DOCUMENT RESUME

ED 208 579 EA 014 157

AUTHOR Olivas, Michael A.
TITLE Research on Hispanic Education: Students, Finance, and Governance.
INSTITUTION Stanford Univ., Calif. Inst. for Research on Educational Finance and Governance.
SPONS AGENCY National Inst. of Education (ED), Washington, D.C.
REPORT NO IFG-PR-81-B11
PUB DATE Sep 81
GRANT OB-NIE-G-80-0111
NOTE 53p.
AVAILABLE FROM Institute for Research on Educational Finance and Governance, CERAS Bldg., Stanford University, Stanford, CA 94305 ($1.00).

EDRS PRICE MF01/PC03 Plus Postage.
DESCRIPTORS Demography; Educational Finance; *Educationally Disadvantaged; Elementary Secondary Education; Financial Support; Governance; *Hispanic Americans; Postsecondary Education; *Research Needs; School Segregation; Student Attrition; *Students
IDENTIFIERS Internal Colonialism

ABSTRACT

A review of research on Hispanic education reveals a paucity of information and suggests future research needs. Demographic data are available on Hispanic students in elementary, secondary, and higher education but fail to distinguish among different Hispanic subgroups. Existing data indicate increasing segregation of Hispanics in elementary and secondary schools and only a slow increase in Hispanics enrolled in postsecondary education. Research on Hispanic students has failed to explain their high attrition rate, either blaming Hispanics themselves or simply labelling Hispanics "disadvantaged" without offering further causal explanations. Research in educational finance has been more complete, especially on financial support of Hispanics in postsecondary schools, but more research is needed on educational equity and the returns on education to Hispanics. What little research exists on Hispanics and educational governance confirms that very few Hispanics sit on school boards or work in local or state educational agencies. Recent theoretical research, using the "internal colonialism" model, identifies six roles that Hispanics assume in postsecondary education, but the theories need empirical testing. (RW)

IFG

Institute for Research on Educational Finance and Governance

SCHOOL OF EDUCATION . STANFORD UNIVERSITY

[redacted]

Program Report No. 81-B11

RESEARCH ON HISPANIC EDUCATION: STUDENTS, FINANCE, AND GOVERNANCE

Michael A. Olivas*

September 1981

* Michael Olivas is National Director of Research at the League of United Latin American Citizens (LULAC) National Educational Service Centers, Inc.

The research for this report was supported by funds from the National Institute of Education (Grant No. OB-NIE-G-80-0111). The analyses and conclusions do not necessarily reflect the views or policies of this organization.

INSTITUTE FOR RESEARCH ON EDUCATIONAL
FINANCE AND GOVERNANCE

The Institute for Research on Educational Finance and Governance is a Research and Development Center of the National Institute of Education (NIE) and is authorized and funded under authority of Section 405 of the General Education Provisions Act as amended by Section 403 of the Education Amendments of 1976 (P.L. 94-482). The Institute is administered through the School of Education at Stanford University and is located in the Center for Educational Research at Stanford (CERAS).

The research activity of the Institute is divided into the following program areas: Finance and Economics; Politics; Law; Organizations; and History. In addition, there are a number of other projects and programs in the finance and governance area that are sponsored by private foundations and government agencies which are outside of the special R&D Center relationship with NIE.

Abstract

The purpose of this paper is to review the condition of Hispanic education, to examine studies of Hispanic students, to review major finance and governance issues in Hispanic education, and to examine internal colonialism as a theoretical means to understanding the condition of Hispanic education. These issues have not been sufficiently examined even by equity researchers or bilingual educators, for systemic and structural disadvantages facing Hispanic learners are so great at all levels of education and so intertwined with the politically powerless status of Hispanics that neither the nature nor the severity of the disadvantage are fully understood. A research agenda is proposed to prioritize the many areas in which significant finance and governance research needs to be undertaken.

The purpose of this paper is to review the condition of Hispanic education, to examine studies of Hispanic students, to review major finance and governance issues in Hispanic education, and to examine theoretical models of internal colonialism as a means to understanding the condition of Hispanic education. Finally, a research agenda is proposed to prioritize the many areas in which significant education research needs to be undertaken. In an attempt to demonstrate the severity of the problems facing Hispanics in education, elementary and secondary schooling will not be distinguished from postsecondary education. The difficulties many Hispanic students face in the both K-12 and higher education suggest the necessity of improving the transition between the two systems; in keeping with this view, this paper will attempt to analyze the systemic discrimination facing Hispanics at all educational levels. Where possible, Hispanic subgroup data will be disaggregated to account for differences among Chicanos, Puerto Ricans, Cubans, and other Latinos.* Unless otherwise noted, Puerto Ricans will be defined as Puerto Ricans in the 50 states and D.C.; where data from the island are employed, this will be noted.

It is an assumption of this paper that Hispanic education issues have not been sufficiently examined even by equity researchers or bilingual educators, for systemic and structural disadvantages facing Hispanic learners are so great at all levels of education and so intertwined with the politically powerless status of Hispanics that neither the nature nor the severity of

* While "Hispanic" is an imprecise and misleading term, federal data since 1973 have been gathered under this designation. For discussions of ethnic terminology, see Arce, 1978; Garcia, 1980, Hayes-Bautista, 1980; Hernandez et al., 1973. Figure One indicates the heterogeneity of the US mainland Hispanic po-

the disadvantage are fully understood. It may be impossible to disentangle the educational problems from Hispanic political disenfranchisement, inasmuch as educational policy is political both at local and higher levels -- neither level at which Hispanics have control of political institutions, even in geogrphic areas in which they are the majority. However, the focus of this inquiry is upon inability of school districts to educate Hispanic children, rather than upon the scarcity of Hispanic elected school board members, and upon the failures of federal education equity legislation, rather than upon the small number of Hispanic legislators.

[Insert Figure One Here]

THE CONDITION OF HISPANIC EDUCATION

Hispanic children attended more segregated schools in 1976 than was even the case in 1970, when data indicated a high percentage of Hispanic students attended schools in which minority children were the majority of the student body (Table 1). These data show dramatic national and regional trends, to the extent that more than two thirds of all Hispanic students were enrolled in public schools in which 50% of the enrollment was minority. Further, many Hispanic families feel that desegregative racial assignments without regard to a child's linguistic competence will dilute bilingual programs and render both ineffective.[1]

[Insert Table One here)

FIGURE ONE

–Geographical distribution of Hispanics among selected States, by subgroup: 1976

State[1]	Number of Hispanics (000s)	Percent of population Hispanic	Percent distribution				
			Hispanic subgroup				
			Mexican American	Puerto Rican	Cuban	Central or South American	Other Hispanic
United States	11,193	5.6	61	14	6	7	11
Arizona	350	15	91	*	*	*	7
California	3,348	16	82	3	1	7	8
Colorado	278	11	76	*	*	*	21
Connecticut	81	3	*	71	*	*	*
Florida	669	8	5	6	62	9	19
Georgia	23	1	*	*	*	*	*
Hawaii	27	3	*	*	*	*	*
Idaho	28	3	73	*	*	*	*
Illinois	412	4	54	32	*	6	*
Indiana	84	2	68	*	*	*	*
Iowa	22	1	*	*	*	*	*
Kansas	43	2	77	*	*	*	*
Louisiana	85	2	*	*	*	24	52
Maryland	31	1	*	*	*	*	*
Massachusetts	89	1	*	49	*	24	*
Michigan	96	1	70	*	*	*	*
Minnesota	20	1	*	*	*	*	*
Missouri	25	1	*	*	*	*	*
Nebraska	25	2	88	*	*	*	*
Nevada	36	6	62	*	*	*	*
New Jersey	385	5	*	47	24	15	12
New Mexico	420	36	51	*	*	*	48
New York	1,439	8	*	59	5	20	14
Ohio	85	1	52	26	*	*	*
Oklahoma	38	1	66	*	*	*	*
Oregon	40	2	71	*	*	*	*
Pennsylvania	125	1	*	80	*	*	*
Texas	2,557	21	97	*	*	*	2
Utah	41	3	70	*	*	*	*
Virginia	56	1	*	*	*	*	36
Washington	74	2	74	*	*	*	*
Wisconsin	34	1	*	*	*	*	*

*Percent not shown where estimate is less than 20,000 persons.

[1]Only those States with an estimated Hispanic population of at least 20,000 are listed.

NOTE.–Details may not add to totals because of rounding.

SOURCE: U.S. Department of Health, Education, and Welfare, National Center for Education Statistics, Survey of Income and Education, spring 1976, special tabulations.

