
**Institution**: National Inst. of Education (ED), Washington, D.C.

**Pub Date**: 1 Apr 81

**Note**: 91p.: For individual papers, see RC 012 805-810.

**EDRS Price**: MF01/PC04 Plus Postage.

**Descriptors**: Achievement Need; Adult Education; Alaska Natives; *American Indian Education; American Indians; Comparative Analysis; Cultural Influences; *Dropout Research; Educational Attainment; *Educational Needs; *Educational Research; *Education Work Relationship; Federal Legislation; Higher Education; Labor Supply; *Policy Formation; Research Reports

**Abstract**

The volume contains six working papers presented at a 1981 National Institute of Education conference on Indian participation in educational research. The articles are: "A Cross-Cultural Content Analysis of Nez Perce Tribal Legends and Selected Anglo-American Children's Stories for Value-Attitude Factors of Achievement Motivation" by Cecil T. Jose; "Indian Educational Research in a Large Urban School District: A Conceptual Point of View" by Rosemary Christensen with Jan Witthuhn; "National Assessment of the Status of Minorities in American Higher Education: A Project Overview" by Patricia Porter McNamara; "Literacy and Educational Needs of American Indian Adults: Some Initial Results and Observations on Conducting the First National Study" by Rodney L. Brodnick and John M. McQuiston; "Indian Education, Wages and Labor Supply" by Ronald L. Trosper; and "Indian Education Policy Reform: Policy and Implementation" by Myron Jones. (SB)
Indian Participation in Educational Research

A Conference Sponsored by
The National Institute of Education

Washington, D.C.
April 1-3, 1981
Indian Participation in Educational Research

WORKING PAPERS

<table>
<thead>
<tr>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>A Cross-Cultural Content Analysis of Nez Perce Tribal Legends and Selected Anglo-American Children's Stories for Value-Attitude Factors of Achievement Motivation</td>
<td>1</td>
</tr>
<tr>
<td>Cecil T. Jose</td>
<td></td>
</tr>
<tr>
<td>Rosemary Christensen with Jan Wittnahn</td>
<td></td>
</tr>
<tr>
<td>National Assessment of the Status of Minorities in American Higher Education: A Project Overview</td>
<td>31</td>
</tr>
<tr>
<td>Patricia Porter McNamara</td>
<td></td>
</tr>
<tr>
<td>Literacy and Educational Needs of American Indian Adults: Some Initial Results and Observations on Conducting the First National Study</td>
<td>47</td>
</tr>
<tr>
<td>Rodney L. Brod and John M. McQuiston</td>
<td></td>
</tr>
<tr>
<td>Indian Education, Wages and Labor Supply</td>
<td>61</td>
</tr>
<tr>
<td>Ronald L. Trosper</td>
<td></td>
</tr>
<tr>
<td>Indian Education Policy Reform: Policy and Implementation</td>
<td>69</td>
</tr>
<tr>
<td>Myron Jones</td>
<td></td>
</tr>
</tbody>
</table>
A Cross-Cultural Content Analysis of Nez Perce Tribal Legends and Selected Anglo-American Children's Stories for Value-Attitude Factors of Achievement Motivation

Cecil T. Jose
Washington State University
Cheney, Washington

This study examines the nature of cross-cultural differences in value-attitude factors of achievement motivation between the Anglo-American and Amerindian. Based on other research findings that high achievement motivation tends to correlate with high economic development, the rationale for this study is the documented need for optimal economic development on Amerindian reservations. The research methodology involves a comparative content analysis of published Nez Perce tribal legends and selected Anglo-American children's stories. The significance of this study for Amerindian education lies in the potential of developing curricular models and instructional strategies for inducing high Amerindian achievement motivation.

BACKGROUND OF THE PROBLEM: BARRIERS

The people erroneously called Indians purportedly belong to the longest-lived race on earth. (1). As such, they have provided a living laboratory for various types of scholarly inquiry attempting to explain the stubborn survival of this ethnic enigma. The impacting course of their transitory life experiences has also provided scientific investigators with major experimental ingredients in the forms of various approaches to the "final" solution to the so-called Indian problem, the intermediate reactions of the Indians to these solutions, and the final results as reported
in periodic cumulative research on the state of Indian affairs. Yet there persists a perplexing residual Indian sociocultural system that seems to significantly inhibit institutional solutions to the problems of coexistential development. (2).

Statistical data indicative of the social inequality of Indians (3, 4, 5, 6, 7) have been compiled from various sources. These comprehensive profiles reflect the symptoms of the Indian cycle of poverty. Various taxonomic formats for diagramatically representing these data have also been implicitly (8) and explicitly (9) suggested. Continued systematic analysis of this imbalance in the Indian ecosystem and its impact on their resource base and institutional effectiveness and efficiency is critical.

There are at least three interrelated barriers that have precipitated perpetual predicaments in the academic assessment of Indian reactions to rapid, extensive and intensive sociocultural change and conflict.

