DOCUMENT RESUME

ED 356 121 RC 019 080

AUTHOR Masters, Billie Nave

TITLE Culture and Literacy. Part 1: A Historic Overview.

Part 2: The Needs of a Pluralistic Society. Part 3:

Student Perceptions.

PUB DATE [93] NOTE 70p.

PUB TYPE Information Analyses (070) -- Reports -

Research/Technical (143)

EDRS PRICE MF01/PC03 Plus Postage.

DESCRIPTORS American Indian Education; American Indians; *Culture

Conflict; Educational Attitudes; Educational Change; *Educational Environment; *Educational Philosophy; Elementary Secondary Education; Hispanic Americans; *Minority Groups; Negative Attitudes; Piagetian Theory; Public Education; Public Schools; *Self Concept; *Student Attitudes; Subcultures; Whites

ABSTRACT

This three-part series of articles discusses restructuring U.S. public education to meet the needs of culturally diverse student populations. Part 1 presents a historic overview of the philosophies and attitudes underlying delivery of U.S. public education. The American school system is slow to change and, for the benefit of the industrialized labor market, continues to assess and classify each student as a "product." A useful step toward restructuring education would be to redefine the student as "consumer" and to see dropout and literacy rates as indicators of consumer perceptions of the worth of education. Part 2, on the needs of a pluralistic society, discusses cultural diversity in America, tribal bonding in ethnic communities and groups of schoolchildren, and the prevention of gang formation through student participation in acceptable group activities. Part 3, "Student Perceptions," proposes a model of how students evaluate the personal worth of their education. Based on Piaget's social reciprocity theory, this model emphasizes that student perceptions of education are influenced by emotional responses to their educational environment and to their teachers. Negative emotional responses arising from classroom culture conflict lead to negative educational attitudes and lower success rates among minority students. A survey of 320 White, Hispanic, and American Indian students in Grades 8 and 11 found that self-ratings of intelligence and academic ability were low among ethnic minorities, inner-city and reservation youth, and those having a primary language other than English. American Indians generally had the poorest self-ratings. Suggestions are offered for overall restructuring of public school education. (SV)



^{*} Reproductions supplied by EDRS are the best that can be made from the original document.

0

CULTURE AND LITERACY:

Part 1: A Historic Overview.

Part 2: The Needs of a Pluralistic Society.

Part 3: Student Perceptions.

Billie Nave Masters, Ph.D.

Advanced Education Research Center 13561 Farmington Road Tustin, California 92680 (714) 838-4219

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

U.S. DEPARTMENT OF EDUCATION Office of Educational Research and Improvement EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

- This document has been reproduced as received from the person or organization originating it.
- Minor changes have been made to improve reproduction quality.
- Points of view or opinions stated in this docu-ment do not necessarily represent official OERI position or policy



CULTURE AND LITERACY:

Part One: A Historic Overview.

Billie Nave Masters, Ph.D.

Advanced Education Research Center 13561 Farmington Road Tustin, California. 92680 (714)838-4219



ARTICLE ABSTRACT:

Culture and Literacy in Public Education: A Historic Overview.

Billie Nave Masters, Ph.D. Social Science: Social Psychology. Advanced Education Research Center Tustin, California

This article is part one in a three-part series concerning a study of culture and literacy in public education with an emphasis on the role of both Indian and non-Indian student perceptions with respect to educational effectiveness and achievement.

In this piece we will develop an historic overview of United States public education delivery with special attention to the role of sociocultural minority-student populations. In part two, these perceptions will be expanded into a discussion of culturally-sensitive data-gathering methods for the generation of educational-restructuring models. The series concludes with an examination of data from a student-perception study, and the impact of these findings with respect to needed changes in United States public educational delivery.



In the United States, a nation which prides itself upon accomplishments rooted in an assessment of the facts derived from responsible research, we have chosen not to apply these standards with respect to the application of research pertaining to the quality and performance of our public schools. The gap between the findings of educational research, social science research and knowledge acquired by the direct examination of the educational experience itself is clearly widening.

Local efforts, national conventions, and governmental initiatives have been designed over the years to develop and evaluate a plan of action to address the problems of declining literacy and increasing student dropout rates in terms of reform of methods of educational delivery. Yet, the growing number of students dropping out of school is not a measure of a school's failure. It is only the long-term result of failing to meet the needs of our youth, both in and out of the classroom.

Educational exploitation includes diversion of funds from minority education by assigning inferior or untrained and inexperienced teachers who are paid less wages, to predominantly minority schools; or by providing lower non-teaching operating expenses, such as clerical and maintenance, supplies, textbooks, and the like, to predominantly minority schools. This type of exploitation has been most fully documented in the case of Blacks even as recently as the 1970s. Educational exploitation leads to inadequate preparation of the minority youths for joining the labor force.

[p.91. Ogbu and Matute-Bianchi, 1986]

Although the government, the home, community, and student share custody of this dilemma, the public school, as mandated by the legal and ethical imperatives imposed by American society, shoulders the brunt of responsibility for education in our culture. Within a cultural milieu in which many American



families are in a state of crisis, the community and its schools hold the tools and control the resources to act as both arbitrator and purveyor of societal principles and cultural mores.

Improving the response of public education to ethnic minority youngsters is the most important challenge facing the schools of this country in the decade ahead. Given the deteriorating condition of urban environments, schools have no choice but to play a larger and larger role in the lives of children from low-income backgrounds, most of whom are members of ethnic minorities.

[p.54. Arciniega, 1981]

The fundamental philosophy of education within the United States began as an approach of individualized instruction based upon the premise that individuation and variation was necessary to assure student success. This variation included flexible scheduling, adaptive methodology, holistic curriculum and theory. The fact that the teacher was often hired directly by the family and was answerable to the family for the child's success is, in theory, not radically different from the current educational system in which school boards represent the specific interests of parents today. In fact, many parents still maintain direct contact with the school and hold individual teachers accountable for the educational success or failure of their child. Unfortunately, most of the parents who fall into this category are also individuals from the cultural mainstream who successfully passed through the educational system, and who may lack perspective in terms of understanding the problems faced by ethnic minority or marginal students.

Historically, the system of educational delivery in the United States has evolved very slowly, and it is also not entirely clear that this evolutionary process has been marked by even modest improvement when evaluated in regard to the educational success of the non-mainstream student.



Herein lies an irony: schoolmen who thought they were promoting a neutral and classless, indeed a <u>common</u> school, education remained unwilling to perceive the extent of cultural particularity inherent in their own writing and activity. However, it was central and not incidental to the standardization and administrative rationalization of public education. For in the last analysis the rejection of democratic localism rested only partly on inefficiency and violation of parental prerogative. It stemmed equally from a visceral fear of the cultural divisiveness inherent in the increasing religious and ethnic variety of American life. Cultural homogenization played counterpoint to administrative rationality. Bureaucracy was intended to standardize far more than the conduct of public life.

[p.47, Katz, 1987]

Colonial education was a byproduct of the British system, and was therefore designed to fit the needs of upper-class, standard English-speaking children. The system used to educate wealthy British children during the eighteenth century was very conscious of, and sensitive to, the hierarchy and values of the society in which it operated. There was an acute awareness of the background of the individual student, as well as a clear understanding of the role in society for which the student was to be prepared. The training of a child required more than the isolated memorization of a body of facts. Implicit in the educational process was an understanding of the familial and cultural traditions which were unique to each individual student. It is in this discarded feature that the system currently employed in the United States demonstrates its most glaring limitations.

Many children among the urban poor have never been outside the limits of the few blocks that constitute their neighborhood. They seldom, if ever, have exposure to experiences that middle-class children frequently accept as ordinary, of example, visits to the zoo or to museums. Few attend plays or concerts and many have never the inside of a bank or large department store. To a considerable extent, the narrow range of their experience reflects that of their parents. The limitations of experience means that lower-class children lack familiarity with much of the cultural content that is taken for granted among middle-class status groups. However, the cultural content through which the learning



process is mediated in are oriented to the interests, experiences, and values of middle-class America.
[p.46-47. Gould, 1969]

Most of the individualized tutorial elements which marked the strength of the Old World philosophy, as well as features such as flexible scheduling and variable curriculum, have largely been phased out in favor of an approach which stresses standardized content and pedantic delivery: a modification better suited to the needs of a society with a large, multi-cultural working class requiring only limited access to resources beyond those required by the labor force. This system still comprises the basic pattern and structure of education in the United States today. Despite the edict that the needs of a pluralistic society can only be met by guaranteeing equal access to educational resources for all of our children, and that designs for comprehensive educational systems have been in existence since the 1860's, the present educational system is still rooted in the support and perpetuation of the concept of aristocracy.

The complexity of the challenges faced by a nation made up of first Americans and immigrants, and yet committed to universal, free, and mandatory public education is unique to the United States as well as unique in the history of western civilization. The situation, as it exists, is vastly different from countries that have basically stable, mono-lingual, heterogeneous populations expressing long established consensus with respect to traditions and values.

This anomaly has sparked a variety of opinions concerning the historic roots of our current difficulties.

...Progressivism implied the radical faith that culture could be democratized without being vulgarized, the faith that everyone could share not only in the benefits of the new sciences but in the pursuit of the arts as well. Jane Addams, that noble lady who founded Hull House



and led its efforts for fully forty years, once remarked: "We have learned to say that the good must be extended to all of society before it can be held secure by any one person or any one class; but we have not yet learned to add to that statement, that unless all men and all classes contribute to a good, we cannot even be sure that it is worth having." Here was the spiritual nub of progressive education, and it simply negates contemporary nonsense about the movement being narrowly practical and nothing else.