(Condition, 1980, Table 1.04)

TABLE ONE

.–Number and percent of Hispanic students attending public schools in selected school districts,[1] by minority[2] composition of school: 1970–1976

Geographic area	Number of Hispanic students (000s)	Percent of Hispanic students attending:		
		Schools with 0–49% minority students	Schools with 50–89% minority students	Schools with 90–100% minority students
United States:				
1970	1,563,647	34.6	35.2	30.2
1972	1,671,011	34.1	35.7	30.3
1974	1,747,658	32.2	36.6	31.1
1976	1,903,811	28.7	38.6	32.6
Northeast:				
1970	376,287	15.2	34.0	50.8
1972	400,681	16.4	32.3	51.2
1974	383,957	15.3	29.8	54.9
1976	440,941	14.4	31.7	53.9
Border States and D.C.				
1970	9,072	89.2	7.6	3.2
1972	11,029	85.7	10.8	3.5
1974	13,693	78.1	16.8	5.1
1976	15,326	75.8	18.4	5.9
South:				
1970	469,326	27.7	35.5	36.7
1972	514,144	28.4	35.6	36.0
1974	560,209	28.5	37.1	34.4
1976	598,382	26.5	38.0	35.5
Midwest:				
1970	103,901	48.1	40.8	11.2
1972	114,166	47.6	37.8	14.6
1974	122,808	44.3	35.2	20.5
1976	129,000	39.6	36.7	23.7
West:				
1970	605,061	48.9	35.1	16.0
1972	630,991	46.6	37.9	15.5
1974	666,991	42.0	40.8	17.2
1976	720,162	36.4	44.2	19.4

[1] For purposes of comparison, analysis was restricted to the 1,910 school districts which were included in all four surveys. The selected districts include approximately 67 percent of all Hispanic students enrolled in public schools in the United States in 1976.

[2] Minority students include all students other than white, non-Hispanic.

NOTE.–Details may not add to totals because of rounding.

SOURCE: U.S. Department of Health, Education, and Welfare, Office for Civil Rights, *Distribution of Students by Racial/Ethnic Composition of Schools 1970-1976*, August 1978.

(Condition, Table 2.05)

Hispanic students are far less likely to complete high school or graduate with their age group than are majority or even most minority students. Attrition rates, which tend to understate the extent of dropout, show that 1978 high school completion rates for Mexican Americans who were 25 years or older were 34.3% in comparison with 67.1% for non-Hispanics over 25.[2] The Hispanic students who did remain in school fell behind their classmates until 24% of the 14-20 year olds were enrolled two grades behind their classmates; only 9% of white students were 2 years behind their age cohorts.[3]

Moreover, bilingual education programs remain inadequate in most states, both in the diagnosis of linguistic competence and in the provision of bilingual curricula and personnel. Tests and other instruments have not been developed to measure the cognitive abilities and English speaking abilities of linguistic minority children.[4] However, even when Hispanic children are diagnosed as limited-English or non-English proficient, fewer than half are enrolled in bilingual programs.[5] Further, few classrooms have Hispanic teachers; in 1976, less than 3% of all public school employees were Hispanic, with nearly as many Hispanic service workers (custodians) as Hispanic teachers.[6] Until the number of Hispanic educators is increased, bilingual programs and school systems will continue to be unresponsive to bilingual children's needs.

The failures of school systems to meet the needs of Hispanic communities are mirrored in postsecondary institutions, where issues of limited acces, discriminatory employment practices, and

high attrition disproportionately affect Hispanic students. Although there is a public perception that Hispanic enrollments have greatly increased in recent years, the reality is very different, for Hispanic students have neither attained access into a broad range of institutions nor dramatically increased their numbers throughout the system. For example, from 1970 to 1978, Hispanic full time students increased only from 2.1% of the total to 3.5% (Table 2).[7] From 1976 to 1978, this meant an increase of a mere 5,000 students. California, which accounts for nearly one-third of all Hispanic enrollments, actually experienced a decline of more than 6,000 Hispanic fulltime enrollments in the two year college sector.[8] Therefore, it is clear that Hispanic enrollments have not shown the growth one would have expected from affirmative action programs, governmental efforts, or institutional efforts to increase minority student enrollments.

[Insert Table 2]

While these numbers show that the penetration into postsecondary institutions has not been deep, distribution data show that the access also has not been widespread. Hispanics are concentrated at the less prestigious and less well funded institutions, and, indeed, in very few institutions. In 1978, only 23% of white full time students attended two year colleges, while 42% of Hispanic students attended these institutions.[9] This maldistribution of Hispanics within the system indicates that a large cadre of Hispanic students seeking a full time, traditional learning experience are doing so in institutions established for

TABLE 2

Hispanics as a percent of all full-time students in institutions of higher education, by level of study: Fall 1970–1978

Fall of year	Undergraduate[1]		Graduate and first-professional[1]	
	Number	Percent of all students	Number	Percent of all students
1970[2]	98,453	2.1	5,680	1.2
1972[2]	131,084	2.4	8,661	1.5
1974	157,572	2.8	9,916	1.5
1976	191,065	3.3	12,149	2.0
1978	196,451	3.5	13,170	2.2

[1]Does not include institutions of higher education in Puerto Rico and outlying territories, or U.S. service schools.

[2]"Spanish-surname-American" was the ethnicity designation on the form in these years. Also graduate and first-professional students were combined.

SOURCE: U.S. Department of Health, Education, and Welfare, Office for Civil Rights, *Racial and Ethnic Enrollment Data from Institutions of Higher Education*, for 1970 data: *Fall 1972;* for 1972 data: *Fall 1976;* and for 1974 through 1978 data: *Fall 1978.*

(Condition, Table 3.09)

commuter, part time students. Two year institutions have increased Hispanic access, but have inherent problems in transfer, part time faculty, residential programs, and funding patterns.[10] Morover, Hispanic students do not even have full access into open door institutions, as a mere 21 colleges on the mainland enroll 24% of all mainland Hispanic students; when the 34 Puerto Rican institutions are included, these 55 colleges enroll 43% of all U.S. Hispanic students.[11] Additionally, unlike other minority students who benefit from historically black or tribal colleges, Hispanic students do not have access to a network of historically Hispanic colleges.[12] Therefore, Hispanic students are extraordinarily concentrated in fewer than 2% of the more than 3100 collegiate institutions in the country, and in institutions that do not have historical missions to serve Hispanic students.

To say that the leadership of these schools is non-Hispanic is to understate the case. In Summer, 1981, there are 5 Hispanic four-year presidents, and 16 Hispanic two-year presidents on the mainland. A survey of two year college trustees noted that only .6% were Hispanic, while a study of postsecondary coordinating boards found 1.1% of the commissioners to be Hispanic.[13] At another level of leadership, little evidence suggests that significant leadership will be drawn from faculty ranks, as only 1.4% of all faculty (and 1.1% of all tenured professors) are Hispanic,[14] including faculty in Spanish and bilingual education departments. With many Hispanics employed in special assistant or affirmative action/equal employment staff capacities, even fewer

hold substantial policymaking positions. Confronted with these data, one is forced to concede that Hispanics have not penetrated institutions in any significant fashion.

RESEARCH ON HISPANIC STUDENTS

Any comprehensive review of research findings cannot but conclude that little is known of Hispanic students. As a result, program evaluations measure Hispanic children by instruments and methodologies evolved from studies of majority students; more often than not, studies find the predictable evidence of educational programs not accomplishing the goals of improving Hispanic student performance.[15] In questioning the value of research on Mexican American children, Carter and Segura have noted:

> Little had been written about the interaction of cause and effect among the three important variables -- the school, the social system, and the Mexican American subcultural group. The available literature, however, clearly demonstrated that Mexican Americans often do poorly in school, drop out early, speak Spanish, and are poor. These four factors are usually seen as causal and circular: Chicanos do poorly in school because they are poor, speak Spanish, and are culturally Mexican; or Mexican Americans are poor, speak Spanish, and carry a traditional folk culture because they do poorly in school. Most research slighted the socioeconomic influence; the nature and outcomes of school programs, policies, and practices; and the more recent considerations of school social climate. There was little analysis of school intervention in the apparently self-perpetuating cycle of poverty-school failure-poverty.[16]

Although their criticisms were addressed to research on Chicanos in the Southwestern U.S., they might well have noted that research similarly has ignored or blamed Puerto Ricans and other Latinos for their condition of education.

The research on elementary and secondary Hispanic students has been summarized by several commentators, and does not merit detailed repetition.[17] One review has summarized the major emphases of literature on Hispanic education:

1. Studies measuring achievement and years of schooling, which varied greatly in degree of sophistication;

2. Studies relating socioeconomic factors, and occasionally cultural values and orientations, to achievement and years of schooling;

3. Studies explaining these conditions;

4. Papers advocating special programs, which were sometimes polemical; and

5. Curricular materials.[18]

The bulk of this literature falls into two conceptual categories: studies that blame Hispanics for their own school failure, or studies that articulate a deficiency model of minority education, a model of remediation or compensation. In the first view, minority communities are themselves to blame for not encouraging their children to do better in school and for not providing a more learner-centered home environment; in the second, a corollary view is offered to explain why these children do not act like children from the middle-class, and therefore require remedial efforts to overcome their cultural deprivation.

