome through special interventions such as Headstart (Hess and Shipman, 1965; Valentine, 1968). As these efforts appeared to meet with only limited success, and failed to change the fundamental relationships of students to schools, the focus shifted in the 1970s to a cultural difference model.

The cultural difference model suggested that minorities were not so much deprived of important cultural experiences as they were participants in a different set of experiences that, while worthy in themselves, did not meet the expectations of schools (Carter and Segura, 1979; Buening and Tollefson, 1987). This is commonly referred to as the "mismatch theory." One of the chief cultural differences between lower-income and middle-class students identified by researchers was speech style (Hymes, 1974). This focus on speech and language differences was especially apt for Chicanos because of the obvious differences between the home and school languages which, coupled with other cultural differences between home and school, came to explain academic failure. The major educational response to this theory of failure was bilingual/bicultural education.

Bilingual education has proved to be an important educational reform for many language minority groups, and particularly for Hispanics (Fernandez and Neilsen, 1986; Merino, 1991). It has established a template for providing limited-English-proficient students with access to the core curriculum and has demonstrated that LEP students do not have to remain on the periphery of schooling until their English skills are sufficient to join the mainstream. Although the potential effect of bilingual education on long-term educational outcomes for Hispanic students has never been finally determined because of the very limited way in which this reform has been implemented and studied (Gandara, 1986b), language differences apparently do not fully explain the achievement gap between Mexican Americans and others. Evidence for this lies in the fact that most Mexican Americans are English speakers, yet educational attainment for these students has remained low.

The 1980s saw the rise of more powerful and complex explanatory theories of school failure for Mexican Americans. Ogbu (1987), Trueba (1988) and others have suggested that educational failure is a socially constructed phenomenon resulting from social rules designed to screen out "outsiders," and from fixed notions about the abilities and appropriate roles for certain minority groups. According to Ogbu (1987), Mexican Americans can be classified as "involuntary" minorities in that their minority status derives initially from the American conquest

of Mexican land, which transformed them, literally overnight, into a disenfranchised class. Ogbu contrasts Native American and African American peoples with what he calls "voluntary" minorities such as Asians, who left their countries of origin voluntarily in search of a better life in the U.S. Mexican Americans, in contrast to "voluntary" minority groups that have immigrated more recently to the U.S., are viewed by themselves and others as lacking the drive, skills, and cultural and social capital (Matute-Bianchi, 1986; Lareau, 1987) to succeed educationally. To address this view of the problem of Hispanic underachievement, some researchers have suggested that the central strategy must be empowerment: empowering parents to advocate for their children (Delgado-Gaitan, 1990); empowering communities to change their schools (Trueba, 1988); and empowering students to reconceptualize their own self-image (Gandara, 1992).

The important element missing from most of this research, however, has been the insights that can be gained from understanding how students who don't fail manage to escape that fate, despite adverse circumstances. With few exceptions (e.g., Gibson, 1987; Suarez-Orozco, 1987), the research has failed to address this other compelling question.

This paper explores the characteristics and experiences of Chicanos who survive poverty and disadvantage to become academic achievers. In so doing, it also attempts to integrate some of the large body of research on academic achievement into a coherent understanding of how low-income Chicanos may find rewards in school.

The Study

Data collection for this study has spanned more than a decade and focuses on the lives of fifty people 30 men and 20 women who met a very stringent criterion for academic accomplishment: an MD, PhD, or JD degree conferred from a highly regarded American university of national stature. This is not a study about "successful" individuals, however, but about people who chose education as a vehicle for social and economic mobility or personal fulfillment. No judgment has been made about how successful they are as a result of this choice. I make this point because other studies of "successful" individuals from all kinds of backgrounds (Goertzel, Goertzel, and Goertzel, 1978; Pincus, Elliott, and Schlacter, 1981) have done little to illuminate the social context of aspiration because their focus is invariably on personality variables that influence achievement behavior. That is, the focus has been on extraordinary people, rather than extraordinary outcomes for people from ordinary circumstances. It is of no importance, ultimately, if these individuals view themselves or are viewed by others as "successful"; it is sufficient that they chose to pursue education as a means to some particular end, were able to reflect on how that decision came to be made and find the resources to realize their ambitions.

All subjects are Mexican Americans from the "baby boom" generation, born during the 1940s to the early 1950s. This is the first documented large cohort of Mexican Americans to complete doctoral-level education and take their places in the professional world (Astin, 1982; Carter and Wilson, 1991). All received their college educations during the 1960s, 1970s, and early 1980s. The majority of the subjects came to this country as young children or were the first generation of their family to be born in the U.S. All came from families in which neither parent had completed a high school education or held a job higher in status than skilled laborer. The average father of these subjects had a fourth-grade education, and the average mother had completed a little less than five years of school. The great majority are the sons and daughters of farmworkers and factory workers. During their years in school they met most of the criteria that are generally acknowledged to be highly predictive of school failure and dropping out: poverty, low levels of parental education, large families, limited exposure to English at home. To better illustrate the background from which the typical subject came, some descriptions follow, in their

own words.

A female biology professor:

At the time that we came to the United States [my father] was working at a ranch. My father's previous occupation in Mexico had been farmer, stockman, and that was the logical thing for him to do to try to get a job as a ranch hand . . . that's what he did until I was nine and he had to leave that job so we could move into town . . . from then on he was essentially a day laborer . . . odd jobs, unskilled labor, anything he could get ahold of . . . he dug holes and cleared debris left by oil crews . . .

What was your father's highest level of education?

I think he had six months in all.

And your mother's?

I think she went for two or three years, but it didn't make any great dent. She learned to read and write, but she's never been terribly good at sums . . . she would take on any and all kinds of jobs, like washing clothes . . . sewing for people . . . [she's] very resourceful.

A male JD, vice-president of a major corporation:

My father was born in Los Angeles but shortly after he was born the family went back to Sonora, and then he came back with his family when he was 10 or so. Both my mother and my father were raised in Brawley . . . that was their home base and they migrated throughout the year. But they always went back to Brawley. . . . They picked prunes for about 25 years at one ranch right above the hills of Stanford. And so they were on their way from there down to the Imperial valley and they stopped the caravan there in Madera, threw out a mattress on the highway, and I was born. After a few days they packed up and came south. . . . My grandmother delivered me, and she delivered everybody else in my family. How far did your mother go in school? About second grade. And your father? About the third. A female, former chemist, now a professor of literature: My father had died, and my mother was pregnant . . . so my mother told my grandmother she could have me and my grandmother said, "Well, if it's a little girl; I don't want to have a little boy." My grandmother didn't like boys. But anyway, she said, "If it's a girl, I'll take her," I guess. So when I was born, my mother raised me for about a year . . . breastfed me . . . then later on, we moved and my mother stayed at her house in San Pedro . . . [My grandmother] worked in the fields. She always worked in the fields. She worked right alongside my grandfather, whenever and wherever she could. And she had no formal education? No. And your grandfather's education? He was totally illiterate. He could only write his name, and that was . . . to get his legal papers, he had to learn to write his name. So he learned to sign his name. He didn't have any education.

Demographics of this group are displayed in Tables 1A and 1B.

TABLE 1A
Sample Demographics

	N	Generation			Father or Primary Wage Earner's Occupation		
		Immigrant	1st Generation	2nd Generation	Unskilled	Semiskilled	Skilled
Total	50	13 (26%)	21 (42%)	16 (32%)	29 (58%)	11 (22%)	10 (22%)
Female	20	7 (35%)	8 (40%)	5 (25%)	15 (75%)	3 (15%)	2 (10%)
Male	30	6 (20%)	13 (43%)	11 (37%)	14 (47%)	8 (27%)	8 (27%)

TABLE 1B
SAMPLE DEMOGRAPHICS

	N	MOTHER EMPLOYED?		HOME LANGUAGE		NUMBER OF SIBLINGS	
		Yes	No	English	Spanish	Bilingual	Means
Total	50	36 (72%)	14 (28%)	8 (16%)	26 (52%)	16 (32%)	5.3
Female	20	13 (65%)	7 (35%)	4 (20%)	12 (60%)	4 (20%)	5.5
Male	30	23 (77%)	7 (23%)	4 (13%)	14 (47%)	12 (40%)	5.2

Locating the Sample

Membership lists from professional organizations, two national rosters of Chicano faculty and researchers, and class lists from medical and law schools were consulted initially for leads in identifying potential subjects. Although a few subjects were located in this manner, it was a cumbersome process because such lists provide no clue as to individual backgrounds. The most important source of respondents was through a network sampling procedure, whereby key individuals were contacted at universities and government offices around the country and asked to nominate potential study subjects. These individuals, in turn, called upon others to generate names. Personal nomination had the added advantage of providing an initial screen for background characteristics, and frequently provided an introductory phone call that was helpful in securing cooperation. Ultimately, hundreds of potential subjects were screened, and of these 59 were interviewed. (Nine who deviated slightly from the criteria for inclusion were used as pilot subjects.) Hence, the sample is not random, but is probably reasonably representative of this cohort of individuals. Only half a dozen of the respondents were known to the researcher before the study began. However, no one who was contacted and met the criteria for inclusion refused to participate.

These individuals were selected because they represent known academic successes; as they have already completed their educations, there is no question about eventual academic outcomes. The cohort was also restricted to a fairly narrow age range in order to protect against widely

differing social circumstances. That is, the individuals were exposed to a similar social climate and similar opportunities with respect to financial aid, recruitment, and competition for college entrance.

The cohort does not include the most recent university graduates "those completing their educations since the early 1980s" which leaves open the question of how representative the experiences of this group are compared to more recent graduates. To have broadened the sample would have introduced other methodological problems, however, related primarily to the changing social climate and opportunities experienced by the most recent generation of graduates.

There are two compelling reasons for focusing on this earlier cohort of Chicano achievers. First, the baby boom generation represents a particular peak in the college-going behavior of Mexican Americans; more recent data show a proportional decline in college enrollment (Carter and Wilson, 1991). Hence, it becomes important to understand the motives behind such behavior during a period of marked expansion. Second, there is great consistency in the literature on achievement motivation for both majority and minority populations involving samples of subjects studied over the last several decades; the effects of particular family process and peer variables, for example, do not appear to have changed significantly over time.

A Note about the Women

There are more men than women in the sample. This was not by design. Finding female subjects was a particular challenge. Most potential women subjects contacted did not meet the background criteria to be included in the study. It became evident in the process of identifying study subjects that it was much more difficult for Chicanas to achieve this level of education without at least one parent breaking into the middle class before them, most typically a mother who had attained the status of a clerical or secretarial position. The special issues facing women deserve greater attention, and the author has attempted to address these issues in more depth elsewhere.

Methods

A retrospective method (described by Garnezy, 1974) was used to gather data through a semistructured interview format. After a fairly exhaustive review of the literature on achievement, motivation, and minority schooling, a draft interview was developed that included some closed-ended and many open-ended questions about family background and childrearing practices; schools attended; religious experiences; peer relations; attitudes toward, and experiences in, school; mentoring relationships; and personal characteristics and achievement attributions. Questions were designed to test a number of hypotheses about achievement motivation culled from the literature, but leaving sufficient flexibility for respondents to add things that were important to them and to suggest their own hypotheses. The interview was piloted on nine subjects, who met most of the same criteria as the sample subjects, and revised accordingly. The final interview protocol included 119 questions.

Interviews were conducted in subjects' homes and places of business, usually by this author, but in some cases by an assistant, throughout California, Texas, and the Washington, DC area. Interviews ranged in duration from 1 to more than 4 hours and were audiotaped and transcribed.

Data were first analyzed quantitatively by question and subgroup (male/female; JD/MD/Ph.D), yielding numerous tables that allowed for a cursory description of similarities and differences between groups, and highlighted areas of broad commonality. Like a picture, this information created the broad outline of the work; respondents' comments were then grouped and

analyzed to fill in the detail, and give the picture color, texture and coherence. Often the analysis of respondents' actual comments --and the tone of their voices--changed entirely the apparent meaning of a particular finding, as in the subjects' interpretations of the roles of their parents in shaping their educational ambitions.