Stereotyping

The first involves what Northrop (10) has referred to as the expression of immediately apprehended or pure fact in terms of concepts with carefully controlled denotative meanings. In this vein, Berkhofer (11) has chronicled the natural history of basic conceptual categories, classificatory schema, explanatory frameworks, and fundamental moral criteria that have molded past and present perceptions, observations, descriptions, interpretations, explanations, evaluations, and manipulations of Indians. His analysis of a preponderance of primary and secondary sources of evidence in many different forms of print and picture exemplifies and explicates the effect of inadvertent and intentional descriptive bias on the structuring of historic Indian-White relations. In tracing the origins, development, and perpetuation of the erroneous label "Indian," he found three basic themes persisting throughout his sources of evidence. One was the descriptive tendency toward Pan-indianism. A second was the descriptive tendency toward the negative prototype of the "culturally" deprived Indian. The third was the descriptive tendency toward fusing ideology and ethnography: by the ideological criteria of Christianity, Indians were ethnographically described as infidels, pagans, and heathens; by the ideological criteria of civility, they were ethnographically described as being children of nature, anthropocentric wildmen, barbarians, and noble savages. Thus, the misnomer "Indian" often connoted these ethnographic synonyms, often used interchangeably according to the dual criteria of Christian civilization. Underlying such Euroamerican doctrines as "Manifest Destiny" was the belief in Europocentric anthropogenesis (12).

When the stereotypical connotations of the misnomer "Indian" are asserted as propositions or expressions of relations that
possess the type of formal properties to which syllogistic logic can be applied to prove the "truth" of these descriptive beliefs (13), they become amenable to theoretical reinforcement through scientific research (14). The Indian sociocultural system is thereby denied inherent integrity and intellectual tradition according to the attributes of a deprived or underdeveloped cultural system. Consequently, it is rendered incapable of sustained indigenous contribution to any universal hierarchy of knowledge. Such is the tyrannical and oppressive power of definition. One could conceivably elaborate on this process by employing Bell's (15) power, influence, and authority communication paradigms; but that is beyond the scope of this paper.

Nonetheless, the duplicity of consensus on a simplistic and self-serving set of stereotypical assumptions about the Indian have served to promote radical and often perfidious fluctuations in policy (16) ranging from assimilationist (termination), through integrationist (acculturation), to separatist (17). Theoretically, such policies were based on the aforementioned scientifically reinforced principles (18), syllogistically proven truths, and falsely inferred descriptive facts. If one were to add to the stereotypical imagery of the Indian the ideological imperatives of social Darwinism, cultural narcissism (19), and psychological egoism (20), one could derive a normative sociocultural philosophy (21) that would advocate such practices toward Indians as genocide, imperialism, colonialism, paternalism, exploitation, and expropriation of property. Likewise, such philosophical perspectives as those of the "Melting Pot" theory, cultural relativism, and cultural pluralism have variously defined the structures and processes of institutional solutions to the so-called Indian problem. Such are the historically shaped attitudes and actions toward Indians that are associated with (many would say, "have caused") the Indian cycle of poverty.

To the extent that the original (pure) facts of an indeterminate cross-cultural situation were brought under denotive conceptualizations that denied, ignored, distorted, or misrepresented the true identity of the native peoples called Indians and their sociocultural diversity, they were transformed into stereotypical imagery that passed for descriptive fact with an obviously counterproductive determinate meaning. As attested to by the federal Definition of Indian Study, it is by no means easy to derive an omnibus conceptualization for these native peoples. Needless to say, the misnomer "Indian" has many different denotive and connotative meanings to many different people. "American Indian" sufficed for a long time, but, like "Indian," it connoted the same misnomer, and periodically included within its rubric were the people from India with U.S. citizenship. Although Berkofer (22) uses "Native American," this label also created some problems when Hawaii became a state. These latter two designations thus had implications for the special federal-Indian trust relationship. Price (23) uses "Native" to include the native peoples of Canada. Burger (24) et al. use "Amerindian." No less arbitrary, this paper will use "Native
Amerindian" (hereinafter, Amerindian), with the appropriate precautions concerning Pan-Indianism. The native peoples encountered by the early colonists also needed new general terms to designate and differentiate themselves from those strangers who invaded their lands (25). Price (26), among others, has discussed Amerindian stereotyping in this regard. Like stereotypes of the Indian, this too has continued into contemporary times (27). Intellectual variations have ranged from such labels as "Caucasian," "Euroamerican," "Anglo-American," to "White Man." There is just as much interethnic confusion created by these designations as there is with the misnomer "Indian." This paper will use "White Anglo-American" (hereinafter Anglo-American) to arbitrarily designate this ethnic group.

The first conceptual barrier to Amerindian research is compounded by and includes a pervasive lack of intra- and interdisciplinary academic consensus and linguistic precision in defining appropriate conceptual constructs from which suggested solutions to the so-called "Indian problem" eventually evolve. For example, there are some 160 definitions of culture (28). A similar situation could be said to exist for definitions of society. This has significant implications for the systematic transmission of the sociocultural foundations of Amerindian education. The designation of the Amerindian cultural system as a subculture can carry with it the possibility of rendering it comparable to a football team (29) and promote the connotation of being somewhat inferior to the Anglo-American cultural system. Consequently, the former has often been designated "culture," and the latter "Culture." The same subtlety applies to the Amerindian social subsystem designation. Consequently, use has been made of "dominant macrosociety," in contradistinction to "microsociety" in some cases. McFee (30) refers to a similar subtlety concerning assimilation and acculturation and such designations as traditional, transitional and progressive Amerindi ans. Once again, the interplay of stereotypy, sophistry, irrationality, and theoretical framework can result in equating such things as cultural determinism with economic determinism (30, 32) and achievement motivation with ethnocentric Angloism (33).