This record of poor evidence on Hispanic elementary and secondary student characteristics has severely limited research upon Hispanic college populations. Primarily, the K-12 attrition rates and disproportionate attendance by Hispanic students in commuter and two year institutions create major problems for population validity and college entrance measures, which most frequently have been normed upon Anglo or black cohorts. Breland, for instance, has noted, "Although a few studies have been made of Hispanic groups, these are not sufficient to allow for any sound generalizations. Hispanics are often grouped with blacks to construct a minority population. Given the possibility of important linguistic influences, it seems essential that more studies be made -- both in prediction and in internal analysis -- for groups having had substantially different lingustic and cultural experiences."[19]

Our understanding of Hispanic college students is not significantly increased by available student literature. A major summary of research on college students published in 1973 reported no studies on Hispanic students,[20] and there is as yet no book on Hispanic college students.[21] However, one unpublished study of Chicano students in the University of California and California State University systems does suggest a methodologically and conceptually appropriate approach to understanding Hispanic undergraduates, that of analyzing the stress encountered. The research, reported in A Study of the Chicano Experience in Higher Education, employed three instruments, two of which were designed

specifically to test the minority experience in majority institutions. The first was a structured interview format, adapted from a study of black students in white colleges; the second was a general demographic questionnaire designed to test language and family characteristics. Finally, a standarized test to measure stress (College Environmental Stress Index [CESI]) was administered:

1. Chicanos and Chicanas reported greater stress levels than did their Anglo counterparts;
2. Anglo men and Anglo women were very similar regarding the intensity of stress they perceived;
3. Chicanos and Chicanas reported vast differences regarding the intensity of stress experienced, with Chicanas scoring higher at every level;
4. There were significant differences between Anglo women and Chicanas, which suggests that socioeconomic and cultural differences were more influential than the gender identity of these women;
5. Chicanas reported greater stress scores than did Chicano men, Anglo men, and Anglo women. In spite of their higher stress scores, however, Chicanas did not appear to have a higher attrition rate than Chicanos. Furthermore, Chicanas performed academically at a higher level than did Chicanos. Primary support systems for Chicanas seemed to be Chicano campus organizations and Chicana discussion groups. Chicanas and Chicanos were significantly more similar than any other groups in ranking events from the most-to least-stressful. Hence, although Chicanos and Chicanas may differ considerably with respect to the intensity of stress perceived, they were extremely similar in their perceptions regarding the most-to least-stressful events.[23]

While these findings do not surprise Hispanic educators, they reveal a marginalization of the students within a system that only reluctantly accommodates them, and suggest the extent to which K-12 systems alienate Hispanic students, even the elite who graduate from high school and attend college. It appears clear that much work is needed on Hispanic student characteristics and

achievement, and the disappointing quality of Hispanic cohorts in longitudinal and large scale sample projects is indicative of the nescience of scholars and consequent lack of research paradigms in this important area.[24]

RESEARCH ON FINANCE

One area where there has been significant research attention to Hispanic education, indirectly if not directly, has been in school finance research. As evidenced by the school finance litigation brought by Chicano litigants in Serrano and Rodriguez,[25] school finance equity considerations remain important to Hispanic educators and communities. The passage of Proposition 13 in California, however, has called into question the appropriateness of Senate Bill 90, the post-Serrano school finance mechanism, as have the more recent developments in the Los Angeles desegregation case.[26]

Coons, Clune, and Sugarman's 1970 book, Private Wealth and Public Education, concluded that most minority children live in the wealthiest school districts, if measured by rankings of total assessed value. This anomaly was due to overcrowding and high industrial property bases in these districts. However, reanalysis of total assessed value data for assessed value per pupil measures shows opposite results.[27] In such a situation, it is necessary to establish ground rules in equity issues, for the phrasing of fiscal inequities is extremely important; major efforts are required to review school finance decisions, summarize the equity implications, survey the technical considerations, and propose models of equitable school finance.

Another necessary K-12 finance initiative is bilingual education cost index construction: major data required include analyses of categorical programs such as bilingual education, as well as more careful analyses of implementation of Lau mandates.[28] In California, for instance, bilingual programs include formulae-based expenditures from the Educationally Disadvantaged Youth Program, Bilingual-Bicultural Programs (under A.B. 1329), Economic Impact Aid Program, and six additional state and federal programs.[29] With proposed federal regulations for bilingual education meeting enormous resistance, it is urgent that realistic cost projections, personnel requirements, and assessment tools be developed. Any federal initiatives to merge categorical programs into block grants will require better data on alleged cost savings and reduced overhead than those that exist at present.

There are four debates in higher education finance that have major equity implications for Hispanics in higher education: two year colleges, financial aid packaging, financing graduate studies, and returns on schooling. While each of these is of obvious concern to majority students, the demographic condition and underrepresentation of Hispanics in higher education make these issues crucial for Hispanics. Although major technical and conceptual problems remain in analyzing these areas, more researchers have been investigating the problems, leading to greater clarity in these equity issues.

The importance of the question, "Do community colleges get their fair share of funds?" is crucial to Hispanic students, for they are disproportionately enrolled in the two year sector: in

1976, whereas 27% of white full time undergraduates were enrolled in two year colleges, 45% of Hispanics were enrolled in this sector. By 1978, the percentages were 23% and 42%, respectively, owing to a significant decline in Hispanic enrollment in the California community college system, probably due to the impact of Proposition 13.[30] Once again, the demographics of Hispanic enrollments make the study crucial for an understanding of the underlying equity issues: if the distribution of Hispanic students throughout the postsecondary system is skewed into one sector, and that sector receives less than its "fair share" relative to the four year sector, then there are serious questions of access and equity.

Two year college financing issues include two major dimensions: whether two year institutions receive less money per student (or per student measure, as a Full Time Equivalent formula [FTE]), and whether students in two year colleges receive less financial assistance than do their four year counterparts. There are serious data deficiencies and major conceptual disagreements in both these questions, and much work needs to be done in these areas.

Researchers employing different data sets or methodologies reach different conclusions in redistribution debates. The same is true in subsidy debates. Nelson and Breneman have summarized the results of these debates, and categorized three intersectoral models: institutional spending per student, rates of state subsidies per sector, and comparisons of resources actually spent on two year student's education relative to those spent on a four year college student. In reviewing the conflicting results, the authors are

persuaded that "community college students have approximately the same volume of resources spent on them and receive about as much subsidy as their counterparts at senior public institutions."[31] They were particularly impressed by the arguments advanced by James, who reanalyzed 1966-67 data from a 1971 Carnegie Commission study--data that had shown only slight intersectoral disparities in favor of senior colleges. James measured subsidies (instructional costs minus tuition) and found evidence that two year college students "cost more and pay less" than do senior college students. Hyde and Augenblick have concluded the opposite.[32]

The short summary here of this complex debate obviously does insufficient justice to the topic. However, despite Nelson and Breneman's assertions that "the absence of serious expenditure differentials at least moves the burden of proof onto critics of the current funding patterns,"[33] it is unclear whether the studies or the reanalyses of data warrant such an assertion. Several major issues have not been resolved; primarily, the major studies have employed data that are not current. Indeed, the major data sets analyzed by Nelson and Breneman date back to 1964 and 1966-67. Since that time, the number of community colleges has increased considerably; the period between 1966 and 1974 saw more than one new public two year college open each week, more than doubling the existing number of institutions--from 408 to 901. Even though the number of private two year colleges declined, the total number of community colleges grew from 685 in 1966 to 1151 in 1975.[34]

There needs to be agreement on how to account for capital expenditures. Two concerns should be paramount. First, capital expenditures are frequently administered by separate state agencies and bond authorities, so the construction costs and bond repayment expenses vary even within state systems. Second, public two year colleges rarely have dormitory facilities, in itself a measure of "opportunity," a major consideration in any discussion of intersectoral equity.[35]

FTE data are not an accurate measure for intersectoral comparisons, for the two year college sector enrolls proportionately more part-time students than do senior colleges. For example, of the 60 largest campuses in the country, only 1 two year college (Miami-Dade) enrolls more full time than part-time students; conversely, only six senior colleges enroll more part-time than full-time students.[36] This difference, reflecting both lack of residential facilities and institutional mission, means that an FTE measure in a two year college is likely to be 3 or 4 students taking 1 course each (to equal 12); the FTE measure in a senior college is likely to be one student taking 12 hours. The economies of scale become clear when the administrative costs (bursar, admission, financial aid, registrar, etc.) are calculated to account for the increased number of registrants. Institutions are extraordinarily complex, with certain programs supporting other less-popular or more expensive courses. This cross-subsidizing makes intersectoral comparisons difficult, particularly if technical or professional curricula are measured.