Related Research and Study Findings: Family background

A substantial literature exists demonstrating that family background accounts for a larger portion of the variance in educational outcomes than any other single variable, including the school(s) a student attends (Coleman, et al., 1961; Jencks, et al., 1972). As a result, researchers have devoted a great deal of study to uncovering the family background variables that make the greatest contributions to students' educational achievement.

Across racial and ethnic groups, the single most powerful contributor to students' educational outcomes is thought to be socioeconomic status, usually defined as some combination of educational and occupational status of parents (Jencks et al., 1972; Laosa and Henderson, 1991). Because of the highly predictive nature of this variable, the subjects in this study were considered foreordained for school failure. There is less consensus on the question of why socioeconomic status has such powerful effects. Some have suggested that the social reproduction of status differences between multiple generations of different groups is the direct result of capitalist economic policy (Bowles and Gintis, 1976). Others have suggested that it is the more inadvertent result of a culture of poverty (Lewis, 1961; Glazer and Moynihan, 1963), in which maladaptive responses to schooling are transmitted through the generations by parents who were, themselves, ill-suited to school, did poorly, and failed to learn the skills necessary to propel their progeny through the educational system.

Other explanations for the powerful correlation between socioeconomic status and achievement behaviors in children include notions of social and cultural capital (Coleman, 1987; Lareau, 1987;1989). According to this line of research, middle-class parents who have been successful in school understand the "hidden curriculum" of schooling and know how to coach their children in appropriate responses to the system. They also have extensive community resources and networks that allow them to "work the system."

Parent-child interactions and teaching strategies

Related to this concept are studies that attempt to demonstrate relationships between middle-class communication patterns and social behaviors and the particular demands of classroom interaction. These studies have suggested that the behaviors required for success in school are the same kinds of behaviors that are typically transmitted by parents in middle-class homes, and that students who are not exposed to this acculturating home experience are at risk in school (Erickson, 1987).

One scholar has demonstrated that Mexican American mothers do, indeed, employ different behaviors than non-Hispanic white mothers when teaching specific tasks to their children, and that the behaviors of the white mothers are more consonant with the demands of school situations (Laosa, 1978). The white, middle-class mothers used an inquiry approach to teaching tasks, rather than modeling the solutions as the Mexican American mothers tended to do. This approach is more aligned with the requirements for independent problem solving that are characteristic of American classrooms. However, Laosa also found that when socioeconomic class was controlled, there was little difference between the teaching behaviors of non-Hispanic white and Mexican American mothers. Middle-class Chicana mothers with higher levels of education also used questioning behaviors more extensively than modeling when teaching their children.

Psychosocial factors in achievement motivation

More generally, the ways in which families help children acquire the motivation to achieve have been studied extensively by a number of psychologists. Eminent among these are McClelland et al. (1953), who concluded that motivation for achievement could be engendered in children through early training by setting high standards and providing sufficient independence for children to develop a sense of task mastery. In a study employing Mexican American pupils, Anderson and Evans (1976) were also able to demonstrate a positive association between independence training and academic achievement. However, the unique nature of interdependence of family members in the Mexican American family (Grebler, Moore, and Guzmán, 1970) calls into question whether independence has the same meaning for Chicanos as it may have for other cultural groups.

Others, notably Wolf (1963) and Dave (1964), developed this line of research further in an investigation of the "achievement press" of the home. They contended that certain parental behaviors could combine to create a press for achievement that would result in higher academic performance. In fact, with non-Hispanic white school-age subjects, Dave and Wolf were able to obtain a .80 correlation between their cluster of home environmental process variables that included such things as intellectuality of the home (e.g., availability of books and other educational materials), standards for work habits, and opportunities for language development and academic achievement. Although Marjoribanks (1972) was able to demonstrate the independence of these variables from socioeconomic status for non-Hispanic white students, Henderson (1966) was unable to establish this same independence for Mexican Americans.

Noninstructional influences

In a review of the literature on noninstructional influences on student achievement, Steinberg, Brown, Cider, Kaczmarek, and Laaro (1988) concluded that "studies of family processes indicate that students perform better when they are raised in homes characterized by supportive and demanding parents who are involved in schooling and who encourage and expect academic achievement" (p.ii). The studies they reviewed, however, involved few families and students who were not non-Hispanic white.

Parental involvement in children's schooling has also been shown to be positively correlated with higher student achievement. Stevenson and Baker (1987), using a nationally representative sample of elementary and secondary students, demonstrated that attendance at parent-teacher conferences, participation in parent-teacher organizations, and influence over their children's selection of courses, were predictive of academic achievement. Similarly, in a study of different socioeconomic groups, Lareau (1987) has shown that family "cultural capital," as manifested in parental contact with schools and knowledge of how to "work the system," is associated both with children's academic achievement and family socioeconomic status. However, Delgado-Gaitan (1991) has described the ways in which lower-income Mexican American parents can effect changes in schools that can result in increased achievement for their children. Nonetheless, in the same article she reports that Mexican American parents are frequently characterized as having low rates of participation in school activities (Delgado-Gaitan, 1991).

In sum, a large body of literature points to several ways in which parents and families of various racial and ethnic backgrounds affect educational outcomes for their children: early training in independence, high aspirations and standards, encouragement for schooling, creation of an intellectually stimulating environment, and involvement in schools.

The Subjects Speak

We now turn to the study sample. Given that the parents of the study subjects had relatively little experience with schooling themselves, and lacked many of the social and economic resources that middle-class parents call upon in orienting their children toward high educational aspirations, the questions to be answered are, Did these parents exhibit the same kinds of behaviors noted in the literature on high achieving students? If so, how, given their limited circumstances, would the parents evidence these behaviors?

The Nexus of Independence and Hard Work

It would be impossible to know, solely on the basis of retrospective interview, what kinds of maternal teaching strategies were used with these subjects. This question is unanswerable with the current data. However, about two-thirds of the subjects reported that their parents did stress independence as they were growing up. This meant "doing things on your own, not asking for help, especially outside of the family, and being able to fend for oneself." Often this took the form of accepting large amounts of responsibility within the home, as in the case of the lawyer who recounted the responsibilities thrust on her in late childhood:

I learned all the responsibilities of the home. When I was 12 years old, I fixed a Baptismal dinner for my little brother. And babysat five kids while I was making dinner and he was getting baptized at church. So, by age 12, I had all the housekeeping skills. I could cook dinner, I could clean, I could take care of children, I could wash. . . . My mother never even thanked me for anything I did. She just took it as a matter of course . . .

Or, as a male subject recalls:

[M]y father . . . was a butcher, and they taught me the business of the family, at a very young age, and I began practicing some of these things at the age of seven. . . . I was running the business at eight years old.

For these individuals, independence and hard work were closely related concepts:

[T]hey stressed independence, but they did it like . . . you have to be self-reliant if you want to make it, there's no one to fall back on . . . if you don't work there's not going to be food on the table. Despite it all I got some good values from my parents. Hard work, and independence, I got those from them.

Especially for the farmworker parents, independence was not an abstract concept, but a reality of everyday life. Being independent meant being able to fend for yourself in the world of work. As one subject succinctly put it, "when you're working in the fields, whether you're picking string beans or fruit, or whatever, everyone carries his own load."

Lessons in the value of hard work cum independence were sometimes articulated as well. Some parents were very explicit about what they expected their children to take from their work experiences:

(T)hey encouraged us to be good workers . . . an attitude that somehow we needed to be efficient, have something, have some skill that people would be willing to pay for, so in that sense we were encouraged in independence. We had to work in the fields everyday, even in elementary school.

This training in responsibility and independent behavior was a natural outgrowth of the

parents' own dedication to the work ethic. Virtually all the subjects in the study commented on their parents' extraordinary capacity for hard work. It should be mentioned that although no question was asked about this, when describing their parents the subjects invariably noted that their parents were the hardest-working people they had ever known:

My mother was a very hardworking woman, she still works hard . . . she worked all the time. She was a clerk, she still is a clerk . . . sells shoes . . . Monday through Saturday . . . and then on Sunday, she used to go clean up offices, every Sunday, I remember that because I used to help her sometimes. She worked all the time, all the time.

Another subject reflected back on his life and experiences and offered the following description of his father, a man in whom he found little else to admire:

He doesn't stop. Physically he keeps himself busy until he practically goes to sleep. Even if there is nothing to do, he finds something to do. He will knock down a tree and put it up again.

The role of hard work "both as a model for behavior that would later translate into the children's work habits at school, as well as a means for instilling a sense of independence, taking care of yourself" cannot be overstated. Whereas more middle-class parents might structure learning opportunities for their children to emphasize independent behavior, these parents encouraged independent behavior in a more direct manner:

Self-reliance was a sort of a learned kind of thing, because, like I said before, when my mother left Wilmington, she took her kids [eight children] and she didn't ask for help from anybody. And that was a very vivid lesson to all of us, that is, if you wanted something, you went out and you paid the price for it.

One subject, a lawyer, explained how the hard work ethic of his mother translated into a sense of high standards in whatever one does:

My mother . . . would have made All-American in any sport, because if we were picking tomatoes she was the champion of both men and women. If we were picking cotton she was the champion. Whatever, she was the outstanding. And it has to do with her athletic ability, but also with her tremendous sense of wanting to achieve and to win, and I think I learned that from her . . . and if I came home and said I pitched a one-hitter, she said, "Why didn't you pitch a no-hitter?" And if I said I got 4 A's and a B, she wanted to know why I didn't get all A's . . . she just expected us to be at the top, by her example.

In a very few cases, this sense of independence was learned because the parents failed to provide positive role models and the children were forced, of necessity, to take on the home responsibilities themselves. A lawyer, whose father was an alcoholic and periodically abandoned the home, recalled how her parents instilled independence in her:

I think it was their irresponsible attitude toward life. I had to fend for myself and learn to fend for my family. I knew at an early age, I think all of us knew, no matter what happened it wasn't the end of the world. There was always tomorrow. We'd always get by. It happened so much. Like, my father would leave us, and we'd manage. I guess it gave us sort of a fighting attitude. We became very competitive in school and we had a very strong survival instinct.

Parental Support and Encouragement

The literature on academic achievement motivation is replete with references to support in the home for academic or intellectual pursuits. Such support may take the form of encouragement for performing well in school, helping with homework and school assignments, providing stimulating learning experiences in the home, and helping children set educational goals. To what extent were these parents, overworked, and undereducated themselves, able to provide these kinds of supports for their children?

Mother/father differences

Subjects were very emphatic on the topic of parental support and encouragement. Most reported that both parents were supportive of educational goals, though mothers were substantially more so (see Table 2).

TABLE 2
PARENTS' PERCEIVED IMPORTANCE OF EDUCATION

MOTHER				
	Not Very Important	Moderately Important	Very Important	N
Total	4 (8%)	3 (6%)	43 (86%)	50 (100%)
Gender				
Male	1 (3%)	1 (3%)	28 (94%)	30 (100%)
Female	3 (15%)	2 (10%)	15 (75%)	20 (100%)
Degree				
J.D.	2 (17%)	0 (0%)	10 (83%)	12 (100%)
M.D.	1 (8%)	0 (0%)	10 (91%)	11 (100%)
Ph.D.	1 (4%)	3 (11%)	23 (85%)	27 (100%)
FATHER				
	Not Very Important	Moderately Important	Very Important	N
Total	12 (26%)	8 (17%)	26 (57%)	46 (100%)
Gender				
Male	5 (19%)	5 (19%)	17 (63%)	27 (100%)
Female	7 (37%)	3 (16%)	9 (47%)	19 (100%)
Degree				
J.D.	4 (33%)	1 (8%)	7 (58%)	12 (100%)
M.D.	3 (30%)	2 (20%)	5 (50%)	10 (100%)
Ph.D.	5 (21%)	5 (21%)	14 (58%)	24 (100%)

While fathers frequently indicated that they wanted their children to do well in school, they were more ambivalent in the messages they conveyed to their children. One ex-farmworker

commented:

(M)y father politically and philosophically supports education, but he wanted me to work more . . . it was difficult for him, he needed me to help pay the bills.

A young lawyer whose father was a railroad worker described the lukewarm encouragement she received from him in the following way:

My dad was very anti-education, especially for women. You're going to get married, so I don't see why you need an education . . . but he never pressured us to quit school . . . my dad let everybody finish school. So that was kind of a big accomplishment.