Disciplinary Constraints

The second, interrelated barrier to Amerindian research involves the universe of scholarly inquiry. Given the essential prerequisites of scientific investigation, this universe must be delimited to conceptually and methodologically manageable proportions. However, the collective life experiences of the Amerindian peoples include a multiplex of events, influences, and conditions that microscopically exemplify and cumulatively reflect a macroscopic profile of issues and problems in the state of Amerindian affairs. Thus, the environmental universe of scholarly discourse is replete with all sorts of material and nonmaterial "things," which may exist in the past, present
This field of "things" is simultaneously complicated by the broad complexity of its scope and the subtle intricacy of its depth. Since every "thing" cannot be described, the crucial scientific problem is one of abstraction from the relatively indeterminate milieu of Indian affairs. To derive determinate meaning from this field of "things" in terms of theoretical principles of relationship ideally demands substantive background knowledge of various artistic, musical, literary, linguistic, religious, philosophical, educational, historical, political, economic, and legal variables. In other words, what is ideally required is a multidisciplinary approach to Amerindian research attuned to the integrated ethos and world view of Amerindians.

Fragmentation

The third, interrelated barrier to Amerindian research is the requirement of dissertation-type research that it be rendered relevant and basically intelligible to a particular branch of knowledge or specific discipline. The difficulty here lies in what Thornton (34) has described as the lack of an intellectual tradition in Amerindian studies as an academic quasidiscipline. That is, it will be problematic for Amerindian studies to claim to be an autonomous academic discipline until it establishes an intellectual integrity in conformance with certain historically legitimized, albeit somewhat nebulous, criteria. Such legitimization requires an endogenous definition of unique Amerindian issues and problems as foci for scientific examination from which major contributions to the general academic fund of knowledge could be made.

Different Amerindian areas may be studied according to the respective approaches of different academic disciplines. For example, psychology may study Amerindian achievement motivation according to its approach, and economics may study the dynamics of Amerindian economic development according to its approach. Or, the same basic approach can be focused on some different Amerindian areas. For example, literature may apply the same basic approach on the study of the mythopoeic dimension of Amerindian metaphorical reality as philosophy may use in its study of Amerindian rational ideology. Or, the same Amerindian areas of concern can be approached in different ways. For example, the same area of tribal government may be studied according to the different approaches of political science, business administration, or law.

The exogenous perspectives of these specialized disciplines are of significance in their own right. But the interrelationships of the academic knowledge and problems that they generate are difficult to determine systematically and often discouraged by academic provincialism or feasibility. Such synthesis is demanded by any multidisciplinary philosophy of Amerindian education that is endogenously attuned to the traditionally holistic ethos and world view of Amerindians. And, it is demanded by
the multiplex of forces affecting Amerindian techno-humanonomic (35, 36) underdevelopment. But, until Amerindian studies attains the de facto status of an autonomous academic discipline, Amerindian researchers may be primarily dependent on the traditional disciplines to formally legitimize their interdisciplinary work.

That the three aforementioned barriers to Amerindian research also exist in different forms in other areas of research in no way diminishes or negates their peculiar implications for Amerindian research.

STATEMENT OF THE PROBLEM

A review of related literature reveals that the direction to be taken in resolving such academic dilemmas as those discussed above and their pragmatic consequences is to be found in the underlying casual antecedents to the contemporary Amerindian cycle of poverty.

The Impact of Anglo-American Secularization

Cultural System Lag. The abusive impact of Anglo-American secularization (37, 38) on the Amerindian religio-philosophic frame of reference (39, 40) has resulted in what might be called a "cultural system lag." In this sense, by cultural system is meant the relatively enduring idealized (religio-philosophic) knowledge that Amerindian peoples use to "generate and interpret social behavior" (41). Aboriginally, this traditional cultural system has been universally and spiritually linked to all conceivable aspects of the environmental system and fundamental social system. Within this context "environmental system" refers to the ordered aggregate of all natural and artificial elements and/or phenomena; "social system," to the relatively modified symbolic (42, 43) and pragmatic (44) expressions of the cultural system in terms of instrumental activities (45), relations, and actions (46). The ordered merging of these systems represents the holistic Amerindian ecosystem (47, 48).

With the advent of Anglo-American secularization, the environmental system was demystified and desacralized. This disenchantment of nature (49) had the supposed interethnic effect of tacitly breaking the numinous linkage (50) between the traditional Amerindian cultural system and their neo-environmental system. However, the relatively enduring nature of this cultural system has somehow predisposed its perpetual enculturation and transmission, albeit in a somewhat attenuated (51) status. Likewise, with the advent of industrialization (52) and urbanization, the Anglo-American social system became specialized and differentiated. And with the techno-scientific revolution, the artificial aspects of the environmental system.
became increasingly complex at the expense of its natural aspect.