The debate on intersectoral subsidies has a counterpart in financial aid awards--do two year colleges receive their "fair share" of student financial assistance? A study by Lawrence Gladieux in 1975 answered "no" concerning campus-based programs (Supplemental Educational Opportunity Grants [SEOG's], National Direct Student Loans [NDSL's], and, to a lesser extent, the College Work Study Program [CWSP]).[37] He attributed this "underutilization" to a number of causes, but found few systemic reasons for the pattern. He labelled the phenomenon an "enigma," and suggested that the community colleges themselves were not as entrepreneurial as senior colleges and that they were penalizing themselves by not placing more attention on the financial aid function. Nelson, however, with more recent data (1976), found less underutilization in the campus-based programs, and found a "fair share" in Basic Educational Opportunity Grants [BEOG's].[38] Further, she was critical of the "half-cost limitation," differential treatment of veterans benefits, and the data from which she drew her conclusions. More attention by researchers to these intersectoral financial aid patterns would inform the larger debates over distribution in the system and the effects of disproportionate Hispanic enrollments in the two year sector.

Although both Gladieux and Nelson found a measure of underutilization in campus-based loan programs for two year colleges, disaggregated packaging data for Hispanic freshman show a different story. In an analysis of 1972-73 financial aid awards, Wagner and Rice found Hispanic students' packages to have a 10% higher

proportion of loans--the only portion of packages which have to be repaid.[39] No study has reanalyzed the 1972 data, for the data problems are particularly severe in this type of study, as are conceptual issues of "need" and appropriateness of packaging configurations. While there is no generally-accepted "norm" for packaging financial assistance, Hispanics should have no more reimbursable aid in their packages than do majority students.

One possible reason for this finding may be the difficulty Hispanic families (and most low-income families) encounter in applying for assistance and in negotiating complex financial aid. The financial aid deadlines, for example, fall well before income tax returns are due, so poor families--who may or may not file federal income tax forms-- frequently miss deadlines for all non-reimbursable programs. Loans, however, can frequently be secured late in the admissions process, although this may change as the Middle Income Student Assistance Act raises the eligibility for student aid. Under this scenario, any first-come, first-served phenomenon would limit even the loan access for late filers. Moreover, poor families have to negotiate even more basic hurdles, such as whether financial aid will negatively affect public assistance eligibility (it does, particularly for commuter students).[40]

These considerations, as well as the greater price elasticities of disadvantaged populations, should pose considerable questions for proponents of higher tuition/increased aid strategies. Even acknowledging the information barriers all applicants (but particularly disadvantaged applicants) encounter, Nelson and Breneman

advocate this course: "Indeed, our analysis suggests that a higher tuition/higher aid strategy, the pricing policy traditionally supported by economists on efficiency grounds, is also the more equitable."[41] Information theorists dispute this claim,[42] as would those persons who saw $50 recissions across the board in BEOG payments for 1979-80. Congress disregarded the legislative reduction formula required by Title IV, initiating what is certain to be a series of tradeoffs that disproportionately affect low income students.[43]

A third consideration of Hispanic finance would be the manner in which Hispanic graduate students finance their studies. Data from the National Research Council show considerably different methods of financing this burden for white and Hispanic students:[44]

(Insert Table 3)

The most evident disparity is the more obvious availability of teaching and research assistanships to white doctoral students. These patterns hold importance not only because of the basic issue of sustenance and living expenses, but for informal and formal professional reasons. Assistantships are mainstream apprenticeship activities, involving graduate students in major teaching or research responsibilities with faculty mentors and departments.

Other data corroborate the need for further research into Hispanic graduate education financing. NRC data for 1978 show that

TABLE 3

Graduate Support	Hispanic US Citizen 1978	White US Citizen 1978	Hispanic US Citizen 1979	White US Citizen 1979
Federal fellow/trainee	22.3	22.4	23.1	21.8
GI bill	10.9	10.2	8.3	9.9
Other fellowship	22.1	20.0	20.1	19.8
Teaching assistantship	31.9	46.4	36.2	47.2
Research assistantship	19.1	33.7	20.7	34.4
Educ./Inst. funds	13.9	9.6	13.8	10.2
Own/spouse earnings	63.4	67.4	64.4	69.5
Family contributions	10.9	14.2	10.3	14.4
National Direct Student Loan	10.7	8.7	12.2	9.6
Other loans	13.1	9.7	12.2	10.0
Other	8.6	6.0	5.5	4.2
Unknown	2.4	1.4	2.8	1.0

Note: Totals do not add to 100% because students can report more than one source of support.

Hispanic doctoral students took an average of 10.2 years after the BA to complete the doctorate, with a total registered time of 6.3 years; for whites, it was 8.9 and 6.2 years.[45] For Hispanics in 1979, the total time was 10.0 years, with total registered time of 6.5 years; for whites it was 9.1 and 6.2 years.[46] Thus, while the time in graduate school was similar, Hispanics took approximately one year longer, suggesting a longer time in the workforce or a stopping-out pattern different than that of whites.

Fellowship provisions are key, and largely unexplored. There is anecdotal evidence, for instance, that Title VII fellows become marginalized in elite universities, and have difficulty securing intramural funding when the fellowships expire--usually during the A.B.D. stage. The Ford Foundation doctoral fellowships have been consolidated into a postdoctoral program, while the Graduate and Professional Opportunities Program (Title IX) fellowships to Hispanics appreciably declined from 1978 to 1979.[47] There has not been any major change in Hispanic graduate enrollments or degrees since 1976, when the National Board on Graduate Education noted, "Mexican and Puerto Rican Americans appear to have the lowest [graduate] participation rates relative to other ethnic and minority groups."[48]

A fourth area, returns on education to Hispanics, suggests itself as a response to economists who argue that external benefits are an important consideration, rather than the less-empirical "assumed social good" rationale advanced by many.[49] Data in this area are particularly problematic, as refugee and immigration patterns, heterogeneity of the Hispanic workforce, and historical

exclusion from postsecondary education make research into education-returns difficult and cloud the equity issues. Therefore, studies have found unaccounted-for discrimination in pay differentials for Chicano workers, as well as higher returns on college investment to Chicano males than to Anglo males, even with lower absolute income for Chicanos.[50] Although it is important that economists sharpen these arguments, it is not clear Hispanic communities attempt to maximize their earning potential by attending college. Educational aspirations are a tangle of motivations, not all of them economic. Nonetheless, many Hispanic educators will need to address "returns on education" as a concern in increasing Hispanic participation in higher education.

GOVERNANCE RESEARCH

It is governance, particularly in the forms of school boards or boards of trustees, that constitutes "the system" of education in the United States. State and local boards determine educational policy for school systems, while state coordinating or governing bodies and trustees boards determine higher education policy. Neither sector has been particularly responsive to concerns of Hispanic parents or students, and the theoretical model of internal colonialism is premised largely upon such a system of unresponsiveness. While it is difficult to disentangle the electoral and political components of such a situation from the precise research questions posed by the condition, it is important to note that the history of Hispanic education has been one of struggle against

insensitive government agencies and school boards, those organizations responsible for governing education systems. Whether this struggle has manifested itself in the form of litigation, political action (such as the takeover of the school board in Crystal City, Texas), or in legislation,[51] the focus has been upon sensitizing larger governance structures.

As at institutional levels, Hispanics have not historically had access to these structures: few minorities are appointed or elected to school boards or to trustee boards. These boards and commissions are not "representative," however the norm may be defined. A 1978 study, for example, found only 1.1% (5 of 463) of 1202 commission members to be Hispanic,[52] although the legislation requires the commissions to be "broadly and equitably representative of the general public...."[53] Commission and board appointments constitute a major representative device in a democracy, and are a significant policy arena, particularly as federal education policy shifts to a decentralized block grant approach and as large amounts of federal financial aid are coordinated through states.

While a sense of history should inform all educational governance research, in minority education, most of the historical context has been a belated acknowledgement of racism and slavery's effect upon the schooling of black children. Following the Adams v. Califano litigation,[54] statewide boards have been involved in "desegregation" of public higher education. Because society tends to perceive desegregation solely in terms of black access into

white institutions, the fate of public historically black colleges is uncertain. White and black colleges have been merged, in order that the hybrid have no racial identity.[55] While the lack of historically Hispanic colleges means that Hispanic students have little to fear from Adams litigation, there is the danger of Hispanic student equity issues being ignored in Adams states with large Black and Hispanic populations. This occurred in Texas, for instance, where the first Office for Civil Rights (OCR) study mandated by Adams did not examine Chicano access, but instead concentrated upon the state's two black colleges. No analysis of Chicano enrollment patterns, disproportionate community college attendance, or lack of Chicano faculty and staff was performed--although at the time, no Texas senior college had ever had a Chicano president.