In the cases where the father was not fully supportive of the children's educational ambitions, usually the mother would intervene on their behalf. A biologist described the dynamics in her family:

Once it became clear that I was doing well in school, you know, my father just felt eighth grade education was . . . a lot of education. He had none, so eighth grade was already an educated person and he wanted me to get out and work, just thinking of money. [But] my mother said, "Look, she's doing all right, why don't we just let her go on to high school?" . . . It was usually her influence and her intervention that allowed them to come up with a little extra money to buy clothes or buy books . . . and it was her perseverance when it came time to go to college . . . my father wouldn't sign my National Defense Loan . . . because he was afraid of the consequences if I weren't able to make it through college, default on the loan. [But] my mother . . . was always saying, "Oh we'll make it, she'll make it."

Another subject described how his mother provided the support for schooling that his father lacked:

I think it was more of a covert thing, although it was well understood. My dad was more lax, and I'm sure if we had wanted to drop out of school in third grade, and he were the only one around, we would have done it. But, you know, having her there, it was understood that was not to be talked about.

It is evident from the numbers in Table 2 that mothers were most often the guiding force in the home behind the children's powerful educational ambitions. However, the numbers do not reflect the depth of feeling that subjects expressed about their mothers' encouragement. They rarely hesitated in answering the question, "Which of your parents had the greatest influence on setting your educational goals?" Usually the response was swift and emphatic: "my mother." One subject explained what he saw as the apparent contradiction in the common stereotype of passive, submissive Mexican mothers, and the role they consistently played in their children's goal-setting:

My mother always predominated in my family. That's something that's sort of subtle, that's not brought out within our culture. I think in a lot of the Chicano families, the mother is really the head. The father is more a figurehead and he ultimately puts down the blows. But the mother is really the one that controls the father. It's sort of manipulative.

Many subjects commented, similarly, that although the father was the acknowledged head of the household, or "figurehead," the mother was the one who exerted the greatest influence over

their lives, even in everyday decisions. This subject's analysis was probably reasonably representative of many of the subjects' homes.

Kinds of familial support

While parents had few resources and relatively little experience with schooling themselves (though many were highly literate), most of what they could offer was verbal support and encouragement for their children's schooling, and most subjects felt very strongly supported at home. Sometimes parents articulated this support, as did the father of an Ivy League law school graduate,

Well, don't be what I am. Don't have to earn your living by having to dig ditches and filling them up. Use your brains and use your head. Do something better. Don't be a dummy like me. Finish school and you go out and learn yourself something.

Other times the support was less directive, but nonetheless fully understood by the children. One subject talked about how her mother encouraged her without really setting any specific goals:

She expected us to do our best and other than that she never directed us, but she always encouraged us. . . . She really goes out of her way to not bring in her own feelings, to make us feel that we making a decision on our own. "Don't do anything for me," she says. "Do it for yourself." She always supported my decisions, but she never directed them.

Apart from verbal encouragement, many subjects recalled instances of their parents actually helping with schoolwork, to the extent that they could, which was usually very limited. A law professor recalled back to his first homework lesson in the third grade:

I had to read something and I don't remember it all, but it had something to do with reading a story that had something to do with flax. I remember not really knowing what to do and I asked my father. It was late; I had waited to do it 'til really, really late and my father stayed up with me and tried to figure out what I was supposed to do . . .

To make his point about his father's willingness to help his children, even though his own skills were limited, he went on,

(O)ne time that was characteristic of the way he would help . . . my sister was trying to do some homework and she was trying to find the definition of "fortnight" and dad didn't know exactly what it was and couldn't find it in the small dictionary that we had. . . . (W)e didn't have a telephone in those days, but he went and knocked on doors of people that he thought would have dictionaries to get them up so they could find a definition of fortnight for him.

A physician, whose father died when she was nine, recalled his attempts to help her with her homework, and her mother's efforts as well:

I remember my father going over my arithmetic with me all the time. They really didn't have that much in the way of resources at all, the experience that was needed, but they were always there. They were interested in my homework. They helped us.

They made us study. I remember them buying us books. And I remember my mother taking us to the library, which nobody else's mother did. I remember going to the library every Saturday when we moved to Barstow . . . and her . . . knowing the librarian, because we went there every Saturday to pick out new books.

Another subject's mother, unable to help her budding scientist son in any direct way, provided encouragement for his curiosity:

When I was in high school, I used to bring a dead cat and dissect it at the [dining room] table. . . . She thought it was fantastic that I knew all the muscles . . .

The law professor, whose father had combed the neighborhood for a dictionary, recalled the poignant moment when his father, a laborer who had gone to the eighth grade, felt he could no longer help his son:

(W)hen I graduated from the eighth grade . . . he took me aside and he said, "Look, you know, from now on you have more education than I do and you know better than I about what you want and what you are supposed to do. I have been able to help you up till now but I can't help you anymore." So, he was sort of saying he trusted my judgment.

Creating the environment for achievement

Because of the consensus in the research literature on the importance of providing a rich intellectual environment for stimulating academic achievement, subjects were asked about the availability of reading material in their homes: whether they had in their homes (1) an encyclopedia, (2) a dictionary, (3) a daily newspaper, (4) magazine subscriptions, (5) more than 25 books. It was assumed that most would not have had such things in their homes because parental education, time, and financial resources were extremely limited. Astonishingly, however, 98 percent of the subjects had at least two of the five things, and almost 70 percent had an encyclopedia as they were growing up. Moreover, half of the subjects reported that at least one parent was an avid reader, a fact that is more than a little surprising in light of the low level of formal education of the parents.

Most of these parents read in Spanish and shared this activity with their children. It was therefore not surprising to find that many of the subjects, and almost all of the women, were avid readers throughout school, and even credited reading with being key to their academic success. Reading, however, is not the only form of literacy training, nor was it the only way in which these parents encouraged their children's love of learning. Vygotsky, the famed Russian psychologist who has revolutionized modern thinking about literacy, contended that written language develops as speech does, in the context of its use, hence the importance for learners to be immersed in language in order for literacy to be easy (Goodman & Goodman, 1990). This is precisely what almost two thirds of the parents of these subjects did. Sixty-two percent of the subjects recounted how discussions of politics and world events were routine topics in their households. Several of the parents held strong views on social issues, or were well-versed in history or literature and shared this love of inquiry and ideas with their progeny. There were no differences between the sexes on this factor.

The picture that emerges of the home environments of most of these subjects is one in which a high premium was placed on ideas and information, in spite of the very limited formal education of the parents. One subject, a political science professor, whose father had never attended school and whose mother had less than one year of education, recalled her home environment in the following way:

My father is a self-educated man. He was very, very intelligent and really well read, but he did it himself. And my mother too. My mother enjoyed reading . . . she had read a lot of what we consider classics in Spanish whenever she could get ahold of them and she was an avid reader. . . . My father . . . loved music . . . he knew all the artists and the names of all the operas, the music of all the operas. I remember the old cartoons, they always had classical music in the background. My father would take us to see those nasty cartoons just to listen to that classical music. . . . I always thought it was such a terrible combination of those ugly cartoon figures and this beautiful music. My father's dream was always to go to the San Francisco Opera, the opening of the opera in San Francisco. He did get to go to Los Angeles once, but he never got to go to San Francisco. We were going to take him one day, but then he had cancer and he couldn't walk very well . . .

Similarly, a linguistics professor whose parents had dropped out of school before the sixth grade, commented on the early education she received in her home, particularly from her father, who became a lay preacher and Sunday school teacher:

My father was an exceptional man. Education was very important to him . . . he would give us like statement problems, "What if I bought this . . ." We'd sit there and try to figure it out . . . then when we started going to church everything was in Spanish, and everybody was supposed to read chapters and report. So I had a great deal of instruction in the Spanish language without knowing it. Also it sort of set the stage for literature. By the time I went into literature, that kind of stuff was not difficult at all. I would simply write in a biblical style.

Foregoing children's economic contributions

Most parents, however, were not able to provide this kind of intellectual stimulation for their children, and even rudimentary homework lessons were beyond their level of academic skill. The children knew that their parents wouldn't be able to help them. But, the parents were able to show support for their children's education by protecting their time for study and foregoing badly needed financial help. One subject said,

My parents pressured me to stay in school and they didn't ask me . . . since I was the oldest, the natural thing would have been . . . for me to go out and work full-time and help them with the family. But they didn't [ask me to].

All of the migrant parents (about one-fourth of the subjects) had made the sacrifice of settling down in one place, foregoing their migrant patterns, when they realized it was having a negative effect on their children's schooling. In some cases this was a particularly difficult decision for families when there were no guarantees of steady work. Some fathers would leave the family behind while they continued the migrant work on their own. For one subject, the family's decision to settle in the Napa Valley was especially fortuitous. Apparently teachers took note of the family's sacrifice for their son's education and made an extra effort on his behalf:

We were one of the only families that stayed. . . . I was the only [Chicano] who stayed [in school] after the grape picking. So, the teacher took a half hour every day away from the other kids to teach me English. That made a lot of difference.

For another subject, who would become a physician, the family's decision to stop migrating was the clear turning point in his educational career:

(W)hen I was in the seventh grade, they were going to keep me back because I was failing. And my brother had failed the year before and the family didn't want us to fail. That was a major decision that was made, that we no longer migrate during the school year. . . . [F]rom the seventh to the eighth grade I went from a D and F student to an honor student.

Parental aspirations

The literature on achievement motivation also suggests that the parents of high-performing students usually have high aspirations for their children and transmit these aspirations to them. This literature, however, is based largely on middle-class samples. In an analysis of parental goals in a cross-cultural context, LeVine (1974) suggested that,

In populations with relatively scarce or precarious resources for subsistence, parents will have as their overriding conscious concern the child's capacity for future economic self-maintenance (broadly defined), particularly after his survival seems assured; and child-rearing customs will reflect this priority (p 231).

The experiences of the subjects of this study reflect this analysis to a large degree. More than half of the subjects believed their parents, both mothers and fathers, aspired to nothing higher than a high school education for their children (see Table 3).

Graduation from high school represented a high goal that these parents believed would assure their children of a reasonable livelihood in the future. When asked, "How far do you think your mother hoped you would go in school?," for example, a physician who grew up in a migrant family responded,

High school. She knew that if I graduated from high school, I could get a good job after I got out. Because at that time . . . she grew up in a time when high school graduation was the goal to attain, and once you had achieved that . . . you were really, you know, you were somebody.

Interestingly, parents' levels of aspirations for their children were relatively similar for both sons and daughters, whether they included high school graduation or extended to a college education. However, somewhat smaller percentages of parents envisioned a graduate or professional education for their daughters. Considerably more daughters did not know what their fathers envisioned for them, and felt their parents didn't encourage them to become doctors, lawyers, or scientists to the same extent as they encouraged their sons. Hence, while overall support for education was relatively similar for both males and females within the family, there was some tendency for parents to have higher aspirations for their sons.

TABLE 3
PARENTAL ASPIRATIONS FOR SUBJECTS' EDUCATION

MOTHER							
	Less Than H.S.	High Sch.	Some Coll.	Coll. Grad.	Grad. Prof.	Tech. Ed.	Don't Know
Total	2 (2%)	17 (38%)	3 (7%)	11 (22%)	8 (13%)	0 (0%)	9 (18%)
Male	1 (3%)	12 (40%)	2 (7%)	5 (17%)	6 (20%)	0 (0%)	5 (13%)
Female	1 (5%)	5 (25%)	1 (5%)	6 (30%)	2 (10%)	0 (0%)	4 (15%)
J.D.	1 (8%)	2 (17%)	1 (8%)	4 (33%)	3 (25%)	0 (0%)	1 (8%)
M.D.	1 (9%)	4 (40%)	1 (9%)	3 (27%)	1 (9%)	0 (0%)	1 (9%)
Ph.D.	0 (0%)	11 (41%)	1 (4%)	4 (15%)	4 (15%)	0 (0%)	7 (26%)
FATHER							
	Less Than H.S.	High Sch.	Some Coll.	Coll. Grad.	Grad. Prof.	Tech. Ed.	Don't Know
Total	7 (15%)	13 (33%)	2 (5%)	9 (21%)	5 (10%)	0 (0%)	9 (15%)
Male	4 (16%)	8 (32%)	2 (8%)	4 (16%)	3 (12%)	0 (0%)	5 (16%)
Female	3 (16%)	5 (26%)	0 (0%)	5 (26%)	2 (11%)	0 (0%)	4 (21%)
J.D.	2 (18%)	2 (18%)	0 (0%)	3 (27%)	2 (18%)	0 (0%)	2 (18%)
M.D.	1 (10%)	5 (50%)	1 (10%)	1 (10%)	1 (10%)	0 (0%)	1 (10%)
Ph.D.	4 (17%)	6 (26%)	1 (4%)	5 (22%)	2 (9%)	0 (0%)	6 (22%)

Sibling support

A number of the subjects reported that older brothers or sisters played the significant role of transmitting expectations and paving the way to college. One subject talked about the way his older sister, frustrated in her own ambitions, had been instrumental in developing his:

My oldest sister . . . was, I think all along, much sharper and [more] intelligent and academically oriented than I was. . . . I think I was very much molded by her influence. . . . (S)he never completed college. I think she could have had a tremendous academic career, but as she was the oldest, she bore most of the brunt of my father's pressure and didn't accomplish as much as I did. . . . (S)he helped me a lot. One of the important decisions . . . about which high school to go to, had to do with her. She was the one who encouraged me to take the . . . alternative. She gave me the reasons why and she recognized at that point that it was important academically for me to do it.