[p. ix. Cremin, 1961]

This nationally recognized work was soon challenged by a contradictory perspective:

The nation's growing demand for urban labor requires a mechanism which would "balance" this need against the pressure of Anglo-Puritan social restrictions - its vicious hatred of Catholics and its immense racial and cultural bigotry. Indeed, if there had not been such a need for manpower - and an ever growing need at that - it is likely that the prospect of widespread pauperism (especially burdensome in times of slump) and the fear of papal power would have discouraged the mass entry of Irishmen into Northeastern cities whatever the faith that the schools would salvage and Americanize them. But they did come, and the schools, as Jefferson had hoped, proceeded to separate the "rubbish." But selecting out the rubbish was always an important part of the job. [p. 64-65. Greer, 1977]

This perspective on the historic function of American education was soon augmented by the development of a case for the identification of the continual renewal of inequality in advanced industrial societies through a challenge of the language developed by the educational system itself.

...deprivation can only have meaning as an economic notion. To speak of cultural deprivation is patronizing at best, at worst it is a device for schools shrugging off their own limitations as instruments of working-class education. The economically deprived can only be put at a cultural disadvantage by neglect of their culture in the schools. [p. ix. Entwistle, 1977]

This socioeconomic perspective with respect to the fundamental nature of educational delivery is grounded in additional critical observations.



Schools legitimate inequality through the ostensibly mentocratic manner by which they reward and promote students, and allocate them to distinct positions in the occupational hierarchy. They create and reinforce patterns of social class, racial and sexual identification among students which allow them to relate "properly" to their eventual standing in the hierarchy of authority and status in the production process. Schools foster types of personal development compatible with the relationships of dominance and subordinancy in the economic sphere, and finally, schools create surpluses of skilled labor sufficiently extensive to render effective the prime weapon of the employer in disciplining labor - the power to hire and fire.

[p. 11. Bowles & Gintis, 1977]

Through this reasoning, what becomes clear is a case in which the immediate conventions of convenience were translated, through unchallenged repetition, into an overriding philosophy which still finds its way into the American classroom. The current controversy regarding "Mainstreaming", the grouping of students according to age without imposing limitations based on academic performance or learning style, is an excellent case in point.

The value of heterogeneous grouping by age has long been a subject of debate among educational theorists, as is the issue of the labelling and categorizing of students. The wisdom of labelling students prior to their educational experience as an attempt to "predict" performance has always fired contention among those professionals who believe that student-centered instructional imperatives are better met through efforts to measure actual achievement in terms of ongoing performance and individual improvement.

To be a valid basis for inferring differences in "intelligence," a measure must have normative validity, that is, the persons being compared must come from the same sociocultural population and must not differ in emotional or physical handicaps. It would not be appropriate to compare a child with a visual impairment to norms based on children with good vision. It would not be appropriate to compare the performance of a six-year-old child to norms based on ten-year-old children because the six-year-old would have had less opportunity to learn the material in the



test. Traditionally, tests have controlled for age differences by having agespecific norms. They have not recognized that controlling for sociocultural differences is also necessary in a pluralistic society if a test is to have normative validity. [p.102. Mercer, 1981]

Public education historically classified students into one of three categories: advanced, average, or remedial. These classifications tend only to be varied to respond to criteria stipulated by particular state and federal agencies in order to qualify for additional funds. Classifications, such as gifted, special education, Chapter I, Title V, are based upon an assessment of the student as "product". Much as one would assess the relative merits of an automobile, the make, model, and value of our children is determined through the use of the standardized-test score. It is these numeric evaluations, an assessment of how the individual student has responded to a particular, specialized learning/assessment environment, that perform as the market indicators of overall effectiveness. They are <u>not</u> an accurate description of the true potential or inherent psychological capacities of the students.

What is being described here is a need to break from previously employed perspectives which have been utilized to categorize and inhibit individual development in the classroom: an outmoded imperative which no longer serves the needs of our society and never served the needs of a significant percentage of our children. In this time of social restructuring, what clearly bears consideration is the development of new processes in order to study how actual learning takes place in the classroom, and to assure a commitment to that ideal. Such a procedure would include not only descriptions of the results of the educational experience, but also an appreciation of the student's individual needs, and the socioeconomic, cultural, regional, physical, cognitive, affective,



and motivational factors that are active during the learning process and which ultimately influence the educational outcome.

We suggest that the focal concern of the public school is not relations with the physical, cultural or social environments, but with the environment constituted by the psychological systems, or personalities, of the students entrusted to its care. The relation does have a cultural aspect, however, and seen in those terms, the schools' charge is to transmit to students the cognitive, expressive, evaluative, and other components of the cultural system that are essential prerequisites of future role performance.

[p.208. Hills, 1976]

A useful step in this direction would be to redefine the student as consumer, rather than product, client, or patient. Another valuable change in perspective would be to recognize that the individual's cognitive development is not isolated from affective development, nor from the situation in which learning takes place (Kitschener, 1981). Based on this premise, a paper-and-pencil test would not be adequate for student placement. A process of this importance and complexity would not be limited to a singular indicator, but would be increased in scope to encompass a spectrum of developmental criteria. A single paper-pencil score is no more adequate than color of skin, crook of the nose, height, chronological age, or presence of a womb as a criteria for student placement.

Education should not be reduced to a simple process of the mechanical transmission of information from one person to another. It should be viewed as a multi-faceted operation intended to facilitate the development of self-confident, competent and productive citizens. Such a goal would require a commitment to the greatest possible degree of flexibility within the ongoing educational structures to assure our youth their constitutional right of equal educational opportunity.



The approach of public education has been to ask: "What is wrong with the students that they are not learning?" It is seldom asked, "What is wrong with our system that results in such low scores?" Much is written about culturally-disadvantaged, learning disabled, and limited English proficient students, however it is very seldom that one finds a classroom exercising unique curricular options or reaching for a new theoretical approach to education of these populations. It would seem that although the needs are identified, there is often a failure to address those needs in any meaningful way. It is unclear how simple segregation of students by labeling is intended to address the needs of those students on an individual basis. However, if one viewed public education from the standpoint of the student as a consumer to which we are marketing a particular product, the high dropout and failure rates would no doubt be conceptualized in a radically different manner.

Chronic low sales of a particular product in a given area does not indicate a defect in the buyers, but rather suggests that the product being marketed is simply not perceived as something worthy of the price. Producers would soon find themselves out of business if they persisted in their efforts to ignore even regional difference in the distribution of their goods. High dropout rates and failure rates could be perceived in terms of poor product design, or at best, a poor understanding of a desired market.

Such an analysis is rather straight forward. If people do not perceive a product or process as meeting their needs, they will not buy it. If individuals do not perceive the educational system as providing an education, they will not continue to participate.



In part two of this series, the traditional objectives of public education are challenged through an examination of pluralistic societal imperatives and a reevaluation of currently employed educational strategies. Part three will deal with proposals for educational restructuring through an examination of the relationship of student perceptions upon current educational effectiveness.



BIBLIOGRAPHY

- Arciniega, T.A. <u>The School Culture and the Cultures of Minority Students</u>. <u>Education in the 80's: Multiethnic Education</u>. Ed. James A. Banks. Washington D.C.: National Education Association. 1981.
- Bowles, S., and Gintis, H. <u>Schooling in Capitalist America</u>. New York: Basic Books, 1977.
- Cremin, L.A. <u>The Transformation of the School: Progressivism in American Education</u>. New York: Vintage Books, 1961.
- Entwistle, H. <u>Class, Culture, and Education</u>. Holborn: University Printing House Cambridge, 1978.
- Gould, Nathan. <u>Cultural Perspectives on the Education of the Poor.</u>

 <u>Perspectives in the Education of Disadvantaged Children.</u> Ed. Milly Cowles. Scranton: International Textbook Company. 1969.
- Greer, Colin. The Great School Legend. New York: Basic Books, Inc., 1972.
- Hills, Jean. <u>On Accountablity in Education</u>. <u>Sociology of Education</u>. Ed. Ronald M. Pavalko. Itasca: F.E. Peacock Publishers, Inc. 1976.
- Katz, Michael B. <u>Restructuring American Education</u>. Cambridge: Harvard University Press, 1987.
- Kitschener, R.F. "Piaget's Social Psychology." <u>Journal for the Theory of Social Behavior</u> 11 [1981]: 153-277.
- Mercer, J.R. <u>Testing and Assessment Practices in Multiethnic Education</u>. <u>Education in the 80's: Multiethnic Education</u>. Ed. James A. Banks. Washington D.C.: National Education Association. 1981.
- Ogbu, J.U., and Matute-Bianchi, M.E. <u>Understanding Sociocultural Factors:</u>
 <u>Knowledge, Identity, and School Adjustment.</u> <u>Beyond Language: Social and Cultural Factors in Schooling Language Minority Students.</u> Bilingual Education Office, California State Department of Education. 1986.



ARTICLE ABSTRACT:

Culture and Literacy in Public Education: The Needs of a Pluralistic Society.

Billie Nave Masters, Ph.D. Social Science: Social Psychology. Advanced Education Research Center Tustin, California

This article is part two in a three-part series concerning a study of culture and literacy in public education with an emphasis on the role of both Indian and non-Indian student perceptions with respect to educational planning and delivery.

In part one we examined the history of American educational delivery with emphasis upon the role of sociocultural minority-student populations with respect to educational effectiveness.