Little scholarship has inquired into the effects of racist immigration statutes upon Asians, systematic discrimination that continues against Indian people, or exclusionary schooling policies against Hispanic children.[56] The indicia of these practices are evident in minority education achievement today, yet major historical analyses of minority schooling are rare. Nonetheless, legal decisions and administrative actions frequently turn upon the litigants' analyses of history, whether in quantifying school attendance zones,[57] measuring Hispanic children's historical access into bilingual education programs,[58] or even in arguing (in 1972) that Mexican Americans are "an identifiable, ethnic-minority class" to be included in desegregation plans.[59]

These examples present persuasive evidence that Hispanics have not controlled political or organizational structures of education, but have been held in subordinate status by school systems and postsecondary institutions. The penetration of a few Hispanic parents or educators has not led to increased quality of education for Hispanic students, and in several key indices, Hispanic educational conditions appear to have worsened. Moreover, the ascendancy of an Hispanic elite has been accomplished at great cost to these individuals, who frequently are ghettoized by majority policymakers and perceived pejoratively as compromisers by Hispanic communities. This condition even persists in situations where Hispanics are the majority, as in northern New Mexico, where the first Chicano college president was not appointed until the 1970's, and in East Los Angeles, where California State University at Los Angeles has never had a Chicano president. Although additional evidence of such structural discrimination is readily apparent, a theoretical explanation is essential for understanding how this condition could persist even when major federal resources have been bought to bear upon school systems enrolling disadvantaged children. In fact, these resources have scarcely altered the patterns of governance, and a retreating federal commitment to education and equity seems likely.

HISPANIC EDUCATION AND INTERNAL COLONIALISM

In analyzing "academic colonialism," Arce has noted, "the most prominent feature of the Chicano experience with higher education is its peripheralness relative to the overall academic enterprise."[60]

Arce has developed a taxonomy of Chicano-Academe Contact Patterns within his framework of academic colonialism, modeled upon Orlando Fals Borda's "colonialismo intelectual," a theory of marginalization in South America.[61] In Arce's view, academic colonialism is

> the selective imposition of intellectual premises, concepts, methods, institutions, and related organizations on a subordinate group and/or the unselective and uncritical adoption and imitation of the intellectual premises, concepts, methods, institutions, and organizations of other groups by selected members of a subordinate group, with the selection processes not being in the control of the subordinate group. Inherent in this definition is the monopolizing of the resources for academic enterprise (college and universities, foundation and government funding agency review boards, journals and other publishing outlets, etc.) by the dominant group and the provision of only limited and controlled access to these resources to the subordinate minority.[62]

Within this scheme, there are six patterns that evolve from the subordinate Chicano role in higher education: structural accommodation, and realignment, conscious assimilation, nationalist exhortative, affirmative action, independent transformational, and interdependent analytical patterns. These patterns fall along axes of ideology and degree of infiltration within institutions:

Chicano-Academe Contact Patterns

IDEOLOGY	*INSTITUTIONAL RELATIONSHIP*	
	Separated	*Integrated*
Marginal	Accommodation/realignment	Conscious assimilation
Co-optive	Nationalist exhortative	Affirmative action
Progressive	Independent transformational	Interdependent analytical

In the structural accomodation/realignment and conscious assimilation patterns, Hispanic students are docile and peripheral to the institution. In the first typology, these students do not become involved in mainstream or ethnic activities on campus. They become marginalized and will likely have high attrition rates; if they do succeed in graduating, they will in all likelihood be average or below-average students in less-demanding major fields of study. In the conscious assimilation pattern, Hispanic students are more likely to become involved in college activities, but to shun ethnic identification or involvement. This anglicization is a strong influence from the college setting, and students who feel no sense of Hispanic community or whose families were not politicized are likely to be found in this category.

In the cooptive ideological categories, two major conservative practices prevail. Within the nationalist exhortative pattern, the singling out of outstanding Hispanics to serve as role models is combined with a tendency towards a romantized reconstruction of history. The affirmative action pattern is a more formal cooptation of Hispanic concerns manifested by specialized minority hiring to fill minority slots, thereby relieving the institutions of the need to integrate throughout its ranks. These responses to internal colonization are understandable, for curriculum and instruction are sorely in need of Hispanic perspectives and revision, while existing job discrimination has precluded many Hispanics from any substantial employment in education. The danger, though, is clear when Cinco de Mayo festivities substitute for more extensive

curriculum revision and when hiring is limited to affirmative action, bilingual education, or token positions.[64]

The final two patterns exist primarily in theory, for they require an extraordinary combination of people, resources, and timing to exist and mature. As this model suggests, the system of structural discrimination present in American education makes progressive educational movements for minorities almost impossible to develop or prosper. The independent transformational pattern is possible only in an historically-Hispanic institution, only 3 of which exist in the mainland U.S.,[65] or in community-based organizations and alternative schools. Such alternatives to mainstream institutions and school systems probably have their best analog in tribally-controlled community colleges (who receive government funds) or in quasi-academic units such as research or training divisions in Hispanic community-based organizations. The second approach is the interdependent analytical pattern, one that links Hispanic academics across institutional or disciplinary lines. Examples include the Chicano Research Network (University of Michigan), the Special Interest Group on Hispanic Research of the American Educational Research Association, or similar collaborative intellectual exchange mechanisms. The focus is one of intellectual selfdevelopment and solidarity with other Hispanic academics, and may revolve around visiting term appointments, professional meetings, or other informal means.

As is evident in these patterns, marginalization is a major danger in Hispanic participation in education, most notably in

attrition and underparticipation data. Those who do penetrate the system do so in a peripheral, non-threatening fashion, while more radical participation is extremely rare and unlikely to generate its own resources or continuation. Observers of Hispanic education will recognize these patterns as rough approximations, but as strikingly accurate portrayals of the condition.

Arce's model of academic colonialism should attract more attention, particularly by constructing careful tests of his typology in different institutions and settings, and with different Latino groups.

Arce's work complements the larger labor market segmentation work of Mario Barrera, in his book, Race and Class in the Southwest: A Theory of Racial Inequality.[66] In particular, Barrera's explication of an internal colonial model extends the Arce thesis. Because the model has been most frequently employed to understand labor discrimination, academic job discrimination against Hispanic educators is plausibly explained. Barrera uses University of California hiring practices as evidence of structural discrimination, and concludes that in most organizations, structural discrimination against Chicanos consists of labor repression, wage differentials, occupational stratification, reserve labor pools, and peripheral buffer role policies.[67] Bonilla and Campos have analyzed similar colonial exploitation of Puerto Ricans, noting that "the root problems of educational inequity for Puerto Ricans remain unresolved and largely unaddressed."[68] These economic analyses suggest the circularity of defining Hispanic educational inequality: Hispanics are

undereducated because they have been historically exploited and their poverty precludes them from further education. While this circle could conceivably define many discrete American groups, no group save Native Americans can claim such a long and misunderstood history of exclusion and underparticipation. However defined or measured, Hispanics do not participate in education proportionate either to their percentage of the US population or to their proportion of the school aged population. While the foregoing defines the condition and theories of Hispanic underparticipation, both the measurement and understanding of root causes are crude and preliminary. The final portion of this paper will suggest a possible research agenda for research into the condition of Hispanic education, focusing upon structural, demographic, and historical means of inquiry.

SUMMARY AND RESEARCH RECOMMENDATIONS

We have only rudimentary knowledge about Hispanics in education or about the socioeconomic and political forces that characterize the internal colonial status of Hispanics in society. As Barrera has conceded, "for the forseeable future, the politics of the Chicano community can be expected to revolve around both class and colonial divisions in a complex manner whose outlines we can only dimly perceive in the current period of confusion and redefinition."[69] He might have also added Puerto Ricans and other Latinos, for population statistics aggregate Spanish origin data, and even Cubans, perceived to be the least-disadvantaged Hispanic group, find themselves victims of anti-Spanish language and anti-refugee

hysteria. While this hysteria and anti-immigration attitudes are the most extreme forms of negative behavior towards Hispanics, institutionalized behavior systematically excluding Hispanic participation is a far more serious and systemic barrier.

A research agenda for examining institutionalized behavior requires two major foci: Examination of structural phenomena and analysis of individuals within institutions. As the earlier sections detail, even when data are inadequate and methodologies frequently inappropriate, the condition of education for Hispanics is poor, relative to Anglo or other minority populations. This condition, manifested in several important, though indirect, indices, suggests inquiry into organizational features. For instance, measuring Hispanic participation in school, despite its seeming simplicity, has not been done well; schools are understandably reluctant to report accurately their attrition rates, particularly when funding formulae are based upon attendance figures. Despite school finance litigation, complex appropriations and fiscal procedures often render school expenditure data incomparable. Sheer measurement difficulties, therefore, have provided researchers and policymakers with an incomplete picture of important school features. The debate concerning community college financing is a postsecondary example of structural debate: how can intersectoral equity arguments be mounted when there is no agreement upon what an FTE expenditure represents in a two year or senior college?