This modernization had the interethnic effect of transforming the fundamentalistic Amerindian social system into a somewhat diffracted, or prismatic (53), one. Consequently, the functional linkage between the holistic but somewhat attenuated Amerindian cultural system and both their prismatic social system and exploited environmental system has supposedly been broken. In the resulting "cultural system lag," the idealized normative obligations of the traditional Amerindian cultural system have not been allowed to keep pace with the de facto praxiological effects and implications of Anglo-American technoeconomic progress.

Conflicting Value Systems. Bennett's (54) related suggestion that "the institution of private property and entrepreneurship" was "both cause and effect of" a qualified or ambivalent agrarian value system (54) can conceivably be applied to the Amerindian situation. Indeed, Rokeach (55) argues that the value concept, as "an intervening variable that shows promise of being able to unify the apparently diverse interests of all sciences concerned with human behavior . . . should occupy a central position across all social sciences." In regard to Amerindians, the ambivalence suggested by Bennett is between two conflicting value-attitude or belief systems (56, 57). On the one hand, there is the capitalistic developmental and exploitive ethic (58, 59). Conversely, there is the harmonious reverence attributed to the humanistic and ecologic ethic (609) of the Amerindians. Bennett (61) has also described this dilemma in socioeconomic terms. The ultimate implication is that the impact of this unresolved dilemma has had the adverse effect of Amerindian techno-humanomic underdevelopment.

A multitude of approaches for resolving this dilemma and its consequences have been directly or indirectly suggested. Pickett (62) suggests the systematic break-up of the total Amerindian traditional cultures or of, at least, their anti-development aspects. Similarly, Rock (63) suggests that the change imagery and pattern variables (64) of the Amerindians be reoriented, perhaps forcefully, to permit tribal decisions to be made "at the required speed, in the necessary number, and at the proper time" to enable sustained economic growth and development.

Two dichotomous orientations seem to stand out in such literature. One is the individualism vs. collectivism orientation. The findings of Kluckholn and Strodtbeck (65) suggest that perhaps Amerindians may be more oriented toward group cohesiveness and obligations, whereas economic success in a market economy is usually associated with rugged individualism. However, Hiyama (66) reports that the obvious success of Japan in the international business world is not dependent on a high regard
for individualism. On the contrary, emphasis is placed on conformance to traditional Japanese cultural values and norms in contradistinction to those supposedly emphasized in the classic market economy. Another dichotomous dilemma is the competition vs. cooperation orientation. The findings of Bryde (67) suggest that perhaps Amerindians may be more oriented to cooperative generosity and sharing, whereas achievement in a capitalistic economy is usually associated with the competitive spirit of the work ethic. In this regard, Danesh suggests that "human beings are not by nature competitive, nor is competitiveness necessarily a virtue" (68). Furthermore, the early findings of Helmreich and Spence (69) suggest that competitiveness is not all that important to achievement motivation and business success.

That there may be other alternative or reconcilable perspectives with latent potential for sustained application to development is further suggested by Schumacher's (70) distinction between what might be called optimal and maximal economic development. That is, perhaps the Amerindian orientations may promote optimal development, while the market economy is more conducive to maximal development. Thus, the prospective rationale for such optional viewpoints is the documented need for attaining optimal techno-humanomic development (71) of the previously defined Amerindian ecosystem, as evidenced by the establishment of the Council of Energy Resource Tribes (CERT). Low's (72) synthesis of Zen principles and organizational management is another alternative approach to such predicaments that has analogous applicability. Ingalls' (73) educational and management approach to human resource development using Eastern and Third World ideologies is another source of comparative application. Melody's (74) examination of the relationship between the mythologies and political organizations of the Apache and Sioux represents another consideration worthy of further exploration. The well-known work of Ortiz (75) has similar significance.

Optimizing Amerindian Development

Guiding Parameters. Further analysis of this problematic situation reveals that optimal Amerindian techno-humanomic development must be guided by two fundamental parameters. One of these is the Amerindian religio-philosophic frame of reference already discussed above. Failure to abide by and continually revitalize and renew this parameter is tantamount to assimilation into Anglo-American society.

The other parameter is the special and unique politico-legal relationship between Amerindians and the U.S. government. The history and nature of this relationship have been well documented by such reputable sources as Déloria (76) and Cohen (77). Suffice it to say that failure to maintain, reinforce, and continually activate the sovereign, trust, and jurisdictional
status of tribal governments is tantamount to termination of said status. The recent federal Amerindian policy of self-determination now places the source of its authority in law. However, Bennett (78) wisely cautions that there is an equal amount of tribal governmental responsibility for determining their own respective destinies. Thus, there is what could be considered to be a dual accountability between the federal and tribal governments.