In this article, we continue with an overview of the traditional objectives of American education as examined with respect to the needs of a pluralistic society and contrasted with currently employed educational strategies. Part three will be an examination of data from a student-perception study, and the impact of these findings with respect to needed changes in American educational delivery.



CULTURE AND LITERACY: PART TWO

The Needs of a Pluralistic Society.

As stated earlier (Masters, 1989), the system of educational delivery employed in the United States has changed very little over the course of this nation's history. The primary philosophy of public education, categorization for the purpose of supporting the labor requirements of an industrialized society, has established an institutional mindset that has limited the direction if not entirely eliminated educational reform for over one hundred and fifty years. In fact it subsequently limited the definition of success to those processes that continue to deliver the student/product to the workplace according to predetermined ranking.

This is not to say that there have not been some genuine attempts at significant reform which sought to operate outside this milieu. In the 1960's, academic critics addressed the lack of basic skills, dull and repressive classrooms, and the school's inability to promote equality, as they were found to be not only segregated but racist and sexist (Coleman; 1969). The disparity between public education as Thomas Jefferson's cornerstone of democracy and the actual conditions present in the schools resulted in a reconsideration of education's role as an element in social change.

The process of socialization asks the poor to perceive themselves and the world about them in the "American way." They are asked to internalize ideas of freedom and equality. But they receive the message under a condition of segregation; that is, in a condition of nonequality. Inevitably, the child of the poor receives the "message" from this same position of segregation and rejection. His view of nonpoor America is from outside and below. This attitude of rejection by the nonpoor leads to a polarization of "we" and "they". Since "they" are so obviously in charge of everything, from schools to welfare to television programs, "we" have



nothing to be in charge of. A sense of inequality pervades the situation; some children may feel the inequality as an injustice, others may feel it as a statement of their inexpressible inferiority.
(p. 13. Alman, 1969)

Even with the new historical view of education based upon the major civil rights legislation of the last 40 years, there were few concrete recommendations or national policy changes, in spite of a clearly perceived need and the impassable imperatives of constitutional law. However, issues illuminated in this controversy remained topics of debate among politicans and professionals for over two decades. Despite the recent shift from the establishment of instructional equity to the pursuit of educational excellence (or equity plus excellence depending upon your position), educational critics have been relentless in the pursuit of their public positions (Aronowitz, 1985).

This era of focus, coupled with the evolution of social values and ensuing changes in the national economy, has resulted in a lack of faith in the public schools and the defeat of school bond issues in most public elections for the past two decades.

If an unfriendly foreign power had attempted to impose on America the mediocre educational performance that exists today, we might well have viewed it as an act of war. As it stands, we have allowed this to happen to ourselves. We have even squandered the gains in student achievement made in the wake of the Sputnik challenge. Moreover, he have dismantled essential support systems which helped make those gains possible. We have, in effect, been committing an act of unthinkable, unilateral educational disarrament.

(p. 5. The National Commission on Excellence in Education, 1984)

As an example of the severe limitations which have been created due to this alteration in perception, the present level of funding for public schools in the state of California is limited to the point that it is impossible to optimize student-teacher ratios, a situation which is antagonized by the fact that a



significant proportion of educational funds in the state are the "soft" (erratic and limited-use) funding derived from a state lottery. This is not only misleading to the public, who see millions of dollars generated from the lottery and, therefore, assume that the schools have plenty of money, but also to the state legislators who justify the absence of adequate appropriation to the fact that the lottery exists. Only those who directly question their local educators know the ultimate effects that this type of funding has upon the quality and availability of public education.

There is no question that money is a necessary component in attracting qualified people into the field of education, but, as many educators and investigators have pointed out, money alone is neither the sole cause nor the resolution of our educational problems (Freire, 1970; Aronowitz, 1985). Still, efforts to equalize financial resources meet a stormy resistence from the "better" schools which must lose funding. The core of this position being that schools which have demonstrated effective use of resources must sacrifice funding to schools which have not, and possibly will not, be able to achieve the same kind of success.

Data derived from student interviews (Crossing the Schoolhouse Border; 1987) paints a picture of the isolation that students feel in overcrowded schools and their hopelessness in being able to get the individual help that they want and need. In California, urban high schools with over 1700 students are known to have the highest dropout rates, yet no serious effort to adjust school size to remedy this problem has ever been made. Class size in the state of California is among the highest in the nation, and correspondingly, so are the dropout, attrition, and illiteracy rates (California ranks 42nd nationally: California State Dept. of Education: 1989.)



Responses to surveys pertaining to future employment, income, and life satisfaction have shown that students who do not graduate are significantly handicapped in these areas (The Achievement Council, 1988). The ethnic-minority and the female student continue to score lower in both math and science according to scores derived from achievement tests. The impact of this finding is punctuated by the fact that most above average salaries stem from employment which requires a working knowledge of both of these disciplines. Yet very little change has occurred in the classroom curriculum, student placement, theory or methodology of teaching to offset this serious deficit.

The self-concept, or perception of oneself, plays a large part in the motivation of the individual. He may perceive himself as, superior or inferior, intelligent or stupid, attractive or ugly, to name but a few of the multitude of possibilities. It matters little how others perceive him. He operates from his own frame of reference, and all his behavior is affested by this self-concept. A disadvantaged child is likely to consider himself inferior when he is surrounded by middle-class children in the typical school. He has not had the same experiences, he cannot talk about the same things and frequently doesn't talk at all, he doesn't succeed in academic tasks, and hence he regards himself as being inferior. He may then retain this inferior feeling, or he may come to rebel against the school in an attempt to salvage himself for what he is. (p.227. Daniel and Keith, 1969)

It should be noted that pilot projects are now being funded by the California Post-Secondary Education Commission to public schools to increase math and science literacy among minorities and women (Eisenhower Act; 1990). However, these funds are limited and are available to only a few fortunate schools.

All of this is not to say that there are not mitigating factors through which clarity can be sought with respect to improvement in educational delivery for high-impact populations. In fact, an advocacy of sorts can be seen in the analysis of social/subcultural groups which make up minority student



populations and the impact of this sub-structure upon systems of educational delivery.

Paul Willis (1977) completed an empirical study on a subculture in England. His findings apportioned a major share o responsibility to the students and their subculture.

For those not familiar with the work, Willis's main question was why do working class kids get working class jobs? In an attempt to avoid a simplistic answer, he rejects both liberal (because working-class kids are seen by significant others - that is teachers - to be slow or non-academic) and reproduction theories (because the system means them to fail in school). Instead, Willis puts forth a theory of cultural production which suggests, based upon his own ethnographic observations, that working-class males actively help to produce themselves as future, semi-skilled manual labourers. In other words, it is the lad's own handling of the situation and their development of a counter-school culture (drawn from the wider class culture) that leads them to value manual labour and delivers them on to the shop floor.

THE LONG TRANSITION, p.9,10. Robert G. Hollands, 1990.

With respect to Willis' findings, it could be said that youth of a specific counterculture engage in activities, adopt philosophies and worldviews, and accept the mandates of the greater culture only to the degree that acquiescence does not interfere with their own self-definition. Such a conclusion leads to larger questions pertaining to the social contribution of ethnic and gender minority students in shaping their own educational destinies. Is Willis' message that as long as women insist upon being feminine, hispanics continue to maintain their culture and language, and American Indians continue to identify as Indians that they will not be able to fully participate in the "good life" of our nation? The porrowing, blending, and incorporation of a variety of cultures is the traditional definition of American culture itself. Yet, this quality is not overtly recognized in the philosophy, administration, definition, or implementation of our educational system.



Again, research has stated some exceptions. Michael Weiss (1988) developed a model for the nation which abandoned the perception of fifty states in favor of the development of definitions for forty neighborhood types or clusters (THE CLUSTERING OF AMERICA, 1989). Using census data, marketing systems, consumer surveys, and a host of public opinion polls, he redefined the population as a whole as a series of homogeneous groups. His findings show that each "cluster" claims distinct boundaries, specific consuming habits, political beliefs and values. He identifies the residents of each cluster by their work, how they spend their money, which television programs they watch, whom they vote for, and where they travel (Weiss, 1988). On of the important points brought out by Weiss is how naive it is to assume that there is such a thing as a uniform "American" value system. Weiss makes it clear that we must perceive these issues in terms of, at least, forty different distinct sets of values. His findings clearly support the position that the traditional expectations of education are not realized with respect to the actual needs of the population currently being served.

Traditionally, education has opened the door to upward mobility. The nation's wealthiest neighborhoods in Blue Blood Estates, communities like Bloomfield Hills, Michigan, lead all the clusters in educational attainment - 51 percentof residents have completed college. Conversely, a lack of education can keep even the most ambitious on the lower socioeconomic rung. That's typical in Hard Scrabble, the rural cluster that has the highest concentration of undereducated Americans - 59 percent of its 2 million residents never completed high school.

THE CLUSTERING OF AMERICA, 1988; Michael Weiss.

Weiss' representation of the United States is thought provoking with regard to proposed policy changes and educational planning. The future challenge to American education may be to couple such findings with the conclusions of S.T. Kimball (1974): the climate of culturally pluralistic classrooms is crucial to



the success of multi-ethnic education since the realities of the learning process... must be viewed in the context of the total arrangements and cultural practices that constitute education and the environment within which it operates (Kimball, 1974:78). Although Weiss does not specifically relate the clusters to ethnic groupings, other than black, he has identified one cluster as including American Indian reservations, and inner-city barrios and ghettos. These clusters are recognizable as distinct when relating the clusters to marketing and census data.