At the individual level, we know precious little about Hispanic students, in large part because survey methodologies have been

inadequate to measure Hispanic community characteristics. For instance, the National Assessment of Educational Progress[70] has severe regional restrictions, while the Survey of Income and Education has the flaws of minority census data and poorly-designed questions of language usage.[71] Even the greatly-improved minority data from the High School and Beyond data have been badly analyzed; a recent HSB study on minority students in private and catholic secondary schools noted, "no distinction is possible in the present research between Cuban, Puerto Ricans, and Mexican Hispanics"[72] when the data were able to be disaggregated. Indeed, the data indicated that 30% of Hispanic private school students were Cuban, a fact that would severely limit the public policy implications for Mexican and Puerto Rican children.

1. It is axiomatic that researchers on Hispanic topics should carefully limit their conclusions to those allowed by data. The condition of Hispanic data, of course, needs to be vastly improved, as do theoretical constructs for explaining the data. Priority must be accorded to Hispanic demography and statistical data improvement. This need will become even more urgent as federal data gathering requirements are diminished or curtailed.

2. Educational researchers frequently ignore or distort history in explaining the condition of Hispanic education. The colonial status of Puerto Rico, exemplified in classic capitalistic fashion by the U.S. government and corporations in the 1900 Foraker Act, Operation Bootstrap, and other exploitative schemes, partially explains the persistent underrepresentation of Puerto Ricans; the

Treaty of Guadalupe Hidalgo and the Bracero Program were quintessential acts of imperialism and official labor market exploitation, whose effects are in evidence today. However, in apparent seriousness, Nathan Glazer can believe otherwise: "We did not conquer most of the Mexican Americans. They came as immigrants, and why they should be 'protected' more than other minorities is an interesting question."[73]

This ahistorical attitude toward Hispanic history is a fundamental threshold barrier to understanding and improving education for Hispanic students. While Barrera's work and that of radical historians is exceptional, far too little is known about the history of Southwestern schooling, about Puerto Rican education on the island or in the mainland, or about the history of Hispanic education. Any such history agenda should include analyses of governance structures, education legislation, litigation, and immigration practices.[74]

3. Several directions for economic research have been detailed earlier, particularly returns-on-education, postsecondary intersectoral equity, school finance, and financial aid analysis. While each of these areas is compelling, priority should be assigned to K-12 school finance and postsecondary intersectoral inequities, for two reasons. First, both issues underpin funding formulae for financing K-12 and higher education; improvement of such formulae to incorporate categorical or general support features will be of immediate practical value to states. Second, litigation

on these matters requires improvement of technical and conceptual arguments.

4. Research on Hispanic students remains primitive, whether the emphasis is upon measuring linguistic competence or upon other characteristics. Existing large scale samples have severe flaws, while smaller studies frequently fail to take into account regional or idiosyncratic features that would render a sample of Northern New Mexico Hispanos different from a sample of border town Texans or urban Puerto Ricans. Student literature is a large gap in our understanding of the Hispanic condition of education, and this persists despite the extraordinary amount of research on students generally.

5. In addition to structural analyses and research on individuals, there is need for more theoretical work in understanding internal colonialism and its manifestation in education. Arce's and Barrera's models, adapting South American and Marxist theories, have strong explanatory power. However, they will require better data and historical evidence to make better sense of centuries of oppression. This research agenda is proposed as a discussion point for such work.

FOOTNOTES

1. Arias, 1980
2. Condition, Table 1.09.
3. Condition, Table 2.23; Glasser, 1969; Aspira, 1976.
4. Locks et al., 1978.
5. Condition, Table 1.09.
6. Condition, Table 2.37/
7. See, for example, SREB, 1981.
8. Condition, p. 118.
9. Condition, Table 3.13.
10. Olivas, 1979.
11. Condition, Table 3.13
12. Olivas, 1981 (b); Condition, pp. 118-119.
13. Drake, 1977; Salazar and Martorana, 1978.
14. Condition, Table 3.42
15. AIR, 1977.
16. Carter and Segura, 1979, p. 7.
17. Hernandez, 1973; Carter, 1970; Carter and Segura, 1979; Ogbu, 1978.
18. Carter and Segura, 1979, p. 7.
19. Breland, 1979, p. 49; Warren, 1976.
20. Feldman and Newcomb, 1973.
21. Books on the topic of Hispanics in higher education include Madrid-Barela et al., 1976; Condition, 1981; Olivas, 1979.
22. Muñoz and Garcia-Bahne, 1977.

23. Munoz and Garcia-Bahne, 1977, pp. 9-18, 131-32.

24. For a different perspective, see Arce, 1978, p. 83.

25. Serrano v. Priest, 487 P 2d 1241 (1971); San Antonio Independent School District v. Rodriguez, 411 U.S. 1 (1973).

26. Estrada, 1979; B. Levin et al., 1972; Catterall and Thresher, 1979; Katz and Wiener, 1979.

27. Coons et al., 1970, pp. 356-357; Dominguez, 1977; Peterson, 1972.

28. Garcia, 1976; Cardenas et al., 1976.

29. Garcia, 1979; Estrada, 1979.

30. Condition, Table 3.13; Jackson, 1979; Nelson, 1979.

31. Nelson and Breneman, 1979, p. 20.

32. Hyde, 1979; Augenblick, 1978; Augenblick and Hyde, 1979.

33. Nelson and Breneman, 1979, p. 22. These "critics" would include, among others, Astin, 1975; Olivas, 1979; Augenblick, 1978.

34. Olivas, 1979, p. 12.

35. Halstead, 1974, pp. 420, 467-68.

36. Olivas, 1979, Appendix B; Hefferman, 1974.

37. Gladieux, 1975.

38. Nelson, 1980.

39. Wagner and Rice, 1977. See also Condition of Education, 1978, Table 5.16.

40. Hansen and Gladieux, 1978; Gladieux and Byce, 1980; Mudrick, 1980.

41. Nelson and Breneman, 1979, p. 33.

42. Bridge, 1978; Kleés, 1974; Olivas, 1981 (a).

43. Gladieux and Byce, 1980. For an opposite view, see AMS, 1980.

44. NRC, 1979; NRC, 1980.

45. NRC, 1979.

46. NRC, 1980.

47. Condition, Table 3.45.

48. NBGE, 1976, p. 45.

49. Newman, 1978; Windham, 1980.

50. Poston and Alvirez, 1973; Williams et al., 1973; Flores, 1978.

51. Miller and Preston, 1973.

52. Salazar and Martorana, 1978, Table 2; Salazar, 1977.

53. 20 U.S.C. 1142 (a).

54. Adams v. Califano, 430 F. Supp. 118 (D.D.C. 1977).

55. Morris, 1979.

56. For examples of work that does examine these issues, see Ogbu, 1978; Olivas, 1979.

57. Haro, 1977; NIE, 1977 (b).

58. Arias, 1980.

59. U.S. v. Texas, 342 F. Supp. 24 (E.D. Texas, 1971), aff'd 446F 2d 518 (1972).

60. Arce, 1978, p. 86.

61. Fals Borda, 1970.

62. Arce, 1978, p. 77.

63. Arce, 1978, p. 101.

64. For an analysis of minority hiring in two year colleges, see Olivas, 1979, Chapter 3.

65. Olivas, 1981 (b).

66. Barrera, 1979

67. Barrera, 1979, p. 217.

68. Bonilla and Campos, 1981.

69. Barrera, 1979, p. 219.

70. NAEP, 1977

71. SIE, 1980.

72. Greeley, 1981, p. 8; Nielsen and Fernandez, 1981.

73. Glazer, 1978, p. 74.

74. With the possible exception of sociolinguistics and educational psychology - - which are advancing our understanding of bilingual education and language acquisition - - history is, in my opinion, the disciplinary cutting edge of understanding Latino education. As yet, no comprehensive histories of Hispanic education exist, but the fertile contributions of Latino historians in understanding labor and political oppression will inevitably enhance our understanding of educational history. I am grateful to Arturo Pacheco for his insight and assistance in this paper.

BIBLIOGRAPHY

Aday, L. et al., "Methodological Issues in Health Care Surveys of the Spanish Heritage Population," American Journal of Public Health, 70 (1980), 367-374.

Admissions Testing Program, unpublished 1979-80 SAT data.

Aguirre, A. "The Sociolinguistic Situation of Bilingual Chicano Adolescents in a California Border Town," Aztlan, 10 (1979), 55-67.

Allsup, C., "Education is Our Freedom: The American GI Forum and the Mexican American School Segregation in Texas, 1948-1957," Aztlan, 8 (1977), 27-50.

Andes, J. Developing Trends in Content of Collective Bargaining Contracts in Higher Education (DC: Academic Collective Bargaining Information Service, 1974).