Another subject recounted how the fact that his older sister had made it to UC Berkeley made it seem possible for the rest of the children of the family, especially for him:

My sister was a tremendous influence on me. . . . I can remember, how many times I used to tell people my sister was at Berkeley. That was sort of a success image, a very important success image aspect of the relationship.

Parent involvement

Finally, recent research has turned up consistently high correlations between parent involvement in schools and student academic performance. Given the high degree of interest that most of these parents exhibited in their children's education, did they involve themselves in the schools their children attended? None of the 50 subjects described their parents as being active in their schools. A few mentioned that their parents would attend some PTA meetings, but for the most part these parents kept a fair distance from the schools unless a problem occurred, and this was likely to result in a visit to the school. The following response to the question of whether his parents ever visited his school to check on his progress was typical of the way most people interpreted their parents' lack of school involvement:

[My parents visited] only because they were forced to, I think. They . . . my mother . . . would not go, I think mainly because she didn't feel up to presenting herself and trying to communicate with the teachers, whom I guess obviously she held in high esteem. And maybe she didn't feel like she would be able to talk to them, although she knew how to speak, although at that time it was probably broken. . . . I think they were always interested but that held them back.

One subject, in describing how his parents never visited his schools, save for required parent conferences, expressed how they nonetheless conveyed their high respect for teachers and school:

I remember my parents always said to me: Primero Dios, segundo los padres, y tercero los maestros [first God, second parents, and third teachers]. School was very important to them and they believed we should treat our teachers almost like our parents.

While parent involvement in children's schooling is highly desirable from a number of perspectives, not the least of which is that correlates so well with student achievement, it is important to remind ourselves that correlation does not equal causation. Parents may well be supporting the goals of the schools without ever setting foot in them.

Family stories

One phenomenon that appeared unbidden during the interviews was the recounting of some family "myth" while subjects were describing their families' migratory experience. One or the other of the parents, most often the mother, was said to have come from a family that was highly esteemed in Mexico.

In an earlier study of Mexican Americans, Grebler, Moore, and Guzmán (1970) had found a similar phenomenon: those who were upwardly mobile, who tended to live in "frontier" communities close to Anglo American residential areas, often told stories of lost glory, "a golden past" which they were determined to recover. The researchers suggested that some kind of myth

"might play a role in social mobility."

No such question was put directly to subjects in this study, but fully half of the sample of low-income Chicanos, sons and daughters of farmworkers and laborers, recounted stories of family wealth and prestige. Following is a small sampling of these stories:

My grandfather's family-- [my mother's] father-- were landowners . . . and she describes things like how my grandfather used to hide the jewelry and hide the valuables, and stuff like that . . . [and] they had orchards . . . [But] my grandfather was dispossessed of his share . . . he was an outcast from the family and because of the difference in status between my grandfather and my grandmother . . . he was never welcome in the family any more. . . . (T)hat's when they came here.

[My mother told us] how her grandfather was like a multimillionaire type. He was a genius in the mines. And none of that went down to her family because of wills and stuff like that. And they were always very proud because her uncles owned a hotel in Aguas Calientes, and that was something nice back there, even though we don't have it here. [She would say,] "You know you can hold your head up high." And we never believed it. We always thought she was just making it all up.

My father, if he had stayed in Mexico . . . would have done a different kind of job. . . . In their family a cousin has a wine thing. My father would have had a different life in Mexico. It would probably have not been labor. . . . My mother's family, also in Mexico, they were more into the mercantile and they ended up having stores. They have huge stores. That kind of thing . . . coming here . . . meant labor.

When subjects did not describe great wealth, they were inclined to comment on how members of their family had achieved great prestige in Mexico, or high levels of education:

In her family [mother's], some were farmers, others were politicians and became very high officials in the Mexican government, including one who became a congressman, one became an attorney. These were her brothers. My grandfather was like a sort of judge of the town, [and] my mother's father's brother, therefore her uncle, was mayor of a town in Sonora and was politically active. My mother's father was also politically active . . . he was in the losing party, so he had to leave town real fast and that's when they came across the border.

Whether the family stories are true is probably less important than that they were so salient, so much a part of the subjects' perceptions of themselves, and their families, that they came easily to mind without prodding. Why would the parents have told these stories to their children? It seems logical that this was a way of conveying that the current impoverished circumstance in which they lived was not one in which they need remain. In fact, one might construe, it was atypical for their family, a fluke of sorts, that could be remedied. The stories seem to point to a great deal of hopefulness in the families of these subjects and a desire to keep alive a dream of what they were, what they could be again.

There is little in the literature by which to anchor such conjectures, but these family stories were recounted so often that the phenomenon cannot be ignored in attempting to explain the origins of the subjects' powerful aspirations.

School Factors

Three major attributes of schools have been shown to affect student achievement: the

teachers, the students (peer groups), and the curriculum. In the Southwest, as well as in the rest of the country, most public school teachers are white, monolingual, and come from middle class backgrounds (Macias, 1988). This fact suggests that they carry into the classroom a set of cultural experiences and expectations that may differ considerably from those of their students who do not share their cultural and socioeconomic backgrounds. Perhaps this phenomenon is related to the very low numbers of students of color who are nominated for classes for the gifted and talented or for college preparatory courses, and the high proportion of these students who are clustered in general and vocational education tracks (Mehan, 1992). Both the skills of the teachers (Rosenshine, 1986), and the decisions they make about their students' capabilities can have far-reaching consequences for student achievement; for example, Oakes (1985) has demonstrated that the curriculum track on which a student is placed can have a major effect on that student's schooling experience, likelihood of dropping out, and future life chances.

Coleman (1966) also noted that the largest portion of the variance in achievement attributable to schools can be accounted for by the composition of the student body. Hence, there is considerable evidence that curriculum tracking, which is largely a function of teacher assessments, and peer group composition, which is largely a function of curriculum tracking, are critical elements of the school that can have a substantial effect on student achievement.

There is also evidence that minority students who attend schools that are racially and ethnically isolated do not perform as well as those who attend more racially integrated schools (Coleman, 1966; Carter, 1970; Orfield and Paul, 1988). Much of the difference in student achievement in these schools has been attributed to the schools' lower funding and tendency to have less experienced and less able teachers (Carter, 1970; Carter and Segura, 1979; ETS, 1991). On the other hand, school expenditures have been shown to have little effect on academic achievement when student background factors are controlled (Coleman, 1966; Hanushek, 1981; ETS, 1991). The study subjects, in recounting their schooling experiences, offer some insights into how this apparent contradiction may be resolved.

Curriculum tracking

Almost all of the study subjects were eventually tracked into college preparatory courses when they were in high school, although for many it was a battle to get there. Had they not been placed in this track, it is unlikely that they would have achieved the level of education they eventually did (Oakes, 1985). These subjects were astute enough, in most cases, to be painfully aware of this fact, and many complained that they had to fight for the right to take college prep courses; the schools frequently did not identify them as being "college potential."

One lawyer, who had come to the United States in the fourth grade, recounted how difficult it was to get out of a lower track once she had been placed in one:

(W)hen I went to the tenth grade, I took that special stupid test they give you and it came out that I would have been a fantastic mechanic . . . so they tracked me average [again] which precluded me from taking college prep classes, and I had already taken geometry and Spanish and biology and some other courses in junior high. Now that I was tracked, and they tracked me secretarial, I used to take my electives as college prep courses. It didn't get to the 11th grade until they finally tracked me into what they called the college prep, that I could take the classes that I wanted. So I was taking these stupid homemaking, which I always hated, typing, which I always hated, courses that I didn't like.

Some subjects indicted their high school counselors for placing them in vocational and noncollege preparatory tracks, in spite of their good achievement in school, interpreting this as an

expression of racism:

My first day signing up [at high school] . . . my dad had been out working in the fields, but he came home early this day to take me so I could get registered . . . there was a counselor. . . . And I took my eighth grade diploma which was straight A's, and I was valedictorian of my eighth grade. . . . And I told him I would like to go to college and could he fit me into college prep classes? And he looked at my grades and everything, and said, well, he wasn't sure I could handle it. My dad didn't understand. He was there with me. And this counselor put me in noncollege prep classes. I remember going home and feeling just terrible.

In some cases, subjects were dogged by test scores or impressions that were very difficult to overcome. The following example illustrates the experiences of a number of individuals in the sample.

My counselors didn't come to me and say we are putting you on a special tracking upwards because you are doing so well, but rather it was something I was entitled to and I was aware that I could go in and ask for it. In fact sometimes I had to insist on it and much later I found out why. Apparently one of the reasons my counselors had such a negative image of me and why they were always insisting I was not college material was because I have always done extremely poorly on IQ exams. And they were totally locked into that IQ . . . like 94, 95, 96 . . . and they never explained why I was doing so well academically when my IQ test was so low.

One subject, who was later to become an acclaimed scientist, was so disturbed by an encounter with a counselor that he counted the incident as perhaps the seminal experience that propelled him to higher education:

I was in an accelerated class, I was in the top 10 percent of my high school graduating class. I wasn't dumb, I was pretty good, I thought. She [the counselor] told me, "Well, you should go into vocational school." I got so mad with that woman, and it was primarily based on some damned exam that I took . . . and I don't believe in exams anyway. . . . (S)he was, I think, the one who motivated me to go to university because she told me I shouldn't go. So I thought, "Well, the hell with you!"

Once subjects were placed into the college prep track, it had an enormous impact on them, not only because they were able to participate in classes that would lead to college, but because of the new peer group it defined for them. In almost every case, they became one of a small handful of Chicanos (and often they were the only one) in their academic peer group. This had a number of consequences.

The very Mexican-looking son of farmworkers, who became student body president of his mostly Anglo school, described his experience at being tracked in this way:

(T)hey put me in a group that kind of restricted who I really hung around with, because it was always the people who were the smarter kids. And the smarter kids were always the people, you know, who were from the higher socioeconomic group . . . and always, you know, the white kids . . . the principal's son, another teacher's daughter. And it kind of restricted my association with the other people in my class . . . by the courses you take you kind of restrict yourself . . . who you even communicate with.

Another subject, also the daughter of farmworkers, described the peer group that was created for her by her college prep classes:

In high school, I tended to hang around with kids who were in my class. And since they had tracking, some of my friends from the migrant labor camps did not get put into the higher tracks. So, I knew them in the labor camp, I would talk to them, they were my friends . . . but I would never see them in my classes, and I would rarely see them, even in school. The ones I hung out with in school were the studious ones, most of them in my class. Those are the ones I had homework to discuss with.

Peer competition and validation

Being tracked into classes with students who were mostly middle class, white, and who, in the words of one subject, would have been aghast if they knew that my parents were farmworkers and we lived in labor camps, had consequences for how these subjects came to see themselves. For many, it required that they constantly defend themselves against self-doubt.