The "founding fathers" of this country used the motto <u>E Pluribus Unum</u> (out of the many, one) to express the ideal that the United States was to be a nation that drew its strength from diversity, and its wisdom from the accommodation of multiple perspectives and ways of being. It is in keeping with this spirit that it can be suggested that a restructured, as opposed to reformed, educational system that reflects and respects the pluralistic aspirations and multi-cultural contributions of its entire population is not only possible, but is indeed necessary if the quality of life that we value in this country is to survive to see the next century.

Educational reform in the past decade has hardly marked a major innovation in social policy. Rather, it has seemed to most, including its most ardent supporters, a natural extension of over a century of progressive thought. Its apparent failure is not only disconcerting in its social consequences, but cast strong doubt on liberal educational theory as a whole, and invites a thorough reassessment of its basic concepts and their historical application.

(p. 18. Bowles and Gintis, 1976)

What appears to be required is a fresh perspective: a means through which to objectify our perceptions with respect to the needs of multi-ethnic populations in terms of educational delivery. It is safe to say that a reasonable beginning for this task would be to redefine the characteristics of the inclusive social groups



and isolate their respective needs. The work of both Willis and Weiss is representative of endeavors directed to this end. Another avenue available to us as educational professionals is to reach back as we reach forward, and seek more basic definitions rooted in the cultural history of the groups we are impelled to serve.

Just such a social/anthropological approach of understanding self-defined contemporary groups has been recently addressed by Peter Marsh (1988). They examined the common attributes of tribes, linking the past with the present to shed light upon out present state of social development. Just as our ancestors banded together to hunt and gather more effectively, as more complex needs came into play, the bands formed themselves into tribes to ensure the viability of succeeding generations. Marsh explored the needs and motivations which compel us to band together to ensure physical and emotional survival.

The tribal qualities of the human species color almost every aspect of our lives. They are so basic to us that, were we ever to lose them, it would mean that we had mutated into another species altogether.

[p. 6. Marsn, 1988]

With the passage of hunting activities as a physical necessity, ritual hunting as a purely symbolic activity has become an integral part of culture. Sports, the observation, strategy, and pursuit skills inherent in science, technology, and the arts all encompass elements of the hunt, and are therefore representative of the innate desire to band together toward the attainment of mutual goals (Marsh, 1988:7-8).

...but if the tribal urges of a particular group are frustrated they are likely to find an alternative and often damaging outlet. They cannot be suppressed because they are too basic and so, if the ruling authority in any society deny the expression of tribalism in a helpful way, the young males will not simply remain calm and passive. Instead, they will form



unofficial tribes and attack the culture which has attempted to cut them off from their primeval inheritance.
[p. 8. Marsh, 1988]

This tribal-bonding process can be seen among many of the ethnic communities as well as within American public schools. For example, whenever groups of young males are encouraged to gather together in establishment-sanctioned activities - sports, debate, politics, or music - and access to such activity is relatively unrestricted, our society prospers. Where the criteria of inclusion is too narrow - e.g., height, grade point average, parental income, acquired skills, or experience - we see the development of asocial "tribes", or to translate the phenomenon to more idiomatic terms, gangs. An expanded awareness of the importance of availability of group activities in early elementary schools could provide all children with the skills and abilities necessary to successfully participate in socially-sanctioned groups and subsequently channel tribal energies into a constructive merging of social and educational elements from which we can derive the highest utility of both.

If budgetary or administrative constraints prohibit the heterogeneous participation of all students in group efforts, alternatives such as removing co-curricular activities out of the schools and into city or community recreation programs, with the utilization of school property after school hours, could be considered. An example would be to reschedule the academic day to provide an activities period following the last academic period for the pursuit of music, drama, or athletic activities free from any constraint based upon academic achievement or specialized criteria.

According to Marsh such activities provide the same kind of excitement - planning and tactics, risk, attire, and oral bonding - that is achieved through clan-type grouping. The entire tribal dichotomy is re-created out of nothing, or



3.

more specifically, it is born out of the chaos and duality of their oppressed lives. The proven advantage is that children involved in co-curricular activities have lower dropout rates, demonstrate better social skills, they go on to secondary and post-secondary education in greater numbers.

The implications of such a model in the prevention of gang formation through increased relevant student participation are clear, as well as the potential for the extrapolation of such a mindset upon other aspects of educational practice and delivery. Through the interdisciplinary view, a way to harness the social energy of our students may now be taking shape. However, it is clear that no one program or area of restructuring can address the range of needs that has been related to public education. Through an interdisciplinary review of research findings, a direction may now be taking shape. In this effort it is clear that parent and community involvement, student perceptions, school restructuring and increased individualized programs are necessary to satisfactorily address the diversity of challenges facing public education.

In part three of this series we will consider the question of educational restructuring from the point-of-view of a study of the role of student perceptions in terms of the needs and objectives of effective multi-ethnic educational delivery.

BIBLIOGRAPHY

The Achievement Council. <u>Unfinished Business: fulfilling our children's promise - a report from the Achievement Council</u>. Los Angeles: The Achievement Council, 1988.

Alman, Emily. "The Child of the American Poor." <u>Perspectives in the Education of Disadvantaged Children</u>. Ed. Milly Cowles. Scranton: International Textbook Company, 1967.



- Aronowitz, S., and Giroux, H. <u>Education Under Siege: The Conservative, Liberal and Racial Debate Over Schooling</u>. South Hadley: Bergin and Garvey Publishers, Inc., 1985.
- Bowles, S., and Gintis, H. <u>Schooling in Capitalist America</u>. New York: Basic Books, 1977.
- Coleman, J.S. <u>Equality of educational opportunity</u>. Washington D.C.: U.S. Department of Health, Education, and Welfare, 1966.
- Commission on Postsecondary Education. <u>The Eisenhower Mathematics and Science education Program</u>. Sacramento: CPEC, 1990.
- Daniel, K.B., and Keith, J.A. "Revising Guidance Practices: An Integrative Process." <u>Perspectives in the Education of Disadvantaged Children</u>. Ed. Milly Cowles. Scranton: International Textbook Company, 1967.
- Freire, Paulo. Pedagogy of the Oppressed. New York: Seabury Press, 1970.
- Hollands, R.G. <u>The Long Transition: Class, Culture, and Youth Training</u>. London: Macmillan Education Ltd., 1990.
- Kimball, S.T. <u>Culture and the Educational Process: Anthropological Perspectives</u>. New York: Teachers College Press, 1974.
- Marsh, P., and Morris, D. Tribes. Layton: Gibbs Smith Publishers, 1988.
- Masters, B. N. <u>Culture and Literacy in Public Education: Student Perceptions.</u>
 Diss. University of California, 1989. Ann Arbor: UMI, 1990. 9014245.
- The National Commission on Excellence in Education. A Nation At Risk: The Full Account. Cambridge: USA Reseach, 1984.
- Weiss, M.J. The Clustering of America. New York: Harper and Row, 1988.
- Willis, P. <u>Learning to Labor: How Working Class Kids Get Working Class Jobs.</u>
 New York: Columbia University Press, 1977.



ARTICLE ABSTRACT:

Culture and Literacy in Public Education: Student Perceptions.

Billie Nave Masters, Ph.D. Social Science: Social Psychology. Advanced Education Research Center Tustin, California

The variety of evidence including rising dropout and illiteracy rates suggests that public education in the United States requires substantial restructuring. Despite the widespread recognition of the need for change, there is little consensus on the direction that change should take. The present study is based on the premise that primary input to policy reformulation must include the perceptions and attitudes of students themselves toward their education.

Drawing from social learning theories, a theoretical framework is developed which focuses on the role of student perceptions and interactions in the educational process. Junior high and high school students sampled from five school districts representing diverse ethnic and economic backgrounds were administered questionnaires. Information was obtained regarding student perceptions in relation to literacy, dropout activity, academic ability, and influences to stay in school. This information was examined as a function of socioeconomic regions, grade level, gender, ethnicity, and primary language. Hypotheses derived from the theoretical framework were tested with respect to the effects of the latter variables on student perceptions, attitudes, and intentions relating to their educational experiences.

Results generally corroborated the thesis that successful educational restructuring must be predicted on student needs. The implications of the research results were formulated as recommendations for public school restructuring, especially addressing the goals of decreasing dropout rates and illiteracy. Suggestion for future research on the crucial role of student needs and perceptions in the educational process were discussed.



Culture and Literacy, Part 3: Student Perceptions

INTRODUCTION:

Who are the American Indians? According to the 1990 census, we are 510 Federally recognized tribes, speaking 250 languages and represent approximately 1,959,234 people living in the United States. In 1980, we had an average annual income level of 13,678 dollars, 8.1% of Indian adults over the age of 25 had completed less than 5 years of school, and as a culture we experienced an average life expectancy of 71.1 years. We are a people in which the will to survive: spiritually, culturally, and physically, has been powerfully maintained. Yet, time and experience has given us the capability of accommodating to mainstream societies' expectations so thoroughly that we live and contribute at every level of society. We are tribal people who have evolved a unique relationship with this government and nation through over three hundred years of treaty negotiations. We live on reservations, rural, urban, and suburban communities. We are federally recognized, stateaccepted, tribally identified and self-defined people who have developed and maintained a special relationship to the earth. Yet we are referred to as onreservation, off-reservation, and landless tribes. We are proud people who create, invent, teach, preach, lead, follow, and establish. We support communities, churches, and businesses. We have been placed on reservations, denied our right to private property, freedom of religion, access to education, health, social services, and labeled as wards of the government. We are a people who have struggled for our lives, fought for our country, and are still willing to defend our rights and the rights of future generations. We are the first Americans, who currently labor with the label of "minority". This status is a governemntally imposed legacy that illustrates our legal, material, health, and educational status.