American Institutes for Research in the Behavioral Sciences Evaluation of the Impact of ESEA Title VII Spanish/English Bilingual Education Programs Vol. I (Palo Alto: AIR, 1977).

American Institutes for Research Evaluation of the Impact of ESEA Title VII Spanish/English Bilingual Education Programs (Palo Alto: AIR, 1979).

Applied Management Sciences Study of the Impact of the Middle Income Student Assistance Act (MISAA) (Silver Spring: AMS, 1980).

Arce, C., "Chicano Participation in Academe: A Case of Academic Colonialism," Grito del Sol, 3 (January/March, 1978), 75-104.

Arias, B. "Issues in Tri-Ethnic Desegregation," paper presented at AERA, 1980.

Aspira, Social Factors in Educational Attainment Among Puerto Ricans in U.S. Metropolitan Areas, 1970 (NY: Aspira, 1976).

Astin, A. "The Myth of Equal Access in Public Higher Education," paper presented to the Southern Education Foundation, 1975.

Augenblick, J. Issues in Financing Community Colleges (Denver: ECS, 1978).

Augenblick, J. and W. Hyde Patterns of Funding, Net Price and Financial Need for Postsecondary Education Students (Denver: ECS, 1979).

Barrera, M. Race and Class in the Southwest (ND: University of Notre Dame Press, 1979

Beck, M. et al. The Analysis of Hispanic Texts (NY: Bilingual Press, 1976).

Berdahl, R. Statewide Coordination of Higher Education (DC: ACE, 1971).

Bonilla, F. and R. Campos. "A Wealth of Poor: Puerto Ricans in the New Economic Order," Daedulus (Spring, 1981), 133-176.

Boshier, R. "The Effect of Academic Failure on Self-Concept and Maladjustment Indices," Journal of Educational Research, 65 (1972), 347-351.

Bridge, G., "Information Imperfections: The Achilles' Heel of Entitlement Plans," School Review; 86 (1978), 504-529.

Brunner, S. and L. Gladieux Student Aid and Tuition in Washington State (DC: College Board, 1979).

Burbules, N. et al. Equity, Equal Opportunity, and Education (Stanford: IFG, 1979).

Burbules, N. and A. Sherman Equal Educational Opportunity: Ideal of Ideology? (Stanford: IFG, 1979).

Cardenas, J. et al. Bilingual Education Cost Analysis (San Antonio: Intercultural Development Research Associates, 1976).

Carter, T. Mexican Americans in School (NY: College Board, 1970).

Carter, T. and R. Segura. Mexican Americans in School: A Decade of Change (NY: College Board, 1979).

Catterall, J. and T. Thresher Proposition 13: The Campaign, The Vote, and the Immediate Aftereffects for California Schools (Stanford: IFG, 1979).

[Condition.] Brown, G., S. Hill, N. Rosen, M. Olivas The Condition of Education for Hispanic Americans (DC: NCES, 1980).

Condition of Education, 1978 (DC: NCES, 1979).

Conlisk, J., "A Further Look at the Hansen - Weisbrod - Pechman Debate," Journal of Human Resources (1977).

Conrad, C. and J. Cosand The Implications of Federal Education Policy (DC: AAHE, 1976).

Coons, J. and S. Sugarman Education by Choice (Berkeley: University of California Press, 1978).

Coons, J., W. Clune, and S. Sugarman Private Wealth and Public Education (Cambridge: Harvard University Press, 1970).

Crain, R. and R. Mahard The Influence of High School Racial Composition in Black College Attendance and Achievement Test Performance (Santa Monica: RAND, 1978).

Cronbach, L. et al. Setting Cut Scores in Selection: A Mathematical Structure for Examining Policies (Stanford: IFG, 1979).

Dill, D. "Teaching in the Field of Higher Education: Politics of Higher Education Courses," Review of Higher Education, 2, No. 2 (1979), 30-33.

Dominguez, J., "School Finance: The Issues of Equity and Efficiency," Aztlan, 8 (1977), 175-199.

Drake, S. A Study of Community and Junior College Boards of Trustees (DC: AACJC, 1977).

Education Commission of the States, "Summary of State Regulations," Higher Education in the States, 6 (1978), 125-148.

Educational Testing Service Principles, Policies, and Procedural Guidelines Regarding ETS Products and Services (Princeton: ETS, 1979).

Epstein, N. Language, Ethnicity, and the Schools (DC: Institute for Educational Leadership, 1977).

Estrada, L., "A Chronicle of the Political, Legislative and Judicial Advances in Bilingual Education in California," in Padilla, 1979, 77-108.

Fals Borda, O. Ciencia Propia y Colonialismo Intelectual (Mexico City: Editorial Nuestro Tiempo, 1970).

Feldman, K. and T. Newman. The Impact of College on Students (San Francisco: Jossey-Bass, 1973).

Fernandez, E. Comparison of Persons of Spanish Surname and Persons of Spanish Origin in the United States (DC: Bureau of Census, 1975).

Finn, C. Scholars, Dollars and Bureaucrats (DC: Brookings Institution, 1978).

Fishman, J. Language Loyalty in the United States (Hague: Mouton, 1966).

Flores, F. et al., "Right of Undocumented Children to Attend Public Schools in Texas," Chicano Law Review, 4 (1977), 61-93.

Flores, R. "The Economic Returns of a College Education to Mexican Americans," paper presented to the Southwestern Social Science Association, 1978.

Franssinetti, A. "La Marginalidad en America Latina: Una Bibliografia Comentada," Revista Mexicana de Sociologia, 15 (1978), 221-331.

Freire, P. Education for Critical Consciousness (NY: Seabury Press, 1973).

Garcia, J., "Bilingual Education Program Fiscal Accountability," in Padilla, 1979, 229-244.

Garcia, J. Cost Analysis of Bilingual, Special, and Vocational Public School Programs in New Mexico, unpublished dissertation, University of New Mexico, 1976.

Garcia, J. "Ethnic Identity and Background Traits: Explorations of Mexican-Origin Populations," La Red, No. 29 (April, 1980), 2.

General Accounting Office, The National Institute of Education Should Further Increase Minority and Female Participation in Its Activities (DC: GAO, 1980).

Gladieux, L. Distribution of Federal Student Assistance: The Enigma of the Two-year Colleges (DC: College Board, 1975).

Gladieux, L. and C. Byce, "As Middle-Income Student Aid Expands, Are Low-Income Students Losing Out?" College Board unpublished Manuscript, 1980.

Gladieux, L. and T. Wolanin Congress and the Colleges (Lexington: Heath, 1976).

Glasser, W., "The Effect of School Failure on the Life of a Child," Journal of Educational Measurement, 6 (1969), 12-18.

Glazer, N. Affirmative Discrimination (NY: Basic Books, 1978).

Golub, L., "Evaluation Design and Implementation of a Bilingual Education Program," Education and Urban Society, 10 (1978), 363-384.

Greeley, A. Minority Students in Catholic Secondary Schools (Chicago: NORC [unpublished], 1981).

Guerrero, M. "Substantive Due Process for President Aliens," Aztlan, 10 (1979), 31-54.

Gutierrez, F. et al. Spanish-Language Radio in the Southwestern United States (Austin: University of Texas Monograph Series, 1979).

Halstead, D.K. Statewide Planning in Higher Education (DC: GPO, 1974).

Hansen, J. The State Student Incentive Grant Program (DC: College Board, 1979).

Hansen, J. and L. Gladieux Middle-Income Students: A New Target for Financial Aid (DC: College Board, 1978).

Hanson, W. and B. Weisbrod Benefits, Costs and Finance of Public Higher Education (Chicago: Markham, 1969).

Haro, C.M. Mexicano/Chicano Concerns and School Desegregation in Los Angeles (Los Angeles: UCLA, 1977).

Hayes-Bautista, D. "Identifying 'Hispanic' Populations: The Influence of Research Methodology Upon Public Policy," American Journal of Public Health, 70 (1980), 353-356.

Heffernan, J. "The Credibility of the Credit Hour," Journal of Higher Education, 44 (1973), 61-72.

Henderson, E. and B. Long, "Personal-Social Correlations of Academic Success Among Disadvantaged School Beginners, "Journal of School Psychology, 9 (1971), 101-113.

Hernandez, J. "La Migracion Puertorriquena Como Factor Demografico: Solucion y Problema," Revista Interamericana, 4 (1975), 526-534.

Hernandez, J. et al., "Census Data and the Problem of Conceptually Defining the Mexican American Population," Social Science Quarterly, 53 (1973), 671-687.

Hernandez, N. "Variables Affecting Achievement of Middle School Mexican-American Students," Review of Educational Research, 43 (Winter, 1973).

Hyde, W. The Equity of the Distribution of Student Financial Aid (Denver: ECS, 1979).

Jackson, G. Community Colleges and Budget Reduction (Stanford: IFG, 1979).