**Educational Intervention.** The provisions of the self-determination policy are only tools, not a panacea for the poverty cycle of the Amerindians. The question still remains as to the locus of a strategic point of intervention into this cycle. Chiago (79) offers a compelling argument for education as the crucial factor to the success of Amerindian self-determination. In this regard, Samples' (80) description of the metaphoric mind in conjunction with Cattey's (81) study of cultural differences in information processing suggest that perhaps Amerindians may possess learning styles that are significantly different from the Anglo-American, thereby requiring alternative instructional methods. Likewise, Benderly's (82) analysis of the multilingual mind and Svensson's (83) proposition that "language...may become a critical catalyst in the emergence of ethnic ideology" point to the significance of linguistics to ethnic identity.

But, if these are more process issues, what about curricular content? Amerindians certainly cannot afford to have their values institutionalized to the extent that their substantive needs, long-range goals, and enabling priorities eventually become confused again with the paternalistic provision of goods and delivery of services (84). Does this mean Amerindian-controlled schools? Perhaps. The other option seems to be systematic modifications in the extant formal educational systems of Anglo-America. In any case, the curricular content question is still difficult to articulate because the Amerindian cultural system has been transmitted primarily through oral tradition. One genre of this folklore tradition includes tribal legends. Recently, many tribes have begun to publish their legends. Recently, many tribes have begun to publish their legends.

It is in this regard that the monumental work of McClelland et al. (85) suggests some insightful possibilities. Their cross-cultural research on the need for achievement (n Ach) not only has terminal implications for economic development but also suggests instrumental possibilities for reversing the low academic achievement and high drop-out rates of Amerindians. McClelland’s theoretical generalization that a high n Ach is correlated with a high level of economic development is based on this statistically tested operational inference that a consistently high score obtained by content analysis of a predetermined set of different n Ach categories in such fantasy productions as the selected children's stories of a country is significantly correlated with a high level of economic development in
that country as measured by per capita consumption of electricity in kilowatt-hours. Theoretically, by \( n_{\text{Ach}} \) is meant the rapid and independent accomplishment, mastery, manipulation, and organization of something difficult by excelling, overcoming obstacles, and attaining a high standard to increase self-regard through the successful exercise of talent (86).

Parsons' (87) definition of action as behavior reduced to the goal-directed and normatively regulated expending of human energy in contingent situations that allow or require decision-making concerning priorities has particular relevance in regard to Amerindian activism. The goal-direction is optimal technohumanomic development. The normative regulation is provided by the previously discussed parameters as high standards. The human energy is the commitment and investment of Amerindian \( n_{\text{Ach}} \) related to Ingalls' formulations alluded to earlier. The contingent situations are those of sustained technohumanomic growth and development referred to by Rock. Theoretically, by need is meant a relatively enduring motive or state of tension that consciously or unconsciously arouses, maintains, and attitudinally guides and directs behavior toward a goal (88). Thus, McClelland theoretically defines achievement motivation "as the striving to increase or keep as high as possible one's capability in all activities in which a standard of excellence applies, and where the execution of such activities can, therefore, either succeed or fail" (90).

Achievement motivation may thus conceivably be considered to be both culturally derived and socially formed, thereby to vary accordingly. In this regard, the key factor would seem to be the "internalized standard of excellence." That is, it might be that Amerindians are successfully achieving according to their respective tribal standards but failing to achieve according to the Anglo-American and capitalistic standards. If this is the actual or potential case, the next question is whether the two different sets of standards can be reconciled as previously suggested in regard to Japan's situation. Furthermore, if this is possible, can educational models and methods be designed and implemented to develop the acquisition of appropriate achievement motives as suggested by McClelland (91) and analogous to those studied by Alschuler (92)? To determine the feasibility of these possibilities, it is initially necessary to subject some Amerindian standards of excellence to a critical comparative analysis. This is the purpose of a currently ongoing dissertation project at Washington State University and Eastern Washington University. Since it is presently being conducted, the following description of the project will be much more concise than the introduction to the background and statement of the instigating problem.
RESEARCH DESIGN AND METHODOLOGY

According to McClelland, the children's stories of a modernized society, where the oral tradition has almost died out, often derive from oral traditions similar to those represented by the folk tales of contemporary Amerindian cultures. Such simple, short, and imaginative tales tend to be protective and reflect the motives and values of the culture in the way they are told or in their themes or plots. Being widely standardized in most cultures, they thus represent popular culture in that they are considered to be appropriate for all the children of that society. These stories are therefore presumed to be directed toward a particular audience rather than being merely demonstrative of some creative expression or expressive of personalized feelings. Accordingly, they are likely to be much more reflective of something typical or at least widely acceptable within the culture in contrast to mere indulgence in self-expression.

Many Amerindian tribes have recently compiled and published their respective folktales, which symbolically express the mythopoetic dimension of their reality. Theoretically, these tales contain many factors that may lend insight into the nature of their respective achievement motives and distinguish certain influential patterns of these motives from those of other cultures. Among these factors are value-attitudes. Consequently, this research study is employing McClelland's value-attitude coding system to comparatively analyze the content of selected Amerindian and Anglo-American children's tales.