This article is intended to explore the area of education with respect to this cultural group. While there is national consensus on the need to restructure public education, there is little or no consensus on the area or direction of that that process should take. Refining that issue to Indian education, there is a long awaited desire for educational improvement.

The position expressed in through this material is that all areas of education must be restructured if we are to design an effective system of education for a pluralistic society. Based on the premises that truths and ability exist among all societies, that there can be no educational excellence without equity, and that restructuring cannot occur without a focus on the social interaction of class, gender and ethnicity: the following considerations are offered.

- -Currently utilized definitions of the components of American education, rooted in the values of the 19th century, are no longer applicable.
- -The mechanics of the schooling of our youth is a politically structured process. The realization that the earlier political ideology is no longer relevant must be recognized and addressed.
- -If our nation if going to enter the 21st century with the level of education required to maintain the quality of life we desire, then we must address the educational needs of our youth.

All of the areas listed must be approached from a framework of social interaction. To some degree, recognition of the following premises is necessary to sculpt the direction of educational restructuring. One, what has historically been called schooling has failed the majority of students. Schools are not preparing our youth to become informed, active and participating citizens. Schools sort, select, and legitimate class. The actual results of the activities of educational institutions run counter to



their stated goals. Schools have become the site of class, ethnic, and counter-cultural conflicts. Knowledge and the processes through which it is transmitted is an inherently political exercise. The structure of the schools has denied the presence of mind over matter. Individuals are no longer passively socialized: they avoid, bargain, negotiate, and resist. The need is to focus on social interaction, not systems. Change will come through consciousness.

Questions that seek answers at the deeper level must be addressed. Are there class, gender and ethnic differences in educational achievement? In examination scores? Does the school structure and policy alienate some pupils? What is the effect of teacher expectations? Labelling? What determinants of inequality lie outside of the education system? Is there sufficient support from Piaget's Social Relativity Theory to support the position that social formation is produced between people, through social inter-actions?



PART I - THEORETICAL FRAMEWORK

Within the existing body of literature on educational practice, there is a void with respect to scholarship relating students' perceptions to the process of their educational experience. Although sub-group studies have been performed which relate student records and specific curricular results charted through test scores to overall educational performance [Hughes, 1953; Aiken and Dreger, 1961; Demos, 1962; Hill and Giammetteo, 1963; Aiken, 1976; Espinosa, Fernandez and Dornbusch, 1979; Lancaster, 1985], no material is currently available which takes into account subjective student perceptions as a factor in educational performance.

From the perspective of forming a viable theoretical frame from which to pursue this issue, there are two writers whose contributions are of particular importance. These are Russell Fazio and Jean Piaget.

The laboratory studies of Fazio and his associates on attitude formation and the relationship between attitude and behavior are of particular significance to education [Fazio and Zanna, 1976; Regan and Fazio, 1977; Kahle, Klingel and Kulka, 1981].

Fazio and Zanna [1976] suggest that:

...it may be fruitful to view confidence both as a variable which mediates the effect of the manner of attitude formation on attitude-behavior consistency and as one which, independent of how the attitude is formed, acts as a determinant of attitude-behavior consistency.



In a further study conducted to test the hypothesis that the method by which an attitude is formed is a crucial variable affecting attitude-behavior consistency, they found:

...that direct behavioral experience produces an attitude which is more clearly, confidently, and stably maintained than an attitude formed through more indirect means [Regan and Fazio, 1977].

The importance of Fazio's work is that not all means of influencing perceptions have equal impact on the individual. Perceptions created through non-participatory experience are far less permanent and have less effect upon behavior than those formed through more direct and concrete experience. Being told repeatedly by television commercials that some particular food product is good for you and tastes great may influence a person to think about that food in a positive way. However, if they find that it tastes terrible or makes them ill, the negative perception created by their direct experience is more likely to remain in tact and permanently influence their subsequent behavior. This is not a trivial issue where education is concerned. Parents, teachers, school administrators, government officials and the media are all very clear and consistent in their message with respect to the value of education. Nevertheless, the percentage of young people who drop out of school early is still shock-ingly high. It must also be noted that this dropout rate is not uniform across all segments of our society. The current dropout rates among ethnic minorities is disproportionately higher [Hodgkinson, 1986].

Fazio's work is relevant in that it suggests that the attitude of such students is being formed by a focus on different experiences from those intended by the schools, or made by students who do not perceive school as a positive experience. The present system seems to work well for a portion of the overall



population, English-speaking males and some of the upper and middle-class students recently emigrating from Asian and European countries, but what of the other segments of our society?

It has been demonstrated that higher dropout rates among females and minority groups cannot be accounted for by any variables associated with lower intelligence or diminished intellectual capacities. Most five-year-olds enter school curious, active, and eager to learn, yet the educational system of the United States is not fulfilling the expectations of over one-third of our students, and up to sixty percent of inner-city youth.

Illumination of this paradox can be sought through an examination of the work of the Swiss structural psychologist, Jean Piaget. His theories of learning and cognitive development posit an active process involving the interaction between inherent properties of the developing nervous system, and the child's behaviors with respect to interaction with the environment. Although the aspects of Piaget's model concerning stage development and environmental interaction are widely accepted, there are other aspects of Piaget's model that are equally valuable if not as well known. Piaget theorized that the quality of social interaction between adult and child strongly influences the child's cognitive development.

According to Piaget [1971], mental development is dependent upon four determining factors: maturation - physical maturation of the nervous system; experience - handling, moving, per-ceiving and conceptualizing objects; social interaction - playing, talking, and working with others; and equilibration - building or rebuilding mental structures through manipulation of the first three factors. The capacity for performing symbolic operations develops step-by-step. Through maturation the child acquires the ability to perform adult-type thought. However, only through social interaction, discussion, and



experience will the cognitive processing become more sophisticated and complex [Piaget, 1968].

Piaget's work suggests that object, activity, and situation are all part of a single integrated system in which the social aspect and the logical aspect are inseparable [Piaget, 1971]. The developing child's attitude toward learning is related not only to the informational content of instruction, but also to their affective responses to the teaching environment. This model predicts that the curriculum, and learning environment form an inseparable association in the mind of the student.

Piaget consistently maintained that social interaction is an essential factor in the development of knowledge and that one cannot approach the advancement of intelligence merely from the point of view of the isolated individual [Charles, 1974:31]. Emile Durkheim, the French sociologist, had a major influence upon Piaget's position that neither sociology nor psychology hold the answer to individual development. Instead, these two disciplines deal with the same objective from two distinct but complementary viewpoints [Kitschener, 1981:255].

Recent translation by Richard F. Kitschener [1981] point to the crucial role of society in the develop-ment of the individual's cognitive structure.

Piaget advances a sociological relativism [relationalism] in which all social factors are reducible to social relations and these, in turn, are reducible to rules, values, and signs. Piaget's theory of values takes the form of a social exchange theory characterized in an abstract logical way. Piaget claims social exchange requires normative principles of reciprocity and that individual social develop-ment results in such an equilibrium because rationality



itself is social and based on social cooperation [Kitschener, 1981; p. 253].

Thus, human development can be characterized as an increase in equilibrium manifested both in individual action and in social interaction, making it necessary for the student to be an active participant in the learning process. By contrast, the present situation in education is described by Paulo Freire as follows:

Education thus becomes an act of depositing, in which students are the depositories and the teacher is the depositor. Instead of communicating, the teacher issues com-muniques, and making deposits which the students patiently receive, memorize and repeat. This is the "banking" concept of education, in which the scope of action allowed to the student extends only as far as receiving, filing, and storing deposits. They do, it is true, have the opportunity to become collectors or catalogers of the things they store. But in the last analysis, it is the individual themselves who have filed away through the lack of creativity, transformation, and knowledge in this [at best] misguided system. For apart from inquiry, apart form praxis, men cannot be truly human [Freire, Pedagogy of the Oppressed; 1970].

Freire's ideology parallels Piaget's position on the necessity of interaction and discussion with respect to issues of development. This concept of social exchange value lies at the heart of Piaget's social psychology.

Piaget thus claims that the social exchange of values between two individuals has a pattern, structure, or logic to it; a logic involving



a set of relations between [1] an action performed, [2] a satisfaction received, [3] a debt incurred, and [4] the payment of this debt.

This system of relations has a logical structure to it, a kind of [partially] structured equilibrium Piaget calls regulation, as distinct from a group-ing and a rhythm [Kitchner, 1981; p. 258].

To put this concept into an educational context is to simply say that based on an initial action from the authority figure, a teacher or other educational professional, a personal satisfaction is either received or not received by the student. The quality of that initial satisfaction is determined by the student's response to the quality of the interaction with the teacher and school. Thus, either the student will feel the obligation of "payment" back to the environment, or will feel that no recipro-cation is required. If the debt is perceived by the individual, there will be clear internal motivation to honor the debt and make payment in order to achieve equilibrium.

Piaget stresses social interaction as a necessary condition for intellectual development. Although this concept of social reciprocity is at the core of Piaget's model, this feature has been almost completely ignored by educators and academicians who are otherwise influenced by Piaget's cognitive theory. This is most unfortunate, for the social reciprocity model may be extremely relevant to understanding many of the problems of the present educational system, as well as those of the greater society.