Johnson, J. "Hispanic 'Label' Protested," Washington Post, 12 April 1979, C4.

Katz, D. and F. Weiner. Proposition 13 and the Public Schools: The First Year (Stanford: IFG, 1979).

King, L. The Washington Lobbyists for Higher Education (Lexington: Heath, 1975).

Klees, S. The Role of Information in the Market for Education Services (Stanford: Occasional Paper in the Economics and Politics of Education, 1974).

Korman, F. and N. Valenzuela, "Patterns of Mass Media Use and Attitudes About Mass Media Among Selected Anglo and Chicano Opinion Leaders," Aztlan, 4 (1973), 335-342.

Lee, B. Collective Bargaining in Four Year Colleges (DC: AAHE, 1978).

Levin, B. et al. Paying for Public Schools: Issues of School Finance in California (DC: Urban Institute, 1972).

Levin, H. Educational Vouchers and Social Policy (Stanford: IFG, 1979).

Levin, H. "Postsecondary Entitlements: An Exploration," in N. Kurland Entitlement Studies (DC: NIE, 1977), 1-51.

Locks, N. et al. Language Assessment Instruments for Limited-English-Speaking Students, A Needs Analysis (DC: NIE, 1978).

Lowry, I. "The Science and Politics of Ethnic Enumeration," paper presented at American Association for the Advancement of Science, 1980.

Machlis, P. "The Distributional Effects of Public Higher Education in New York City," Public Finance Quarterly (1973).

Madrid-Barela, A. et al. Chicanos in Higher Education: Status and Issues (Los Angeles: UCLA, 1976).

Martinez, J. Chicano Psychology (NY: Academic Press, 1977).

Martinez, O., "Chicano Oral History: Status and Prospects," Aztlan, 9 (1978), 119-131.

Martinez, V. and M. Lara, "Who Gets In?" Self Determination Quarterly Journal, 2 (1978).

Martorana, S. and L. Nespoli Regionalism in American Postsecondary Education: Concepts and Practices (University Park: Pennsylvania State University, 1978).

McGuinness, A. et al., The Changing Map of Postsecondary Education (Denver: Education Commission of the States, 1975).

McGuire, J. "The Distribution of Subsidy to Students in California Public Higher Education," Journal of Human Resources (1976).

Mexican American Legal Defense and Educational Fund Law School Admissions Study (San Francisco: MALDEF, 1980).

Millard, R. State Boards of Higher Education (DC: AAHE, 1976).

Morris, L. Elusive Equality (DC: Howard University Press, 1979).

Mudrick, N. The Interaction of Public Assistance and Student Financial Aid (DC: College Board, 1980).

Muñoz, C. and P. Rodriguez, "Origen, Distribución y Eficiencia del Gasto Educativo en México," Revista del Centro de Estudios Educativos, 7 (1977), 1-54.

Munoz, D. and B. Garcia-Bahne. "A Study of the Chicano Experience in Higher Education," (DC: NIH, 1977).

National Assessment of Educational Progress. Hispanic Student Achievement in Five Learning Areas (Denver: NAEP, 1977).

National Board on Graduate Education Minority Group Participation in Graduate Education (DC: NBGE, 1976).

National Institute of Education Desegregation and Education Concerns of the Hispanic Community (DC: NIE, 1977 [b]).

National Institute of Education, "Survey of Career Information Systems," NIE Project 400-79-0020, 1979.

National Institute of Education, Women and Minorities in Education R&D (DC: NIE, 1977 [a]).

National Research Council, Summary Report 1979, Doctorate Recipients from United States Universities (DC: NRC, 1980).

National Research Council, Summary Report 1978, Doctorate Recipients from United States Universities (DC: NRC, 1979).

Navy BOOST (DC: NROTC, 1980).

Navy ROTC Bulletin, 1981 (DC: NROTC, 1980).

Nelson, S. Community Colleges and Their Share of Student Financial Assistance (DC: College Board, 1980).

Nelson, S. Community College Finance in California: Equity Implications in the Aftermatch of Proposition 13, unpublished paper, Brookings Institution, 1979.

Nelson, S. The Equity of Public Subsidies for Higher Education: Some Thoughts on the Literature (Denver: Education Commission of the States, 1978).

Nelson, S. and D. Breneman, "An Equity Perspective on Community College Finance," paper presented to the UK/US Conference on Collective Choice in Education, December, 1979.

Newman, M. "A Profile of Hispanics in the U.S. Work Force," Monthly Labor Review, 101 (December, 1978), 3-14.

Nielsen, F. and R. Fernandez. Hispanics and the Higher School and Beyond Data (Chicago: NORC [unpublished], 1981).

Office for Civil Rights, HEW Preliminary Adams Report: Texas (DC: OCR, 1979).

Ogbu, J. Minority Education and Caste (NY: Academic Press, 1978).

Olivas, M. "Hispanics in Higher Education: Status and Issues," Educational Evaluation and Policy Analysis, (forthcoming [a]).

Olivas, M. "Information Inequities: A Fatal Flaw in Parochiaid Plans," in E. Gaffney. Government's Role in Non Public Education (Notre Dame: University of Notre Dame Press) (forthcoming [b]).

Olivas, M. The Dilemma of Access (DC: Howard University Press, 1979).

Olivas, M and S. Hill, "Hispanic Participation in Postsecondary Education," in Brown et al., 1980, 117-216.

Olmedo, E. "Psychological Testing and the Chicano: A Reassessment," in Martinez, 1977.

Olmedo, E. and A. Padilla, "An Empirical and Construct Validation of a Scale of Acculturation for Mexican Americans," Journal of Social Psychology, 105 (1978), 781-790.

Pacheco, A. Educational Vouchers and Their Implications for Equity (Stanford: IFG, 1980).

Padilla, A. "Critical Factors in the Testing of Hispanic Americans: A Review and Some Suggestions for the Future," Testing, Teaching, and Learning (DC: NIE, 1979).

Padilla, R. Bilingual Education and Public Policy in the United States (Ypsilanti: Eastern Michigan University, 1979).

Panel for the Review of Laboratory and Center Operations, Report to NIE (DC: NIE, 1978).

Pechman, J. "The Distributional Effects of Public Higher Education in California," Journal of Human Resources (1970).

Penalosa, F. "Toward an Operational Definition of the Mexican American," Aztlan, 1 (1970), 1-12.

Peterson, G. The Regressivity of the Residential Property Tax (DC: Urban Institute, 1972).

Pfeffer, L., "Aid to Parochial Schools: The Verge and Beyond," Journal of Law and Education, 3 (1974), 115-121.

Poston, D. and D. Alvirez, "On the Cost of Being a Mexican American Worker," Social Science Quarterly, 53 (1973), 697-709.

Roaden, A. and B. Worthen, "Research Assistantship Experiences and Subsequent Research Productivity," Research in Higher Education, 5 (1976), 141-158.

Salazar, J.L. State 1202 Commission Member Characteristics and Positions on Issues of Importance to Postsecondary Education, unpublished dissertation, Pennsylvania State University, 1977.

Salazar, J.L. and S. Martorana. State Postsecondary Education Planning (1202) Commissions: A First Look (University Park: Pennsylvania State University, 1978).

Seale, W. Opinion, in re Alien Children Education Litigation (U.S. District Court, Southern District of Texas), 21 July 1980.

Siegel, J. and J. Passel Coverage of the Hispanic Population of the United States in the 1970 Census (DC: Bureau of Census, 1979).

Southern Regional Education Board. Black and Hispanic Enrollment in Higher Education, 1978 (Atlanta: SREB, 1980).

Survey of Income and Education. Characteristics of Hispanic Postsecondary Students (DC: NCES, 1980).

Troike, R. Research Evidence for the Effectiveness of Bilingual Education (Rosslyn: National Clearinghouse for Bilingual Education, 1978).

U.S. Census Conference on Census Undercount (D.C. Bureau of the Census, 1980).

U.S. Commission on Civil Rights Counting the Forgotten (DC: USCCR, 1974).

U.S. Commission on Civil Rights Improving Hispanic Unemployment Data (DC: USCCR, 1978).

Valdez, A. "The Role of the Mass Media in the Public Debate Over Bilingual Education," in Padilla, 1979. pp: 175-188.

Wagner, A. and L. Rice Student Financial Aid: Institutional Packaging and Family Expenditure Patterns (DC: College Board, 1977).

Williams, J. et al., "Some Factors Associated with Income Among Mexican Americans," Social Science Quarterly, 53 (1973), 710-715.

Windham, D. Education, Equality and Income Redistribution (Lexington: Heath, 1970).

Windham, D. The Benefits and Financing of American Higher Education: Theory, Research, and Policy (Stanford: IFG, 1980).

Zimmerman, D. "Expenditure-Tax Incidence Studies, Public Higher Education, and Equity," National Tax Journal (1973).