Many of the male subjects talked about the importance of knowing they were doing well against middle-class, non-Chicano classmates. (Curiously, this was mentioned frequently by males, and rarely by females.) Many pegged their own performance against the standard set by particular white, Asian, or Jewish students. They believed that if they were competing favorably against these students, they were probably pretty capable. One subject talked at great length about this phenomenon:

(T)hrough high school there was always an identified competitor, male or female . . . it was always like neck and neck. Like a racetrack. In high school the competition got really heavy. There were all these Anglo guys, you know, and they were like geniuses . . . there was Ronald, red-haired guy, John, a Jewish guy. Billy, red-haired guy (I never saw red-haired guys in my life before), Steve, big blond guy. All of these were middle- class, you know, they were well-to-do . . . There were six . . . And grades would be posted . . . and we would be separated by whiskers: 95.2, 95.4, things like that.

And where were you?

I was usually at the top.

In the top three?

The top one. I would trade off with Ron, the red-headed guy.

Some subjects felt the challenge to prove they were capable, not against any specific student, but against all the others who were not Chicano:

To myself, I always had to show the Anglo kids, and the teachers, that just because I was Mexican, I wasn't dumb. When I was in school, I always got top awards. Like I got the only English award, in a school that was mainly Anglo! I thought because I was Mexican that was one thing I could show them, that Mexicans could do better than they could.

Another subject expressed similar attitudes:

I think the one basic attitude that helped me a lot to do well was a very competitive

attitude, especially with the Anglo kids, to be better than them. So I always in my classes loved doing better than them, and I think when I really started coming out was in the ninth grade. I started shining higher than those kids in certain subjects, especially things like social studies.

Desegregated schools

The study subjects were in a position to be tracked into classes that were typically all-white because they overwhelmingly attended desegregated or mostly Anglo schools. In both elementary and high school, between 60 and 70 percent of the subjects reported that they attended mostly white (and usually middle- to upper middle-class) or mixed schools in which at least half of the students were Anglo (see Table 4). Even at elementary school, where school populations more accurately reflect the racial and economic character of the local neighborhood, two-thirds attended mostly white schools.

TABLE 4
RACE/ETHNICITY OF HIGH SCHOOL

	All/Almost All Mex-Amer	Mostly Mex-Amer. Sig # Anglos	Mostly Minor (Black, Mex-Amer, Etc.)	Mostly Minority Excluding Mex.-Amer.	Mostly Anglo	Mixed	N
Total	8 (16%)	6 (12%)	2 (4%)	1 (2%)	24 (42%)	9 (18%)	50
Male	4 (13%)	6 (20%)	1 (3%)	1 (3%)	12 (36%)	6 (20%)	30
Female	4 (20%)	0 (0%)	1 (5%)	0 (0%)	12 (53%)	3 (15%)	20
J.D.	1 (8%)	1 (8%)	0 (0%)	1 (8%)	7 (50%)	2 (17%)	12
M.D.	3 (27%)	1 (9%)	1 (9%)	0 (0%)	3 (20%)	3 (27%)	11
Ph.D.	4 (15%)	4 (15%)	1 (4%)	0 (0%)	14 (49%)	4 (15%)	27

* At least 50% Anglo or more than half of schooling experience took place in mostly Anglo schools.

Inasmuch as these subjects came from poor families and lived in poor neighborhoods in the West and Southwest, where segregation of Chicanos is typical, what accounted for the fact that they attended the kinds of schools that they did? One explanation may lie in the conscious choices made by some of the parents to live in the better Mexican communities located on the fringes of white neighborhoods, perhaps realizing the social and educational advantages that would accrue to their children as a result. Many subjects, in fact, talked about living on the school boundary line or the other side of the ditch from a really bad neighborhood. A young woman who grew up in southern California spoke for many of the subjects in the following

commentary:

I went to schools where I wasn't the norm, but we lived in neighborhoods where we were. In Barstow, where I was districted in a different, more prosperous, elementary school, I wasn't the norm in school, but I lived in a neighborhood where we were. Even in New Mexico, the same way.

A second explanation lies in a fact of life for farmworkers. Their children who attend school often go to the same schools as the well-off sons and daughters of the large landowners for whom their parents work. In the early grades this results in highly mixed schools, but as the students move into high school large proportions of farmworker children drop out, leaving secondary schools that are often largely white, middle-class enclaves.

Catholic schools can also provide integrated education for low-income, minority students; about 30 percent of the subjects had attended parochial schools for three or more years.

There is another explanation for the disproportionately large sample of subjects who attended highly integrated and mostly white schools, having to do with the students themselves. Several subjects commented that they were acutely aware of the differences in opportunities that existed between schools and they made the choices about which schools to attend. One young man who had lived on the boundary between two very distinct schools explained his choice this way:

When I graduated from junior high the big question was which of the two high schools was I going to choose. And the reason why the choice was important was because Lincoln was predominantly, 95 percent, Mexican American and that's where most of the kids from my junior high school were going. . . . Franklin, at that time, was 99 percent Anglo. And the choice was very critical at that point primarily because it was a choice of following the rest of the crowd. . . . I was involved in gangs when I was in junior high school . . . most of them had been arrested for one reason or another. . . . My decision was to go to Franklin . . . I knew the only way to escape this was to disassociate myself from all of them by going to a high school where they weren't going.

Another subject talked about how his schooling was shaped by his two older brothers who had decided that they wouldn't go to school in the barrio where they lived:

My two brothers were trying to do well. They wanted to go to college, that's why they left the barrio, they didn't want to go the schools there, the public schools especially. . . . (T)hey found a Catholic high school through a friend of theirs, and that's where the whole movement started. We used to get out, take the bus across town.

When their mother said the Catholic high school was too expensive, she couldn't afford the one they had selected, and suggested couldn't they attend another school?, the boys replied,

"It's not good enough, look at all those guys, they're not going anywhere." They saw the writing on the wall. Pretty perceptive, actually.

Importance of particular schools

Whether by chance or by conscious effort, many of the subjects commented on how important they felt the particular schools they attended were in shaping their academic futures.

One subject, when asked what was critically different about his background that might have contributed to his high aspirations, replied,

That I went to Catholic school. It was head and shoulders different from public schools. My friends in Catholic school and I, we were proud of who we were. We had pride. We knew that we were studying hard compared to all those other guys that don't carry any books home. . . . We felt like we were doing something. . . . I don't know what would have happened to me if I'd gone to public school. Maybe I would have surfaced, maybe, but I don't know.

Of course, most subjects did not go to Catholic schools. For many of them, their public school experiences were believed to make a difference:

I have sometimes asked myself . . . whether or not I would have achieved as much, or even more, if I had gone to . . . But I don't know. I knew that in going to an Anglo high school I was going to have to overcome everything that I was carrying with me which was going to keep me from achieving it. I did it. Having done it gave me an incredible amount of confidence and completely convinced me that I could do anything I wanted to.

Similarly, a young man whose older sister had invited him to live with her and her husband so that he could attend an upper- middle-class, mostly white, school, reviewed that experience:

I could have stayed at Ravenswood High School, and I would not have gone on to college. And I also think that if I had stayed in the old neighborhood, I would not have gone on to college. But the experience that I had at Campbell, in particular, sort of began to provide me with that proper tone of work, to create a situation in which I could go to college.

Another subject, early in his educational career, found the change of schools he made to be fortuitous in the way it resulted in a different opinion of himself:

I went to Marengo. That was the first school I went to. There I don't remember being at the top of the class . . . I was kind of right in the middle, average. When I went to Murchison, all of a sudden I was at the top of the class . . . and they tested us once and found that about three of us who were transferred from this other school . . . they found we were doing third-grade level. I always thought, gee, that was interesting. Here I was in the middle of my class and suddenly at this school, I'm smart. I'm one of the smart guys. . . . (Then) I remember going to an Open House and my instructor told my parents that I was "college material" . . . and it seems from then on, I was their son, "college material."

Mentors in school

There is little consensus among scholars on the definition of mentoring or the characteristics of the mentoring relationship. For Muskal and Carlquist (1992), mentoring may range from a single motivating conversation to a life-long relationship. Bloom (1985) identifies different types of mentorship, depending on the stage of development of the one being mentored; and Gage and Berliner (1991) contend that the mentoring relationship must be one of mutual benefit that takes place in the context of some kind of work. While differing along several dimensions, these definitions share in common the notions that the participants' relationship must

be one of superior and subordinate and the subordinate's career is advanced through this relationship.

In this study, mentoring was defined as a process by which a particular individual dramatically affected the subject's orientation to schooling. The mentor was the person who encouraged, showed the way, and nurtured the subject's aspirations to pursue higher education. Although most subjects reported that they had positive experiences with teachers who encouraged them, only half actually nominated a teacher or other person outside of the family as a real mentor.

An interesting gender difference became evident here. While all of the female subjects had been good or excellent students throughout their school careers, and teachers and counselors, with a few exceptions, had been generally supportive, only 30 percent of the women cited a person outside of the family as having had a major influence on setting and/or achieving educational goals. On the other hand, 60 percent of the male subjects cited a person outside of the family as playing this role in the formation of their educational goals. Although a fair number of the males had uneven academic backgrounds, many more people stepped forward to be their mentors.

In some cases mentoring took the form of an exceptional interest in the academic nurturing of a subject, even early on. One sociology professor recounted such an experience with his fifth and sixth grade teacher, whom he credited with being the impetus for a lifelong love of learning and a desire to pursue higher education:

Well there's no doubt that the most important person in probably my whole educational experience was a teacher I had in fifth and sixth grade who I visited last year to tell her I was getting my PhD and that I really owed it to her. She was a wonderful woman, an Anglo woman who was from the Midwest. She was very religious and she had an old-fashioned attitude toward education. She loves her students and she puts out for them. I remember very clearly she bought the World Book Encyclopedia for the class. . . . Up until then I could hardly write my name . . . I could hardly read. She was the kind of person who would take the slowest students and work them the most. . . . She took me and . . . and she took this one Anglo boy who was a migrant worker . . . he used to wear rags to school. . . . I started doing a lot of book reports and stuff from the World Book Encyclopedia. She introduced me to libraries and to reading and that's when I really started picking up because once I discovered reading it just opened up a whole new world. . . . In those two years I learned how to learn.

For others, like the lawyer whose parents had discouraged his pursuit of higher education, mentoring meant not only taking him to colleges, but helping to convince his family of the importance of an education beyond high school:

I had a substitute teacher who took regular interest in me. . . . She took it upon herself to start showing me around. And on her own she started taking me to different colleges and universities throughout southern California and making appointments with deans and having me talk to them. . . . She exposed me to possibilities I would not have thought of otherwise . . . she also became involved with (my father) and kind of educated him on the need to have me relieved of my family obligations and continue my education.

All of the subjects' mentors were not found in school, however. Twenty percent cited an older sibling as the person who had been most influential in encouraging their higher education and showing them the ropes. These were always older sisters and brothers who had some

experience with college themselves. Similarly, where the subjects were the oldest child or the oldest of their gender in the family, they played a mentoring role for their siblings; in 60 percent of these cases, all but one of the succeeding children also went on to, or were clearly on track for, college.

Fifteen percent of the subjects found mentors outside of the home and school. This was usually a priest. As a fatherless male psychologist recounts, the priest had provided the encouragement for him to make the decision to go to college:

At that time, you see, Father Bernardin was already involved in our family. . . . He was a real good man. (In an attempt to model him) I knew that I was going on to further studies and to a monastery. . . . But he never really tried to encourage me (to become a priest). In fact, I think he thought it would have been a good idea for me to go to college first. Maybe he sensed it.

The subject did later enter the seminary, but left before becoming a priest.

Peers

Considerable data exist to suggest that peers do influence achievement behavior, albeit probably to a lesser extent than do parents (Steinberg et al., 1988). And, although some patterns of influence have been demonstrated to differ by school (Levine, Mitchell and Havighurst, 1970), high academic achievement is usually not a characteristic that is likely, in and of itself, to catapult a student into the high status group in high school (Coleman, 1961). In fact, in inner-city black schools, Fordham and Ogbu (1986) found high academic achievement to be a serious liability in gaining social status. Hence, one might surmise that peer influences could tend to work against high achievement for low-income Mexican Americans. How, then, did this sample of high-achieving Chicano students manage to avoid the potentially negative effects of peer pressure?