We now return to the question posed by Fazio [1976-77] and his associates: Does the method by which an attitude is formed affect its persistence and impact on behavior? Fazio and associates found that perceptions which are formed by direct experience are more consistently and tenaciously held by the individual than those perceptions which are acquired indirectly. What does this predict about the perceptions formed by a person who experienced a



consistent pattern of frustration, stress, and failure during the early years of the educational experience?

It should really be no surprise that perceptions formed through this kind of direct experience would prove to be both devastating and highly resistant to change. It should also come as no surprise that students holding such perceptions would tend to limit school participation and cease school attendance as soon as that option presented itself. This being the case, it could be predicted that ethnic minority students, operating from culturally defined values, would experience less rewarding interactions with teacher representative of the societal mainstream, and thus incur less social debt than could be ascribed to a less diverse population. A model structured to test this viewpoint would seem to offer a reasonable explanation for extremely poor performance and high dropout rates among such student groups.



PART II - THE MODEL

The intention of this research was to provide an avenue to increase understanding of the reasons why the present educational system of the United States seems to be creating a situation in which large numbers of students are illiterate or simply drop out of school. The following model is pro-posed as one possible explanation of the process by which students make decisions about whether the education they are receiving represents a worthwhile process with respect to personal develop-ment. This model stems from the Piagetian model of Social Structuralism, also referred to as Social Relativism or Reciprocity.

STAGE I - A social action is initiated.

STAGE II - The recipient experiences satisfaction.

STAGE III - A social debt is incurred, recipient experiences disequilibrium.

STAGE IV- The recipient works toward reciprocity, the debt is paid, equilibrium is achieved.

One of the most important features of this model is that it posits that the students are influenced not only because of the content of instruction, but also by the emotional responses with they have toward the teaching environment and the individuals with whom they are interacting. The model presupposes that the personnel, curriculum, learning, and school are inseparably associated in the mind of the student. Based on this premise, learning and the school environment reduce to one experiential category in the student's mind and become inseparable during the thinking process. Students do not separate the cognitive/emotional responses to the information to which they are exposed from their cognitive/emotional response to the teachers and environments that provide the context of instruction.



A student with little history of positive interaction with teachers, or few previous experiences of having achieved success in school, is very unlikely to make an objective, predictable response. Instead of interpreting these feelings of frustration, and confusion as being signs of an ongoing learning process that can be mastered with continued effort and assistance, they interpret such feelings as evidence that continued effort is futile.

Many of the frustrating and humiliating educational events experienced by non-mainstream students are not readily recognized by the classroom teacher, who is most often a member of the mainstream population. The subtleties of cultural clashes by the unaware and unknowing class-room teacher are many. The same pitch and tone of voice used only in intense anger among the American Indian, Alaska Native, and Hispanic populations is often the tone and volume used by mainstream teachers in the classroom. Even if the exchange is considered joking by the teacher, it is often considered rude and insulting by many Indians and Hispanics. Discipline and control by disapproval, humiliation, and embarrassment in front of peers is extremely offensive and counter to social norms among many ethnic minorities, yet it is common practice among main-stream teachers and administrators. Many of the standard procedures used to criticize students for minor infractions or errors in mainstream schools would be reserved in other cultures only for responses to the most severe violations of social norms.

Long-term continuation of this situation would not produce the type of social reciprocity that Piaget states is crucial to allow education to proceed. Therefore, it is not surprising that students who chronically find themselves in this situation with respect to their interactions with the educational environment experience it as being far more unpleasant and less rewarding than their teachers estimate it to be. Such students seek a level of participation which is no more than absolutely necessary to avoid punitive



consequences. These kinds of feelings have a lasting strong influence on a student's attitude about the value of her/his education, sense of accomplishment, and desire to continue. It is not just grades and test scores, but emotional responses and peceptions toward the educational process itself that indicate success or failure of the individual student.

Nearly all of the previous research related to dropout rates and illiteracy have focused on the results of academic achievement tests and have seldom considered emotional responses and effective evaluations by the students. Given the theoretical framework previously described, it is possible to generate a series of readily testable hypotheses related to how a cross section of students will perceive the quality and value of their own educational experiences.

HYPOTHESIS 1: Ethnic minority students will hold lower opinions of their academic achievement than mainstream population students.

This position is derived from the differences between what is tacitly assumed by the classroom teacher as situations demanding a response [creation of social debt] and what the student accepts as a situation requiring genuine effort and a perceived need for positive response [perceived social debt]. A clear distinction between these views are more likely to exist between a mainstream teacher working with a student from a different cultural background than would occur when working with a student with the same sociocultural background. The less often students feel a social debt toward the classroom teacher, and the more often they feel an unrepaid social debt is owed to them by the school, the more negative will be their overall opinion of the educational process. Conversely, the



assumption of a debt owed to the teacher which is never repaid instills in the instructor negative attitudes directed toward certain student groups.

HYPOTHESIS 2: Female students will hold lower opinions of their academic ability than male students.

Even though legal mandates have brought about change with both the Civil Rights Act and the Sex Discrimination Act, society has not yet incorporated these changes into mainstream thinking. The educational system has not effectively addressed these issues in a way that has eliminated their effects. Even though a large percentage of teachers, especially among the lower grades, are female, public school curriculum and the educational system in general still reflects a predominantly male perspective. This leads to a larger proportion of interactions in which female students do not experience a social debt toward their instructors in the same manner as male students.

HYPOTHESIS 3: Inner-city students will hold a lower opinion of their academic achieve-ments than will suburban or rural students.

HYPOTHESIS 4: Suburban students will hold a lower opinion of their academic achieve-ments than rural students.

The rationale behind hypotheses "3" and "4" concern the relative quality of social interaction between students and adults in different environments. The social environment of rural students, as well as their child/adult interactions, is quite different from that of urban or suburban students. In



many non-rural settings, the frequent need for both parents to seek full-time employment means that a concentrated amount of time must often be spent on activities outside the home, leaving considerably less time for involvement in family life. Because of the higher level of satisfaction regarding social interactions with adults in general, it is pre-dicted that rural students perceive their educational experience more positively than would urban and suburban students. This would be expected to be the case regardless of the level of actual academic achievement.

HYPOTHESIS 5: Students from non-English speaking or limited

English speaking homes will hold a lower opinion

of their academic ability than students from homes

where standard English is spoken.

Throughout the United States, school curricula virtually always requires a fluent command of the English language. Those not proficient in standard English find the educational process far more difficult, frustrating, and unpleasant. Since they have a more difficult time under-standing what is expected of them, and interacting with teachers and authority figures is likely to be more labored and inhibited through greater potential for misunderstanding, the difficulties in establishing and maintaining a reciprocal social relationship will be con-siderably greater and will result in the student's perception that they owe nothing to the system due to a perceived lack of interest in their needs and feelings.



PART III - RESEARCH DESIGN

This study involves a comparison among four regional public school districts and one federally operated residential boarding school in terms of student perception of the educational experience. The following represents the methodological components of the research design.

A. Subjects/Sample

The sample consisted of 32 students drawn from five geographical locations in California and Oklahoma. The Oklahoma sample was a rural school on an Indian reservation, but was not restricted to Indian students. With respect to the California sample, the object was to direct criteria toward the inclusion of a range of socioeconomic levels and ethnic groups. The four districts chosen included Los Angeles and Santa Ana [urban, multi-ethnic], Irvine [suburban], and Sherman Indian High School in Riverside, California [a federal boarding school for American Indian reservation students].

In each district a middle school and high school were randomly selected from the districts which were willing to participate and met the inclusion criteria. Thirty-two students from the eighth grade level and thirty-two from the eleventh grade were selected at each site.

B. Procedure

Data was gathered at the Oklahoma site in 1986, and in California in 1987. The data was collected by means of questionnaire, examination of



district reports, and interview. The questionnaire and the schedule-structured interviews took place after the purpose of the study was explained to the participants. Interviews were conducted by credentialed teachers, not employed at the survey site, after having received orientation and training by the researcher.

The questions were concerned with perceptions and opinions. Areas of query were originally divided into six classifications: socioeconomic characteristics, reading, math, perceptions, dropout, and educational reform. The items within the questionnaire were designed to address the issues affecting educational success. A pretest was administered to grades 6 through 12, for the purpose of sharpening the clarity of the goals of the study. All students in the district, present on that day, participated.

The record of each individual student was checked and arranged into a file documentation. Each student was identified by a number for the administration of the questionnaire and the interview. A trained assistant assembled and organized the data.

The pretest questionnaire originally contained 52 items, which resulted in 47 items in the final version.

C. Independent and Dependent Variables

The dependent-variable questions were designed around the four domains of literacy, dropout data, influences to stay in school, and the student's perception of their academic achievement. The independent-



variable items identified the student's school district, grade level, gender, ethnicity, and primary language spoken at home. The independent variables were selected to determine if the typical categories proposed by government agencies and educators as related to student achievement and dropout activity are in accord with the student's own perceptions of their educational experiences. The focus of this line of inquiry was to determine if students felt these areas were in fact relevant in perceptions, to literacy, dropout activity, and major influences in student retention.



D. Statistical Analysis

The univariate analysis presents the frequency, percentages, and graphic data. The bivariate analysis investigates the relationship between dependent and independent variables by applying the Chisquare test.