The theoretical hypothesis is that Amerindians differ from Anglo-Americans in their respective value-attitude subsystems of achievement motivation. (The theoretical definitions of Amerindians, Anglo-Americans and achievement motivation were presented in previous sections of this paper.) By value-attitude subsystems is meant those cognitions or beliefs about (a) one's self-concept, (b) one's own behavior or commitments to behavior, (c) significant others' attitudes, (d) significant others' needs or values, and (e) significant others' behavior. These cognitions or beliefs are experienced as being consistent or inconsistent to varying degrees with one another or with one or more of the values and attitudes within a system of (a) two or more values organized together to form a terminal value system, (b) two or more values organized together to form an instrumental value system, (c) several beliefs organized together to form a single attitude focused on a specific object or situation, and (d) two or more attitudes organized together to form a larger attitudinal system or ideology. This rather lengthy definition and its further reduction to precise definitions of "beliefs, attitudes and values" is the formulation of Rokeach in his publication of the same title referenced in earlier sections of this paper.

The operational hypothesis of this research study is that Nez Perce tribal folktales and Anglo-American elementary school
children's tales contain different patterns of value-attitude factors of achievement motivation. By Nez Perce tribal folk-tales is meant the published and endorsed legends of the Nez Perce Tribe of Idaho. By Anglo-American children's tales is meant a comparable sample of stories in selected readers of a Nez Perce reservation public elementary school system. By patterns of value-attitude factors of achievement motivation is meant the configuration of predetermined categories that results from the content analysis of the respective tales according to McClelland's value-attitude coding system.

The content analysis coding is being conducted by two American professors with wide experience in Amerindian education and broad social science backgrounds. Their coding is being conducted from two points of view. One is that of the self or major character in the tale doing something. The other is that of society or another character trying to get the major character to conform, cooperate, or generally interact in some way. The basis of this intrapersonal and interpersonal distinction is McClelland's functional analysis of the two key problems involved in the relationship between the individual and society. On the one hand, certain values or norms deal with self-obligation, since it is functionally impossible for an individual to be totally passive with no capacity for independent personal choice. On the other hand, certain values or norms deal with an individual's obligation to society, since no society can function without somehow regulating the conduct of its members toward others or the whole group.

One of the potential problems anticipated to affect the outcome of this research study is the interscorer reliability of the two judges coding results. This may have been remedied by their participation in a relevant content analysis training program.

SUMMARY AND CONCLUSIONS

Since this research study has not yet been completed, it is impossible to report any results. Consequently, without having statistically tested the Null and alternate Null hypotheses, it is not possible to make any inferences about the operational hypothesis or to make any generalizations about the theoretical hypothesis, beyond pure unscientific speculation.

Potential Use of Results

Assuming, however, that the results will be significantly valid and reliable, some potential and/or actual uses of the research outcomes may be suggested. Many have already been suggested in prior sections of this paper. For example, the results could
facilitate a reversal in Berkhofer's findings concerning stereotypical imagery of the Indian. The results could also be applied to the development of educational strategies for experimentally inducing high tribally specific achievement motivation. This could have the tangible effect of counteracting low academic achievement and high drop-out rates.

Transformation of the results into a tribally specific normative philosophy of Amerindian education could advance the cause of Amerindian Studies becoming an autonomous academic discipline. The work of Platero (93) et al. suggests possible application to the accreditation of Amerindian-controlled schools. Further conversion of the results into tribally specific theoretical principles based as much as possible on empirical truth and inferred fact could be the foundation for formulating corresponding institutional policies and procedures. As such, tribally specific models of techno-humanomic decision-making may be developed. Accordingly, the promotion of truly endogenous curriculum development in various colleges' tribal administration programs could then be realized. The intercultural implications for the ecology and energy crises are also possible matters of consideration in the application of the results of this research.

Toward these ends and others, the results will be disseminated to the Nez Perce Tribe of Idaho, Amerindian publications, and any journals that may have an interest or impact in these areas.

**Future Research**

Topics that may be suggested for future research by this study are many and varied. For example, the results of this research still have to be administered to people much like Kluckhohn and Strodtbeck's value-orientation survey. Perhaps a better approach would have been to employ the ethnographic semantics approach of Spradley. Through this approach, a taxonomy of such factors as value-attitudes could have been derived by soliciting informative responses to a strategic set of decreasingly open-ended questions. McClelland's attempt to correlate value-attitudes to Parsons' pattern variables is another interesting research possibility. There are many other factors of achievement motivation besides value-attitudes that may correlate or have an interactive effect on economic development. There may also be some research implications for the nature of Rotter's locus of control in regard to the intensional and extensional aspects of the value-attitudes. Likewise, much of the linguistic, information processing, and learning styles research being conducted has possible experimental implications for the development of educational strategies for inducing high Amerindian achievement motivation. Similarly, the innovative application of Amerindian ethnomusicology to the Russian approach to super learning is another possibility for creative research. Although there have been some ethical
issues raised in regard to Rokeach's approach to behavioral change, this is another area of potential exploration.

In the final analysis, the interdisciplinary role of Amerindian education in research designed to improve the techno-humanomic well-being of Amerindians must not be underestimated.