Some did not. As will be discussed later, not all students were uniformly successful throughout school, and some did succumb to peer pressure. One subject, who was an outstanding student in elementary school, talked about how the peer pressure changed between elementary and junior high school in his mostly Chicano, South Texas schools:

It wasn't vogue to be smart, it wasn't vogue to be number one. And so, you just sort of sat back and [became] your basic C student all through junior high school.

And high school?

Same thing. I was very turned off by my high school. I thought the people who made it (in honor society) were a big farce. I didn't want to have anything to do with it. I really felt like I knew my own potential and I really felt like high school was not a place where I need necessarily express it.

Another subject talked about the strategy he used to keep up his grades, and still save face with his friends:

Most of us kids were not studious. Most of us were . . . not too concerned about school. But I always kept it up anyway. I thought it was fun to talk about not studying, but I did it anyway. . . . I didn't let on that I was studying or working hard. I mean you were cool if you didn't study.

Because of the academic tracking that occurred and the fact that 84 percent of the subjects reported that their high schools were either composed of a broad mix of ethnicities or were mostly Anglo, the school peer group of most of the sample was white. These were the only kids they came into contact with regularly during the school day. A few maintained a Chicano friendship group at school, however, and in these cases the friends, though they did poorly themselves, tended to be supportive of the subjects' academic achievements.

This willingness to be supportive of a friend's academic achievement appeared to be tied to feelings that the achiever was still on their side even if he or she performed more like the Anglo kids. One subject who had a crippling case of polio recounted how he was supported by his Chicano peers:

There were a lot of Chicanos in the class, and at the end of the semester, when the teacher read off the grades, all the Chicanos were getting C's and D's and F's, and he got to my name and I got an A. The only Chicano who got an A in the class. And all the Chicanos cheered, "Yayyy!" "Right on." . . . I was different to the extent that I couldn't work out in the field, and I couldn't get in track, I couldn't wrestle, stuff like that. So what I was doing was getting the grades and excelling scholastically. And rather than making me different and turning everyone off, I was the one they cheered on.

A young woman, who used her academic skills to help her friends, also found support in her Chicano peer group:

We were about six, seven girls . . . like a clique. But none of them went to college. They got married after high school . . . worked in factories . . . (but) then I was very popular because I helped them with their work and with school. And actually a lot of people say that bright kids were made fun of and all that, but in my case, it wasn't the case. It was the opposite. They would look up . . . and say, "She's so smart," and "She's a brain," and like that. But in a nice way, you know.

Most of the study subjects, however, maintained two peer groups, one at school, and one from the neighborhood. Because they were so segregated by classes at school, it was easy to keep the two separate. At school, they were free to compete academically in the classroom, and when they went home in the afternoon they would assume a very different posture. This subject described the two social worlds in which he lived:

In high school . . . I got involved in all the clubs. I was an officer. I got scholarships, I was in all the college prep classes. I was getting A's and B's. I was associating with the white kids, but only on a superficial level, as in those clubs. Once out of school, I became a rowdy, a pachuco like the rest. By that time I was riding around in cars, drinking and stealing and skipping out of restaurants. All that kind of stupid thing.

Others found peer groups that had different orientations, but were not quite so disparate:

I hung out in high school with smart, good kids . . . studious, mostly girls, white girls. . . . The smart ones, you know, were active and ran the clubs and I was part of that. . . . So I had two sets of friends, Mexican friends and my white friends. Outside of school . . . (we) formed our own band. All Mexican band.

Virtually all of the subjects talked of maintaining two peer groups: one at school and a different one at home. By the time they had graduated from high school the subjects had

excellent training in moving between two cultures. They knew how to handle themselves with high-achieving Anglos, and they were still equally comfortable in the company of friends who would never leave the fields, the barrios, or go to college. For the most part, they were able to make the jump into the mainstream, without alienating the communities from which they came. It is easy to see how this social adaptability could become a great advantage later in life, and a major factor in their continued academic success. Gibson (1992) refers to this phenomenon as "additive acculturation" and finds evidence of it in several ethnic groups:

Recent studies show that many first and second generation immigrant children are successful not because they relinquish their traditional ways but because they draw strength from their home cultures and a positive sense of their ethnic identity. They distinguish the acquisition of school skills and the gaining of proficiency in the ways of the mainstream from their own social identification with a particular ethnic group (p. 7).

Structured Opportunities

All of these subjects came from low-income backgrounds one of the criteria for inclusion in the study. As a result, all needed financial support in order to attend college. They also came from homes in which parents had low levels of education; the mean number of years of education completed by mothers and fathers was between four and five. Parents were not in a position to inform their children about college options and opportunities; this information came to them through older siblings who had already been to college, through peers, and through the schools. More than half of the subjects (52 percent) attributed their college and/or graduate school attendance, at least in part, to recruitment programs for Chicanos, which brought both information and financial aid. One-third of the subjects used junior colleges as their entry point into higher education, lacking adequate financial support to go directly to universities.

These subjects attended college during a period when opportunities were opening up for minorities. Major civil rights legislation had recently passed and colleges and universities were recruiting minority applicants -- and, in many cases, funding their educations. In addition, after 1965 the federal government began to commit large amounts of aid for students in an effort to stimulate increased participation in higher education among lower-income students (Astin, 1982). The importance of the time period for minority education cannot be overstated. Only once before in the history of the United States had such extraordinary opportunities opened up for a single category of citizens, and that was the result of the post-World War II G.I. Bill, which brought unprecedented numbers of first-time students into higher education (Olson, 1974). The impact that new opportunities in higher education had for some families is illustrated in the comments of one subject, the last born of 10 children. Her only other sibling who had successfully completed college obtained a BA as a nun in the Catholic church. Speaking of her siblings, she commented:

They're all very bright. Only when they were growing up, financially it wouldn't have been feasible for them after high school to go to college. They had to work. . . . I was the last one. If I had been one of the first ones, I would never have gone to college.

Why was it more feasible for you?

Because of financial aid.

If it hadn't been for financial aid, do you think you would have gone on?

Probably not. . . . But I graduated at the time when minority admissions were being pushed really hard. I was one of the lucky ones that got through because of that. I think that was very important.

Another subject commented on the difference the availability of financial aid had made for him, as opposed to his older brother:

It was 1968, the first or second year that financial assistance was available. Had that not presented itself, I probably would have gone to city college. That's what my brother did; it took him eight years to get a BA from the state university. Availability of financial aid was really, really important. What I got from Harvard was more than my dad earned all year.

This subject ended up getting a BA and a law degree from Harvard in less time than it took his brother to complete his undergraduate education, working at the same time.

Of course, for all of these subjects, finding a means for financing their educations was extremely important, as their families were rarely able to provide financial support. But the climate of the time was also an important factor in their continued education. Many subjects commented that college and university recruiters made the difference between possibility and reality in their college aspirations:

At that time the Educational Opportunities Program was just being developed. It was the first year that the program was going to go fully into effect. . . . (The recruiter's) first question was, "Do you want to come to UCLA?" And I had never been asked that before. It was more like, "Why should we admit you?" . . . I spent four hours talking to this guy. It was a very different approach and I got so enthusiastic about it, I immediately went home and . . . decided to go to UCLA.

Although the great majority of these subjects were outstanding students and would have been able to gain admission to the universities they attended under any circumstances, many saw these special minority recruitment programs as key to their higher education. The daughter of cannery workers who had always excelled in school mused,

It was a good time to come along in the educational system . . . there were opportunities and I either reached for them or stumbled on them. . . . I don't know, I was lucky. If there weren't the opportunities I don't know if I'd be a doctor.

Another subject, who eventually completed medical school, talked about his decision to go to college:

I went through high school and never really thought of going to college. . . . I thought I was going to be working with the trucks, with my dad. . . . But I got a scholarship . . . and my dad said, "I'm relieving you of all responsibilities for helping support the family." He said, "Go to college, but you're going to have to do it on your own." So I did. I had three jobs . . .

The role of structured opportunity, whether it was financial aid that became available in large quantity through the federal government or special recruitment programs, was critical to these subjects. Clearly, they were ambitious, hardworking, even driven to succeed, and most had outstanding academic records; they were valedictorians, or in the top 10 percent of their classes. But, many admitted, without someone interceding at the right moment they probably would not have followed the educational paths they did. One can speculate that because of their ambition

and acculturation to hard work they might well have been even more successful in other endeavors, but the question remains whether they would have been able to make education their vehicle of mobility. Given the declining percentages of Chicano students going on to college as financial aid has become less available and recruitment efforts have slowed down (Orfield, 1990; Orfield & Paul, 1988), there is some evidence that they would not. Moreover, Post (1990) has demonstrated, with a more recent sample of Chicano high school seniors, that lack of accurate information about college costs and payment options is a substantial deterrent to college enrollment for Mexican American students.

Formulating Educational Goals

When did these people first really decide they were going on to college? Table 5 displays the distribution of responses to this question. Surprisingly, almost equal numbers of individuals decided very early or did not decide until late in high school (generally senior year), and even sometime afterwards, that they would go to college. The numbers who delayed the decision so long might not be so surprising for students who would eventually work their way through an undergraduate degree in local institutions. However, these are people who made a major commitment to an academic career and who, in all cases, attended prestigious universities, often very distant from their homes. Their decision to continue their education was very much a fork in the road experience.

Who decided early and who decided late? Students who went on to get PhDs were much more likely than the others to make a late college decision. Similarly, this group was more likely to decide to continue their education to the doctoral level after completing an undergraduate degree.

TABLE 5
WHEN SUBJECTS FIRST DECIDED TO GO TO COLLEGE

	Prior to J.H.	J.H.	Early H.S.	Late H.S.	Later	N
Total	16 (32%)	8 (16%)	11 (22%)	10 (20%)	5 (10%)	50
Male	7 (23%)	5 (17%)	8 (27%)	6 (20%)	4 (13%)	30
Female	9 (45%)	3 (15%)	3 (15%)	4 (20%)	1 (5%)	20
J.D.	6 (50%)	2 (17%)	3 (25%)	0 (0%)	1 (8%)	12
M.D.	2 (18%)	2 (18%)	5 (45%)	2 (18%)	0 (0%)	11
Ph.D.	8 (13%)	4 (15%)	3 (11%)	8 (30%)	4 (15%)	27

Tables 6 and 7 display information on the academic performance of study subjects up to the point of entering college. Table 6 illustrates whether the subjects had ever done poorly in school or were always good students. In many cases, those who had done poorly at one time attributed this to early difficulty with the English language. Two-thirds of the sample spoke only Spanish or a combination of English and Spanish when they began school. The women, however, made a particularly rapid transition to English and quickly began performing well in school, which explains the apparent discrepancy between Table 6 and Table 7, which show all of the women reporting that they had always been good students.

TABLE 6
WHETHER SUBJECTS EVER DID
POORLY IN SCHOOL
PRIOR TO COLLEGE
(C's or less)

	Yes	No	Total N
Total	24 (48%)	26 (52%)	50
Male	20 (67%)	10 (33%)	30
Female	4 (20%)	16 (80%)	20
J.D.	5 (42%)	7 (58%)	12
M.D.	6 (55%)	5 (45%)	11
Ph.D.	13 (48%)	14 (52%)	27

TABLE 7
WHEN SUBJECTS BEGAN TO GET GOOD GRADES
(B's or better)

	Always/ Throughout	Elementary	Junior High	High School	Never Prior to College	N
Total	36 (73%)	8 (16%)	1 (2%)	4 (8%)	1 (2%)	50
Male	16 (53%)	8 (27%)	1 (3%)	4 (13%)	1 (3%)	30
Female	20 (100%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	20
J.D.	10 (83%)	1 (8%)	0 (0%)	1 (8%)	0 (0%)	12
M.D.	8 (73%)	2 (18%)	0 (0%)	1 (9%)	0 (0%)	11
Ph.D.	18 (67%)	5 (19%)	1 (4%)	2 (7%)	1 (4%)	27

The most important feature of Tables 6 and 7 is the fact that five of the subjects, all males, reported that they had not even begun to perform well in school until sometime in high school or later, and almost two-thirds reported having a period in school in which they did not do well. Unlike the females, several male subjects began their elementary school careers performing well, and later, for a variety of reasons, sometimes because of peer pressure, performed poorly in school. Thus, the school careers of these exceptionally high-achieving Chicano (male) students often were uneven. At different points prior to college they undoubtedly looked very much like other Chicano students who did not go on to college.