E. Computer Information

The computer package utilized for this data analysis was the SPSSX: 2nd Edition. The graphical presentation of the univariate analysis was developed through the application of the TEL-GRAPH software package.



PART IV - DATA

In accordance to the specifications stipulated by the design component of the study, the following charts represent that section of the pertinent data which corresponds to the hypotheses forwarded in Part One. The material is organized in keeping with the areas of significance previously described, and the data is displayed so as to chart key questions of the inquiry and register significant consistencies and deviations.

The following data is presented as a series of sequentially numbered tables, which are matched to items numbers which correspond to questionaire data derived as a part of the original research. Each table summarizes question responses with respect to the variables being analyzed, and tabulated in terms of their degree of significance.



Table 4.27 - Item #29: "Do you consider yourself smart?" By Ethnicity. (p = .0001)

<u>I</u>	requency		<u> </u>	<u>Percentile</u>		
	yes	no		yes	no	
White	85	6		93	7	N = 91
Hispanic	80	27		75.	25	N = 107
Am. Indian	53	35		60	40	N = 88

$$N = 218$$
 $N = 68$

N = 286

Analysis of this item indicate that there is a significant corellation between ethnicity and student perceptions regarding acheivement of their academic ability. Data is supportive of the first hypothesis regarding ethnic-minority students and their perception of their achievement and ability.



Table 4.28 - Item #41:
"Do you consider yourself good in math?"
By Ethnicity. (p = .02)

<u>F</u>	requency		<u>I</u>	<u>Percentile</u>		
	yes	yes no		yes no		
White	68	24		74	26	N = 92
Hispanic	53	52		50	50	N = 105
Am. Indian	55	33		63	37	N = 88

$$N = 176$$
 $N = 109$

$$N = 285$$

The results indicated in Table 4.27 are confirmed and focused through redirection of subject-specific inquiry. Relationships suggest positive correlation between ethnic-minority groups as contrasted to more definitive separation in results from mainstream students.



Table 4.33 - Item #29:
"Do you consider yourself smart?"
By District. (p<.0001)

	Freque yes	ency no	Perce yes	entile no	
Oklahoma (rural)	51	14	78	22	N = 65
Irvine	61	2	97	3	N = 63
(suburban)					
Los Angeles	41	22	65	35	N = 63
(urban)					
Santa Ana	54	9	86	14	N = 63
(urban)					
Sherman	36	26	58	42	N = 62
(reservation)					
	N = 243	N = 73			N = 316

This table pertains to self-perception as related to the third and fourth stated hypothesis. Responses indicate lowest estimations of academic ability among inner-city and reservation students.



Table 4.30 - Item #29:
"Do you consider yourself smart?"
By Gender. (p>.84)

	<u>Frequ</u>	Frequency		Percentile		
	yes	no		yes	no	
Female	121	40		75	25	N = 161
Male	115	30		79	21	N = 145
	N =236	N = 70				N = 306

With respect to data as analyzed across all inclusive groups, these numbers do not support the second stated hypothesis. It can also be noted that in addition to an absense of correlation to expected conditions, the data actually reflects a result opposite of what was originally expected.



Table 4.31 - Item #48: "Rate yourself as a reader." By Gender. (p>.41)

	Better than most.	As good as most.	I get by.	With little understanding.
Frequency				
Female N = 159	38	79	37	5
Male N = 139	26	67	40	6
	N = 64	N = 146	N = 77	N = 11

Percentile

Female	24	50	23	3
Male	19	48	29	4

The results of the data analysis show no significant correlation to second hypothesis criteria. Although it does indicate trackable trends across all tested groups.



Table 4.32 - Item #41:
"Do you consider yourself good in math?"
By Gender. (p>.09)

	<u>Frequ</u>	Frequency		<u>Percentile</u>		
	yes	no		yes	no	
Female	96	67		59	41	N = 163
Male	100	43		70	30	N = 143
	N =196	N = 110				N = 306

With the inclusion of subject-specific criteria, there is still no significant correlation between gender and perception of academic ability. Tendencies appear stable across all tested groups in regard to gender differences.



Table 4.33 - Item #29:
"Do you consider yourself smart?"
By District. (p<.0001)

	Frequency		Perce	entile	
	yes	no	yes	no	
Oklahoma (rural)	51	14	78	22	N = 65
Irvine (suburban)	61	2	97	3	N = 63
Los Angeles (urban)	41	22	65	35	N = 63
Santa Ana (urban)	54	9	86	14	N = 63
Sherman (reservation)	36	26	58	42	N = 62
	N = 243	N = 73			N = 316

This table pertains to self-perception as related to the third and fourth stated hypothesis. Responses indicate lowest estimations of academic ability among inner-city and reservation students.



Table 4.34 - Item #14:
"Do you think you know math well?"
By District. (p = .017)

	Frequency		Perce	entile	
	yes	no	yes	no	
Oklahoma (rural)	50	14	78	22	N = 64
Irvine (suburban)	47	16	75	25	N = 63
Los Angeles (urban)	30	32	48	52	N = 62
Santa Ana (urban)	38	25	60	40	N = 63
Sherman (reservation)	37	25	59	41	N = 62

N = 202 N = 112

N = 314

In these responses, the correlation to the hypotheses regarding region and self-perception become more pronounced with the introduction of subject-specific criteria. Data indicate more positive rural and suburban responses.



Table 4.35 - Item #48:

"Rate yourself as a reader."

Frequency by District (p = .0004)

	Better	As good	I	little	
Location	than	as most.	get	under-	N Row
	most.		by.	standing.	
Oklahoma (rural)	18	32	13	0	64
Irvine (suburban)	20	33	8	1	62
Santa Ana (city)	13	36	12	2	63
Los Angeles (city)	9	25	23	2	59
Sherman (reservation)	5	24	23	7	59
	N = 65	N = 150	N = 79	N = 12	N=3 <u>07</u>

Percentile.

Oklahoma	28	51	21	0
Irvine	32	53	13	2
Santa Ana	21	57	19	3
Los Angeles	15	42	38	5
Sherman	8	41	39	12



Table 4.36 - Item #37: "Do you usually know answers to teacher's questions?"

By District. (p<.0001)

	Frequency		Perce	entile	
	yes	no	yes	no	
Oklahoma (rural)	56	8	87	13	N = 64
Irvine	55	8	87	13	N = 63
(suburban)					
Los Angeles (urban)	40	23	63	37	N = 63
Santa Ana (urban)	53	10	84	16	N = 63
Sherman (reservation)	33	28	54	46	N = 61
	N = 237	N = 77			N = 314

With respect to this table, the higher rating rural children gave themselves relative to urban children was slight even though it was statistically significant. The analysis indicates strong support for the third hypothesis.



Table 4.37 - Item #29:
"Do you consider yourself smart?"
By Primary Language. (p = .0026)

]	<u>Frequency</u>		<u>Percentile</u>			
	yes	no		yes	no	
English Speaking Homes	122	20		86	14	N = 142
Spanish Speaking	69	25		73	27	N = 94
Am. Indian Language	30	19		61	39	N = 49
N = 221 N = 64					N=285	

With respect to the fifth stated hypothesis, there is a definite correlation between primary language and perception of academic ability. The data indicates that those students who speak American Indian languages as their primary language have the highest significance.



Table 4.38 - Item #48: "Rate yourself as a reader." By Primary Language. (p = .0022)

Frequency

	Better than most.	As good as most	I get by.	With little understanding	N value
English	38	71	29	3	141
Spanish	13	47	27	2	89
Indian Languages	5	19	18	6	48
	N = 56	N = 137	N = 74	N = 11	N = 278

Percentile

English	27	50	20	3
Spanish	15	53	30	2
Indian Languages	10	39	38	13

This table confirms confirm the hypothesis that non-English speaking students have a generally lower perception of their individual academic abilities than standard English speakers.



Table 4.39 - Item #41:
"Do you know math well?"
By Primary Language. (p = .0004)

	Frequency		<u>Percentile</u>			
	yes	no		yes	no	
English Speaking Homes	109	35		76	24	N = 144
Spanish Speaking	45	47		49	51	N = 92
Am. Indian Language	29	20		59	41	N = 49
$N = 183 \ N = 102$					· · · · · · · · · · · · · · · · · · ·	N=285

With the introduction of subject-specific criteria, discrepencies between language groups become increasingly significant. Data indicates a strong correlation between primary language and academic self-perception, with lowest values recorded among American Indian speakers.



PART V - DISCUSSION

The presented research examined the relationship of sociocultural factors to the dependent variables of literacy, dropout activity, influences upon retention, and academic success. The results stemming from these analyses support Piaget's Social Reciprocity Theory in a number of significant ways.

In a sense it can be said that the education system has presumed it is the child's responsibility to try to adapt to the system and work within it. In actuality, this is possible only after the child has attained a threshold level in terms of education, experience, and awareness. If the educational system has fulfilled its responsibility to our youth, they should both value and continue to gain value from their academic experiences. It is reasonable to expect, in a scenario in which children and adults are working together, that the classroom teacher would be the member of this partner-ship who is expected to display greater inclusion, initiative and adaptability. This model assigns principle responsibility to the education system, because it is the school personnel who are required to have the training and the legal obligation to be knowledgeable of student needs. The mandate to display some measure of flexibility to correct the course action which is clearly not effectively meeting the stated purpose is inherently a personnel responsibility.