References


3. A Study of the socio-Economic Characteristics of the American Indian based on 1970 Census data. (mimeographed)


33. Ibid.


40. Deloria, Metaphysics.

41. Spradley, Ethnography, p. 8.


49. Cox, Secular City.

50. Deloria, Metaphysics.


56. Idem, Beliefs.


59. Spoehr, "Cultural Differences."


64. Persons, Action.


83. Svensson, Frances. *Language as Ideology: The American Indian Case.* (mimeographed)


87. Parsons, Action.


Indian Educational Research in a Large Urban School District: A Conceptual Point of View

Rosemary Christensen with Jan Witthuhn

Indian Education Section
Minneapolis Public Schools

The Minneapolis Public Schools is the largest school district in the state of Minnesota. Comprising a small percentage of the total student population, most Indians attend schools in the three large urban areas—Duluth, St. Paul, and Minneapolis. Twenty-five hundred Indian students—approximately 19 percent of the total state Indian student body—attend the Minneapolis public schools. Minneapolis, as other large urban school districts, has difficulty serving its minority student population. And research data show, for example, that of the various minority groups, the American Indian population generally has the lowest scores and the highest rate of absenteeism.

Minneapolis Public Schools is organized administratively into three service areas, each headed by a superintendent, with service divisions and departments providing supplemental service to the schools. The Indian Education Section, which I head, is located within the Equal Educational Support Department. The section is charged to provide Indian students with supplemental services that the schools cannot provide. It is common sense to know the population one attempts to serve. But the status quo in education is that data are inaccurate, unavailable, or only descriptive relative to Indian students. Since this was one of the largest problems I faced when I assumed the directorship four years ago, accurate and usable data were of great interest to me as a management tool.

The St. Paul Foundation, a philanthropic organization in Minnesota, recently undertook a study of minority student educational needs in three Minnesota counties. They found that "early in the research process it became clear that data gathering, both in statistical and opinion areas, would have to be far
more extensive to provide a definitive needs assessment of minority education. The difficulty in assembling comprehensive statistical data alone, appears to require significant additional research." The foundation report found that conducting research on the topic of educational needs is challenging and sometimes frustrating due to the inadequate data available to the researcher. Obviously, this challenge is equally true of the education section in designing and implementing programs. In its final report, the St. Paul Foundation provided a plan for action if decisions about minority education are to be based on accurate data:

- Improve methods used to determine minority student enrollment so counts are accurate, up-to-date, and done in the same way from school to school.
- Maintain more complete data comparing students of different racial/ethnic categories in areas such as academic achievement, financial aid need and financial aid awards, academic history, etc.
- Improve accuracy of records concerning drop-out students to reflect more accurately the number of people who are actually terminating their education and not just moving, transferring schools, etc.
- Investigate the possibility of developing a uniform definition for classifying people as members of a given racial/ethnic group to facilitate accurate record keeping.
- Continue to work on the problem of balancing the need for protecting the privacy of individuals against the need to obtain quality research data so methods can be developed to record needed data without violating individual privacy.
- Determine what types of on-going data are needed to assess the quality of minority education so that institutions who often do not collect data until a specific need arises can begin to collect such data.

I am a member of the St. Paul Foundation Minority Student Education Program. I agree with the conclusions of the report.

As manager of a section of the Public Schools that is committed to providing supplementary education to a disadvantaged portion of the student population, I need accurate, consistent data. It is as a manager that I speak to you today. I know that we must know our population. We must have access to accurate data in order to design programs that will work with our students. We must know answers to questions ranging from the simple to the complex—-from "How many tribes do we have represented in our student body?" to "What are the behavior characteristics of the Indian drop-out?" After being in the district for six years, I can tell you answers (previously unavailable) to the simple questions: I can tell you who we are serving,
why, and where we are heading with our services. That is the basis of my remarks today. I will tell you of our conceptual model of research carried out in a large urban school district with an American Indian minority student population. Using that model, my research staff of three and I, figure out what we need and how we can go about getting it.

THE CONCEPTUAL MODEL

Demographics

In order to understand our conceptual model, I will begin with demographic details. Roughly 1,800 Indian children representing 27 different tribes are dispersed throughout all three administrative areas and 77 schools of our district.

Our most recent census figures (which we update monthly) show that the East Area has 1,079 Indian children, the North Area 424, and the West Area 301. Some schools have as few as one Indian student; others have as many as 140. These demographics make service logistically difficult.

We also gather turnover data and track the movement of Indian children from month to month. At one time, in the fall, at least 300 children moved on and off our census list during a period of three months. We have a rolling census figure based on individual student numbers assigned by staff when Indian children complete a (Title IV regulations) 506 form. Through this student number, we access the district may have on these children and track according to schools, areas, sex, age, and grade. This activity provides us an accurate picture of the district's Indian students.

As example of how we use these data, several years ago our paraprofessional staff were directed to work with children on attendance. For purposes of service, poor attenders were defined as those who missed school 20 percent or more of the time. Six-hundred children fit in that category. Naturally, these children did not fall nicely into one or two schools but rather, were found all over the map and in all schools. We, therefore, had a real problem in assigning our aides, especially as the principals of the schools did not understand why they could not get help for the Indian children on an ad hoc basis.