The role of ability

One might be tempted to conclude that this group of subjects was so academically successful because of their native ability. Conventional wisdom suggests that people who excel

academically are just more intelligent than those who do not. However, there is considerable evidence that intellectual ability and academic attainment are not necessarily highly correlated, especially among minorities (Duran, 1983).

Several subjects commented on the role of intelligence in their own academic accomplishments:

I knew I wasn't all that smart. I knew that (if) I hadn't studied, it just (wouldn't) come like that. I had to study for my mind to work. . . . There were people with more smarts. When people, for example, say to me, "Oh yeah, you're a real brain, aren't you," I say, "I'm not a brain." I knew I wasn't. I was not a genius. I knew that. All I could do was study hard, that's all. . . . But I'd always get a good feeling from mastering something. And that's a personal characteristic. I would get a good feeling from coming out on top of the heap of people who took the test. It was real, it just was. It was my own internal reward.

Another subject related how his drive to achieve was responsible not only for his academic success, but for his success in other endeavors as well:

I think that people admired the fact that I worked hard. I think people admired the fact that I was an achiever when I really shouldn't have been. People would look at me and think to themselves, "there is no reason why this guy should be as good as he is in everything." Academically, the counselors would look at me and say, "this guy has an IQ of 95; there is no reason he should be doing this well." And then I would work hard and I would get A's and I would impress them. . . . The coaches would look at me and say, "Hey, this guy weighs 90 pounds" are you kidding? "if you go out on the field, you'll get blown away." I would go out there and I would become the number one, you know, the starting man on the track team, and they would admire me. So that's a quality; maybe stubbornness more than anything else.

One subject best sums up what many others felt. Clearly, a certain amount of intellectual ability was required for academic success. Although his was not perceived to be extraordinary, it was sufficient to allow other, more salient, qualities to develop:

Well, in terms of sheer intellectual ability . . . maybe I am in the top 10 percent, which, with the people I see myself competing with . . . it's not overwhelming at Stanford; it's not overwhelming in terms of the national leadership, but that gives me enough that I can bring into play things that I think a lot of the 10 percent do not have, which is, number one, a sense of purpose beyond the person, which is a great motivator. Because when you run out of motivation for yourself, and you don't have anything else, you just can't go that extra mile . . .

Summary

Despite serious economic disadvantage, most of these subjects' parents were doing the kinds of things reported to be important for instilling in children the motivation to achieve. For the most part, they supported their children's educational goals, set high performance standards, and helped in any way they could. The important difference between their strategy and that of more middle-class samples, according to the literature, is the parents' modeling of a hard work ethic. Although almost one-third of the sample had lived in the United States for two generations or more, the families behaved very much like recent immigrants in their transmission of a hard-work, education-as-mobility ethic (Duran and Weffer, 1992). The tendency for immigrant

students to display more achievement-oriented behavior than other minorities has been noted elsewhere (see, for example, Ogbu, 1987; Suarez-Orozco, 1987).

How does one account for the tremendous press for achievement that existed in most of these homes? I believe the answer lies, in part, in the family stories. Parents told stories of wealth, prestige, position, to their children to keep alive their hopes for a better future. If one has always been poor and sees nothing but poverty in one's environs, it may be easy to conclude that this is one's destiny. But, if one lives with stories about former exploits, about ancestors who owned their own lands and controlled their own lives, it may be easier to imagine a similar destiny. At the very least, one's family history shows that one is capable of a better life. If it is true that cultural myths and fairy tales can affect the achievement orientations of an entire populace (see Simonton, 1987), perhaps family stories and legends have had an equally powerful effect on the motivation of individual children.

Even beyond the effects of their parents' pressure, subjects expressed intense personal drives for achievement, often manifested in vows, in effect, that they would not live in the kind of poverty into which they had been born. Other studies of exceptionally successful individuals have concluded that some of the variation in achievement is probably due to genetic inheritance or inherent personality characteristics (Goertzel, Goertzel and Goertzel, 1978; Simonton, 1987).

In answering the question, "Why were you so educationally successful when other Chicanos in your situation are not?," subjects typically responded, "Motivation. I wanted it badly. The need creates a will," or "Why me? I think because I wanted it more than anybody else." When asked what personal characteristic made it possible for the subjects to realize their high aspirations, more than two-thirds thought persistence was most important, not innate ability. In fact, ability was ranked third behind persistence and hard work as a factor in their achievement. Most people saw themselves, like their parents, as extremely hard workers who would not give up. Similarly, in a review of achieved eminence, Simonton (1987) found that persistence was more powerful than ability by itself.

Nonetheless, ability, support, and persistence would not have been sufficient without opportunity an area that holds the greatest promise for educational policy initiatives. In all cases, the subjects were exposed to a high-achieving peer group against whom they could realistically test their own skills and validate their performance. These peers also helped to keep them on the right academic track, even in the face of competing peer values. The fact that almost all had extensive exposure to middle-class, white students also provided the opportunity to learn to move easily between different cultures and to adapt to widely differing situations.

Minority recruitment programs and financial aid targeted to attracting minorities were critical to the continued education of most of the subjects. Many felt that without the recruitment efforts, they simply would not have known of the opportunities available to them; others contended that without the financial help they could not have attended college at all. In a few cases, financial aid meant that the subjects could continue working part-time and still have enough money left over to help their families. This eased the guilt of abandoning their families, who had counted on them for support.

Implications for Educational Policy

1. Policymakers should take seriously the effect of integrated schools and multiethnic peer experiences on the formation of academic goals, and shape state education policy accordingly with respect to the racial/ethnic composition of schools.

Excellent minority schools may provide students with the skills they need to continue their education, but will not provide the validation that comes with competing in an arena that mirrors the society into which they will be thrust. During the ongoing debate about abandoning desegregation efforts in areas where it has proved difficult to implement,

many people have advocated putting resources that might otherwise be spent on desegregation efforts into building high-quality, all-minority schools, arguing that the critical variable is school excellence, not the students' racial or ethnic mix. The data from this study would point to exercising great caution in that regard, at least with Chicano students.

These subjects commented frequently on how their self-concept was affected by knowing they could compete successfully against students whom they viewed as models of achievement. Moreover, there is considerable evidence that moving back and forth between the two cultures of home and school provided important adaptive skills that increased their chances of persisting in school.

2. State and local policies should be reviewed with respect to early identification of high-potential students.

There is currently a great emphasis on early intervention with youth "at risk." Such early intervention strategies often focus on identifying high-potential students early in their school years in order to provide them with special support to ensure their school success. While this is no doubt helpful to the students who are targeted, many of the subjects of this study, who passed the most stringent criterion for being "high potential," would not have been so identified early in their school careers. Ten percent would not have been considered "college material" until their senior year of high school or later. More than half of the sample reported doing poorly in school at some point. For the women, this occurred early in their schooling and was due to language factors. For the men, however, many had uneven profiles of achievement, doing well during one time, then poorly during another. Depending on when the identification is done-- and there would have been no consistently good time to do it with this sample-- up to half of these proven achievers would have been missed in the screening.

For students with stable social and economic backgrounds who are not dealing with issues of development, discrimination, and stereotyping, it may be statistically defensible to identify high potential and nurture it early on. But for students with backgrounds similar to those in this study it would be wiser to assume that all have high potential and nurture all equally.

3. There is a need for more analysis of the effects of tracking. This issue is more complex than many educators have acknowledged. Almost all of these subjects were eventually placed in college preparatory tracks in which they were segregated from their neighborhood peers. For them it worked to their advantage. Had they not been so placed it is virtually certain that they would not have been eligible for the educational opportunities they were later offered. However, this provides further evidence of the powerful effects of tracking. By being placed in these tracks, students who came from backgrounds which should have been predictive of academic failure were able to beat the odds; by being labeled smart they came to believe that they were, and by being grouped with other similarly labeled students they were exposed to a curriculum and set of standards that made their college educations possible. Also, by being placed in this track, information and opportunities were made available to them by college recruiters and others that most Chicano students never knew existed. For the lucky few who make it into the college-bound track, the rewards are considerable, but one has to wonder how many were missed along the way.
4. Schools should reduce their reliance on ability measures in making educational placement decisions, and find ways to reward persistence.

By their own accounts, the study subjects were not the "smartest" students, but they

were among the hardest workers. Many more students could be brought into the ranks of achievers if we distributed opportunity (e.g., Gifted and Talented Education) according to desire to learn and willingness to study, rather than on the basis of a test score.

Although the American educational system is no doubt the most open in the world with respect to providing access, there is something in the American ethos that precludes academic attainment more powerfully than structural barriers. This is the belief, however, unspoken, in the salience of ability over effort, hence our willingness to turn over the futures of our children to the assumed predictive ability of standardized tests.

Twenty percent of the study subjects reported that they had been placed in noncollege preparatory tracks at some time during high school, usually on the basis of an ability or aptitude test that they had been given. Another three subjects (6 percent) recounted how they had to argue on their own behalf to be placed in college-prep classes to which they were not originally scheduled. Even in the face of high academic achievement, counselors continued to place more faith in the test scores than they did in the subjects' performance. The research suggests that these were not isolated cases.

5. Schools of education should incorporate into their curriculum an emphasis on discarding stereotypes about Mexican American students and families.

Such stereotypes include a reliance on fate and a passive, diminished role for the mother (Carter and Segura, 1979). These high achieving subjects reported overwhelmingly that their mothers were either the dominant force in their homes, or had at least equal influence as the fathers on family decisions. Within homes that are achievement-oriented, the critical contact for the school may be the mother. Her enlistment in the educational enterprise can have a substantially positive effect on the student's academic aspirations.

6. The same enriched curriculum and high standards should be provided in schools serving the barrios as exist in other, more middle-class, areas.

Many of these subjects made conscious decisions to attend schools they perceived to be better academically. If all schools do not provide the same opportunities, the evidence here suggests that some of the most ambitious students and their families, regardless of income, will find alternative schools, further eroding the barrio schools' academic strength and reducing the opportunities for the students who remain.

References

- Anderson, J. & Evans, F. (1976). Family socialization and educational achievement in two cultures: Mexican American and Anglo American. *Sociometry* 39, 209-222.
- Astin, A.W. (1982). *Minorities in American higher education*. San Francisco: Jossey-Bass.
- Averch, H.A., Carroll, S.J., Donaldson, T.S., Kiesling, H.J., & Pincus, J. (1974). *How effective is schooling?* Englewood Cliffs, N.J.: Educational Technology.
- Bloom, B. (1985). *Developing talent in young people*. NY: Ballentine.
- Bowles, S. & Gintis, H. (1976). *Schooling in capitalist America*. New York: Basic Books.
- Buenning, M. & Tollefson, N. (1987). The cultural gap hypothesis as an explanation for the achievement patterns of Mexican-American students. *Psychology in the Schools* 24, 264-272.
- California Postsecondary Education Commission. (1986). Enrollment trends in California higher

education. Sacramento.

California Postsecondary Education Commission. (1988). The eleventh in a series of reports on new freshman enrollments at California's colleges and universities by recent graduates of California high schools. Sacramento.

California State Department of Education. (1991). Fingertip facts on education in California. Sacramento.

Carter, D. & Wilson, R. (1991). Ninth annual status report on minorities in higher education. Washington, D.C.: American Council on Education, Office of Minorities in Higher Education.

Carter, T. (1970). *Mexican Americans in school*. New York: College Entrance Examination Board.

Carter, T. & Segura, R. (1979). *Mexican Americans in school: A decade of change*. New York: College Entrance Examination Board.

Chapa, J. (1991). Special focus: Hispanic demographic and educational trends. In D. Carter and R. Wilson, Ninth annual status report on minorities in higher education. Washington, D.C.: American Council on Education, pp. 11-17.

Coleman, J. (1961). *The adolescent society*. New York: The Free Press.

Coleman, J., Campbell, E., Hobson, C., McPartland, J., Mood, A., Weinfield, F., & York, R. (1966). Equality of educational opportunity. Washington, D.C.: U.S. Government Printing Office.

Coleman, J. (1987). Families and schools. *Educational Researcher* 16, 32-38.

Coleman, J. & Hoffer, T. (1987). *Public and private high schools: The impact of communities*. New York: Basic Books.