Historically, society has expected young children to be a captive audience who are expected to adapt to an inflexible learning environment. The assumption of passive socialization by participants requires reconsideration. In reality, they bargain, negotiate, avoid and resist. The high level of failure demonstrated by the educational system of this country makes it abundantly clear that this approach can no longer continue. To believe that the child should be made to accept the burden of adaption is analogous to a doctor critizing an unconscious patient because he/she has not sustained the type of



injuries the doctor finds most enjoyable to treat, or for a businessman whose company has gone bankrupt to criticize the public for not being "considerate" enough to buy only those products he finds pleasant to manufacture.

If our current educational challenges are to be overcome, one of the essential requirements is a broader, more holistic focus. This fresh perspective must consider not merely the role of the individual student in school, but also the effect of all adult/child interactions along with the myriad of unrecognized cultural, economic, and social factors which actually determine success or failure of a school. Additionally, serious consideration must be given to the restructuring of the education system in order to reflect and address the needs of our pluralistic society.

The concept of restructuring is not the same as reform. School reform, as the term is generally used, implies modification of an inherently workable system. This approach frequently involves some permutation of the notion of "going back to basics", enforcing old rules more stringently, and returning to a preconceived philosophy in terms of curriculum and instruction. The fallacy of this line of reasoning is the mistaken view that the school system worked excellently a generation ago but has only recently suffered from stagnation because the "good old-fashioned" methods that worked so well once upon a time have fallen into disuse. But what is amply clear is that the myth of an American education system that equally served the needs of <u>all</u> of its students is a comforting delusion with no basis in fact.

The remedy for this situation will take far more than simply making a few minor policy changes. No minor reforms are going to achieve what is needed. It will require a wholesale restructuring; a major rethinking of the basic assumptions upon which the educational system is based, and a major revision of the basic policies and methods that have been used in the American educational system since its inception.



Recommended Restructuring

Data extrapolated from the present study clearly points to the need to create curriculum which is more sensitive to cross-cultural class and gender differences and reflects the input of teachers experienced with these issues. A standard general education core curriculum could be formulated consisting of reading, writing, mathematics, science, and technology which would form a uniform standard for all segments of our culture. The teaching of this core curriculum would require a single national standard, but humanities, history, fine arts, social science, and vocational arts should be presented in a more flexible, class and culturally sensitive manner.

Standardized testing could be used to assess mastery of the core curriculum objectives, as these areas are most vital with respect to future employment. This standard core curriculum would be enhanced by a set of electives which would embrace the breadth of human achievement and provide instruction and insight into the varying textures of human culture. The humanities courses need not be standardized. These elective courses could be taught from a variety of different class, gender and cultural perspectives, allowing students to explore their heritage, or expand their understanding of the world at large, in addition to gaining insight into the development of western civilization.

Restructuring Public School Criteria

In a pluralistic society such as ours, a substantially greater variety of available instruction in the arts and humanities could be made available as a part of curriculum. The fact that what have been called the "classics" are mostly works created outside of this culture raises the question of why there is an insistence on exclusively promoting these works. The selection of which



"classics" in literature, philosophy, and the arts will become a part of curriculum should be made with some consideration of the cultures which comprise the students, and subsequently the community, being served. The concepts and methods taught in order to further the understanding and appreciation of the humanities can be applied to all "humanities", and could surely be extended to encompass a greater variety.

In Piagetism terms, greater variety and flexibility in the public school curriculum would incur a greater social debt among greater numbers of our youth. Analysis of the set of dropout variables also demonstrates the need to implement the kind of restructuring suggested above in order to develop a positive identity and sense of cultural self-worth among all youth in our pluralistic society. Education involves more than just the transmission of information. Knowledge and how it is transmitted is political. In addition to providing a positive inclusive educational experience for all youth, this process would provide the personal satisfaction (incur the social debt) necessary to stimulate a desire to return a greater respect and contribution to the society.

Analysis of the set of academic perception variables implies that, unless such above suggestions or other methods of restructuring are undertaken, a substantial number of students are destined to continue to reject the educational system. The predicted consequences of this tendency are a continued political and economic decline as we, as a society, are overwhelmed with a growing, dissatisfied, non-contributing, illiterate citizenry.

Flexibility in Teaching Theory and Methodology

Within the literature on cognitive learning styles, the modalities for processing and retaining information are visual, auditory, kinesthetic, tactual, olfactory and gustatory. While each individual has a primary, or preferred,



mode of learning also referred to as a learning style, once beyond the age of about ten, the most desirable state is to be able to learn in all modes. However, the present literature reflects a preference by White and Asian culture for the visual mode, the Hispanic, Black, and female for the auditory mode, and the American Indian/Alaskan Native population for the tactual/kinesthetic mode. The primary modes of early childhood education are gustatory and olfactory.

Each higher level modality has both a receptive and expressive component. That is, visual en-tails both reading and writing, auditory both listening and speaking, kinesthetic both observing and doing, and tactual both being touched and touching. Applying this understanding to the learn ing situation of a Hispanic student, for instance, would mean that the teacher who includes



learning for the student. It would also imply that the White pupil would increase her/his language expression skills in order to compete more effectively. The ideal teaching criteria would guarantee three methods of assess-ment: visual, auditory, and tactual/kinesthetic. This methodology would provide areas of success for all students and at the same time strengthen and reinforce the development of the whole child with respect to all socialization processes for all youth.

This study has reaffirmed that ethnicity is a primary factor in school success; these data support the demand for a massive effort to make the public education system reflective of the pluralistic population of the United States.

School Assessment and Grading

The formation of assessment tools must undergo complete revision. It is not possible to cling to the monocultural, single-modality practices of the past. As we expand the education system to meet the needs of all youths we must design instruments that will aid in determining the nature of instruction.

Norm-referenced tests would no longer be the sole criteria upon which academic progress is measured, educational programs evaluated, student placement, or teachers retained. This practice currently reflects only the methodology of a defective model. Tests must be non-discriminatory, and must have normative specificity. That is, persons being compared through evaluation of testing data must at least be members of the same sociocultural population. We have not yet recognized that controlling for gender and sociocultural differences is essential in a pluralistic culture if data gathered in this manner is to be valid.



It is clear, that in order to break the cycle of failure of the educational system which has come to define our educational system with respect to the needs of a multi-cultural society, an effort to rethink and retool our educational priorities must be undertaken. We must draw from data avail-able through theory and research, and apply it to what is lacking with regard to the actual needs of our children and the ability of our educational structures to translate opposition through social/ relational/attitudinal barriers into viable instructional models which respect the attitudes, per-ceptions, and gifts of all our youth.

People have been raising children and training them to be confident participants in their respective societies since prehistoric times. For thousands of years, this was done with much greater success and far less scientific knowledge, technology, and material resources than the current data reflects.

Since successful and effective education of children has been done with far less than what we have available, there is no reason why we cannot do at least as well for our youth and those yet unborn.



BIBLIOGRAPHY

- Aiken, L. R., 1961. "The Effects of Attitude on Performance in Mathematics."

 Journal of Educational Psychology, vol. 52. pp. 293-311.
- Demos, George D., 1962, "Attitudes of Mexican-American and Anglo-American Groups Toward Education." <u>Journal of Social Psychology</u>, vol. 57, pp. 249-256.
- Fazio, R. H., & Zanna, M. P., 1978, "On the Predictive Validity of Attitudes: The Role of Direct Experience and Confidence." <u>Journal of Psychology</u>, vol. 46, pp. 228-243.
- Fazio, R. H., 1981, "Direct Experience and Attitude-Behavior Consistency." In Leonard Berkowiz, ed., <u>Advances in Experimental Social Psychology</u>, vol. 14, pp. 164-181.
- Fazio, R. H., Chen, J. M., McDonnel, E. C., & Sherman, S. J., 1982, "Attitude Accessibility, Attitude-Behavior Consistency, and the Strength of the Object-Evaluation Association." <u>Journal of Experimental Social Psychology</u>, vol. 18, pp. 339-357.
- Fazio, R. H., Powell, M. C., & Herr, Paul M., 1983, "Toward a Process Model of the Attitude-Behavior Relation: Accessing One's Attitude Object.":

 Journal of Personality and Social Psychology, vol. 44, pp. 723-735.
- Freire, Paulo. Pedagogy of the Oppressed. New York: Seabury Press, 1970.



- Hill, E. H., & Giammatteo, M. C., 1963, "Socio-Economic Status and its Relation to School Achievement in the Elementary School." <u>Elementary English</u>, vol. 40, pp. 265-270.
- Hodgkinson, Harold L., <u>California: The State and Its Education System.</u>

 Washington, D.C.:

 The Institute of Educational Leadership, 1986.
- Hughes, Mildred C., 1953, "Sex Differences in Reading Achievement in the Elementary Grades." In Helen M. Robinson, ed., <u>Clinical Studies in Reading</u>. SUPPLEMENTARY EDUCATIONAL MONOGRAPHS, pp. 202-106.
- Kahle, L. R., Kulka, R. A., & Klingel, D. R., 1980. "Low Adolescent Self-Esteem Leads to Multiple Interpersonal Problems: A Test of Social Adaptation Theory." <u>Journal of Personality and Social Psychology</u>, vol. 45, pp. 496-502.
- Kitschener, R. F., 1981, "Piaget's Social Psychology." <u>Journal for the Theory of Social Behavior</u>, vol. 11, pp. 153-277.
- Piaget, J. <u>Structuralism</u>. New York: Harper, 1971.
- Piaget, J. <u>The Construction of Reality in the Child</u>. New York: Ballentine, 1971.
- Piaget, J. <u>The Origins of Intelligence in Children</u>. New York: International Universities Press, Inc. 1972.