Dave, R. (1964). The identification and measurement of environment process variables that are related to educational achievement. Unpublished doctoral dissertation, University of Chicago.

Delgado-Gaitan, C. (1988). The value of conformity; Learning to stay in school, *Anthropology and Education Quarterly*, 19, 354-381.

Delgado-Gaitan, C. (1990). *Literacy for empowerment: The role of parents in children's education*. London: Falmer Press.

Delgado-Gaitan, C. (1991). Involving parents in the schools: A process of empowerment. *American Journal of Education* 100, 20-46.

Duran, B. & Weffer, R. (1992). Immigrants' aspirations, high school process, and academic outcomes. *American Educational Research Journal* 29, 163-181.

Duran, R. (1983). *Hispanics' education and background: Predictors of college achievement*. New York: College Entrance Examination Board.

Educational Testing Service. (1991). *The state of inequality*. Princeton, N.J.

- Erickson, F. (1987). Transformation and school success: The politics and culture of educational achievement. *Anthropology and Education Quarterly* 18, 335-356.
- Fernandez, R. M. & Nielson, F. (1986). Bilingualism and Hispanic scholastic achievement: Some baseline results. *Social Science Research* 15, 43-70.
- Fordham, S. & Ogbu, J. (1986). Black students' school success: Coping with the burden of acting white. *Urban Review* 18, 176-206.
- Gage, N. L. & Berliner, D. (1991). *Educational Psychology*. NY: Houghton-Mifflin.
- Gandara, P. (1986a). Chicanos in higher education: The politics of self interest. *American Journal of Education* 95, 256-272.
- Gandara, P. (1986b). Bilingual education: learning English in California. Sacramento: Assembly Office of Research.
- Gandara, P. (1989). Those children are ours: Moving toward community. *Equity and Choice* 5, 5-12.
- Gandara, P. (1992). Language and ethnicity as factors in school failure: The case of Mexican Americans. In R. Wollous (Ed.), *Children at risk in America*. New York: State University of New York Press. In press.
- Glazer, N. & Moynihan, D. (1963). *Beyond the melting pot*. Cambridge, Mass: MIT Press.
- Gibson, M. (1987). The school performance of immigrant minorities: A comparative view. *Anthropology and Education Quarterly* 18, 262-275.
- Goertzel, M. G., Goertzel, V., & Goertzel, T. G. (1978). *Three hundred eminent personalities*. San Francisco: Jossey-Bass.
- Grebler, L., Moore, J., & Guzmán, R. (1970). *The Mexican-American people: The nation's second largest minority*. New York: The Free Press.
- Hanushek, E. (1981). Throwing money at schools. *Journal of Policy Analysis* 1, 19-41.
- Henderson, R. (1966). Environmental stimulation and intellectual development of Mexican American children. Unpublished doctoral dissertation, University of Arizona, Tucson.
- Hess, R. & Shipman, V. (1965). Early experience and the socialization of cognitive modes in children. *Child Development* 36, 869- 886.
- Hymes, D. (1974). *Foundations in sociolinguistics: An ethnographic approach*. Philadelphia: University of Pennsylvania Press.
- Jencks, C., Smith, M., Acland, H., Bane, M.J., Cohen, D., Gintis, H., Heynes, B., & Mickelson, R. (1972). *Inequality*. New York: Harper & Row.
- Laosa, L. (1978). Maternal teaching strategies in Chicano families of varied educational and socioeconomic levels. *Child Development* 49, 1129-1135.
- Laosa, L. & Henderson, R. (1991). Cognitive socialization and competence: The academic

development of Chicanos. In R. Valencia (Ed.), *Chicano School Failure and Success*. London: Falmer Press, pp. 165-199.

Lareau, A. (1987). Social class differences in family-school relationships: The importance of cultural capital. *Sociology of Education* 60, 73-85.

Lareau, A. (1989). *Home advantage: social class and parental intervention in elementary education*. London, New York: Falmer Press.

Lewis, O. (1961). *The children of Sanchez*. New York: Random House.

Levine, D., Mitchell, E., & Havighurst, R. (1970). Family status, type of high school and college attendance. Kansas City: Center for the Study of Metropolitan Problems in Education.

LeVine, R. (1974). Parental goals: A cross cultural view. *Teacher's College Record* 76, 227-239.

Macias, R. F. (1988). Bilingual teacher supply and demand in the United States. Los Angeles, CA: USC Center for Multi-lingual, Multicultural Research and The Tomas Rivera Center.

Marjoribanks, K. (1972). Ethnic and environmental influences on mental abilities. *American Journal of Sociology* 78, 323-337.

Matute-Bianchi, M.E. (1986). Ethnic identities and patterns of school success and failure among Mexican-descent and Japanese American students in a California High School. *American Journal of Education* 95, 233-255.

McCarthy, K. & Valdez, R. B. (1986). Current and future effects of Mexican immigrants in California. Santa Monica: RAND Corp. R-3365-CR.

McClelland, D., Atkinson, J., Clark, L., & Lowell, E. (1953). *The achievement motive*. New York: John Wiley & Sons.

Mehan, H. (1992). Untracking and college enrollment. National Center for Research on Cultural Diversity and Second Language Learning. University of California, Santa Cruz.

Merino, B. (1991). Promoting school success for Chicanos: The view from inside the bilingual classroom. In R. Valencia (Ed.), *Chicano school failure and success*. New York: Falmer Press. Pp. 119-149.

Mortimore, P., Sammons, P., Stoll, L., Ecob, R., & Lewis, D. (1988). The effects of school membership on pupils' educational outcomes. *Research Paper in Education* 3, 3-26.

Muskal, F. & Carlquist, K. (1992). Getting there: Mentoring, mobility and social class. Unpublished paper. Stockton, CA: University of the Pacific.

Oakes, J. (1985). *Keeping track: How schools structure inequality*. New Haven: Yale University Press.

Ogbu, J. (1987). Variability in minority school performance: A problem in search of an explanation. *Anthropology and Education Quarterly* 18, 312-334.

Olson, K. (1974). *The G.I. Bill, the veterans, and the colleges*. Lexington: The University Press of Kentucky.

- Orfield, G. & Paul, F. (1988). Declines in minority access: A tale of five cities. *Educational Record* 68(4), 56-62.
- Orfield, G. (1990). Public policy and college opportunity. *American Journal of Education* 98(4), 317-350.
- Pincus, C., Elliott, L., & Schlachter, T. (1981). *The roots of success*. Englewood Cliffs, N.J.: Prentice-Hall, Inc.
- Policy Analysis for California Education (PACE). (1991). The condition of education in California, 1990. Berkeley: University of California, Graduate School of Education.
- Rosenshine, B. (1986). Synthesis of research on explicit teaching, *Educational Leadership*, 47, 60-69.
- Rumberger, R. (1981). The rising incidence of over-education in the U.S. labor market. *Economics of Education Review* 1, 291-314.
- Rumberger, R. (1983). Dropping out of high school: the influence of race, sex, and family background, *American Educational Research Journal*, 20, 199-220.
- Rumberger, R. (1991). Chicano dropouts: A review of research and policy issues. In R. Valencia (Ed.), *Chicano school failure and success*. New York: Falmer Press. pp. 64-89.
- Simonton, D.K. (1987). Developmental antecedents of achieved eminence. *Annals of Child Development* 4, 131-169.
- So, A. (1987). High-achieving disadvantaged students: A study of low SES Hispanic language minority youth. *Urban Education* 22(1), 19-35.
- Steinberg, L., Brown, B., Cider, M., Kaczmarck, N., & Laaro, C. (1988). Noninstructional influences on high school student achievement: The contributions of parents, peers, extracurricular activities, and part-time work. Madison, Wis.: National Center on Effective Secondary Schools.
- Stevenson, D. & Baker, D. (1987). The family-school relation and the child's school performance. *Child Development* 58, 1348-1357.
- Stevenson, H. & Stigler, J. (1992). *The learning gap*. New York: Summit Books.
- Suarez-Orozco, M. (1987). Becoming somebody: Central American immigrants in U.S. inner-city schools. *Anthropology and Education Quarterly* 18, 287-299.
- Trueba, H. (1988). Culturally based explanations of minority students' educational achievement. *Anthropology and Education Quarterly* 19, 270-287.
- Valentine, C. (1968). *Culture and poverty, critique and counter proposals*. Chicago, Ill: University of Chicago Press.
- Wolf, R. (1963). The identification and measurement of environmental process variables related to intelligence. Unpublished doctoral dissertation, University of Chicago.

About the Author

Patricia Gandara
University of California-Davis

pcgandara@ucdavis.edu

Patricia Gandara is Associate Professor of Education at University of California, Davis. She teaches in both Educational Psychology and Educational Policy Studies. Formerly, Dr. Gandara was an Associate Social Scientist with the RAND Corp. and director of education research in the California Legislature. Her research interests include academic achievement of limited English proficient, and other minority students and school reform. She is the author of *Over the Ivy Walls* (SUNY, 1995), and is currently working on a book entitled *The Dimension of Time and the Challenge of School Reform*.

Copyright 1994 by the Education Policy Analysis Archives

EPAA can be accessed either by visiting one of its several archived forms or by subscribing to the LISTSERV known as EPAA at LISTSERV@asu.edu. (To subscribe, send an email letter to LISTSERV@asu.edu whose sole contents are SUB EPAA your-name.)

As articles are published by the *Archives*, they are sent immediately to the EPAA subscribers and simultaneously archived in three forms. Articles are archived on EPAA as individual files under the name of the author and the Volume and article number. For example, the article by Stephen Kemmis in Volume 1, Number 1 of the *Archives* can be retrieved by sending an e-mail letter to LISTSERV@asu.edu and making the single line in the letter read GET KEMMIS V1N1 F=MAIL. For a table of contents of the entire ARCHIVES, send the following e-mail message to LISTSERV@asu.edu: INDEX EPAA F=MAIL, that is, send an e-mail letter and make its single line read INDEX EPAA F=MAIL.

The World Wide Web address for the *Education Policy Analysis Archives* is <http://olam.ed.asu.edu/epaa>

To receive a publication guide for submitting articles, see the EPAA World Wide Web site or send an e-mail letter to LISTSERV@asu.edu and include the single line GET EPAA PUBGUIDE F=MAIL. It will be sent to you by return e-mail. General questions about appropriateness of topics or particular articles may be addressed to the Editor, Gene V Glass, Glass@asu.edu, or reach him at College of Education, Arizona State University, Tempe, AZ 85287-2411. (602-965-2692)

Editorial Board

John Covalesskie <i>jcovales@nmu.edu</i>	Andrew Coulson <i>andrewco@ix.netcom.com</i>
Alan Davis <i>adavis@castle.cudenver.edu</i>	Mark E. Fetler <i>mfetler@ctc.ca.gov</i>
Thomas F. Green <i>tfgreen@mailbox.syr.edu</i>	Alison I. Griffith <i>agriffith@edu.yorku.ca</i>
Arlen Gullickson <i>gullickson@gw.wmich.edu</i>	Ernest R. House <i>ernie.house@colorado.edu</i>
Aimee Howley <i>ess016@marshall.wvnet.edu</i>	Craig B. Howley <i>u56e3@wvnm.bitnet</i>
William Hunter <i>hunter@acs.ualgary.ca</i>	Richard M. Jaeger <i>rmjaeger@iris.uncg.edu</i>

Benjamin Levin
levin@ccu.umanitoba.ca

Dewayne Matthews
dm@wiche.edu

Les McLean
lmclean@oise.on.ca

Anne L. Pemberton
apembert@pen.k12.va.us

Richard C. Richardson
richard.richardson@asu.edu

Dennis Sayers
dmsayers@ucdavis.edu

Robert Stonehill
rstonehi@inet.ed.gov

Thomas Mauhs-Pugh
thomas.mauhs-pugh@dartmouth.edu

Mary P. McKeown
iadmppm@asuvm.inre.asu.edu

Susan Bobbitt Nolen
sunolen@u.washington.edu

Hugh G. Petrie
prohugh@ubvms.cc.buffalo.edu

Anthony G. Rud Jr.
rud@purdue.edu

Jay Scribner
jayscrib@tenet.edu

Robert T. Stout
stout@asu.edu