Background and Socialization Variables

In our conceptual structure of research and services, we project that each child brings to the school experience antecedent background variables (including demographic data from the district that we access through our listing of Indian students and our own Indian Education data base) and his/her socializa-
tion experience. We are attempting to chart that socialization pattern in our urban Indian population through our "Successful Indian Child" Research, our Wilder Demonstration Program, and our Social Worker Aide Program. These elements lead to the characteristics of each child which for our purposes, we have labeled personality, learning styles, and environmental perceptions. Our "Successful Indian Child" strand of research will help us to establish a pattern for Indian children in the personality category. Our gifted and talented program, the North Wind Warriors, and the Wilder Demonstration Program will help us establish patterns in learning styles. Our research on students' perception of school climate, friends and home will help us establish patterns in the environmental perceptions.

Outcome Variables

All of these boxes lead to our final box, that of school performance. The bottom line, so to speak. In that category, we have placed the indicators of attendance, achievement, and affective adjustment. We believe that this conceptual framework will help us to plan and perform educational services.

Programs

Of course, while our research is ongoing, we must provide services concurrently. Therefore, our present programs are designed to address some of the relationships that we believe ultimately affect school performance. I am not here to discuss our programs in depth, but following are brief descriptions:

- providing math and reading tutors to the children;
- teachers who teach culture, history, and language to teachers and students on a long-range, structured basis;
- social worker aides who work with families (primarily through home visits) on attendance, self-concept, and other potential problems affecting school performance;
- a chemical dependency specialist who provides group counseling to elementary school children, based on a pre- and post-interview method;
- a reading-improvement pilot program in one school, which uses a reading teacher, social worker aides, and reading aides;
- a gifted and talented program, serving approximately 15 children in a full-time classroom with its own teacher, counselor, and teaching assistant, which takes into account cultural variables;
a six-week summer school, staffed by certified teachers for children K-12 in math, reading, and culture.

This last program has been in our section for three years, and we are planning the fourth. We find our summer program to be very successful. We are able to "catch kids up" who are behind in credits and in their classes, we are able to graduate some kids who would not possibly graduate in the regular school, and we consistently show better grades and attendance than the regular school. For the past three years, we paid the kids to attend school and docked them for poor behavior and avoidance of work. Children 13 and younger received $1.00 an hour, and those 14 and up were paid the minimum wage. Unfortunately, the government decided that we cannot continue to pay these honoraria this summer. We offer the additional incentive of a cultural trip at the end of the summer for students who do extra well in their work. For the past three summers, a bus transported the kids to the Grand Portage Indian Reservation in northern Minnesota, where there is a fine hotel for them to stay and have fun. The teachers go along and work with the kids on the 12-hour bus ride to and from Grand Portage.

RESEARCH PROJECTS

Our research is necessarily long range. We know so little about the urban Indian child. (I should note here that we are exclusively interested in the urban Indian child. It is my belief that urban Indian children differ from reservation and rural children, and, of course, Indian children also differ from tribe to tribe.) Although the research studies that we are presently engaged in number five, I will talk today of two: our "successful child" project and our "Indian drop-out" project. These two are not necessarily my favorites, nor are they the most important of the five. We are most interested, for example, in our research studies regarding school climate, we have undertaken in cooperation with the Indian Education Section of our state department. We believe it is critical that we be able to fully describe and compare the Indian child's perception of school climate.

The Successful Indian Student

The question around which this research centers is, "What are the patterns of internal and external support structures, world view, and strategies used by urban Indian children who are successful in school?" As in other schools where Indian children attend, the Minneapolis Public Schools have Indian children who are achieving well. They are, however, very few in number. If we are to establish a successful pattern for the urban Indian child—his personality, learning style and environment—we must
know why some Indian children succeed, and succeed very well, while others fail, and fail miserably.

Research Design. The original research design called for the identification of four subjects from each of 16 categories formed by the cross-classification of gender, grade, and school success of subjects' siblings. Each subject was to be among the most successful Indian students in terms of high achievement test results and low absence rates, in the groups defined by the cross-classification. All subjects were to come from economically defined "problem" backgrounds as specified by parents who had not graduated from high school and by heads of households who were unemployed or employed in unskilled jobs. Preliminary evaluation of data indicated that within gender-grade categories, there were not a sufficient number of successful Indian children to permit further subclassification by sibling success. Even when the definition of "problem" backgrounds as specified by parents who had not graduated from high school and by heads of households who were unemployed or employed in unskilled jobs. Preliminary evaluation of data indicated that within gender-grade categories, there were not a sufficient number of successful Indian children to permit further subclassification by sibling success. Even when the definition of "problem" background was broadened by using mother's educational level as the only indicator, the pool remained prohibitively small.

At the same time as we discovered this major problem, we also made an unexpected discovery. It had been expected that school success would increase regularly with increase in parents' educational and occupational levels. When appropriate correlations among all variables were obtained, we found that neither achievement test scores nor school attendance are linearly related to higher parental educational and occupational levels. Instead, the data indicated that educational performance is a complex function of the child's gender, age, and background.

These two unanticipated results—the prohibitively low number of successful Indian students and the nonlinearity of the relationship between demographic background variables and educational performance—suggested a re-evaluation of the overall design. The revised design classifies children into the original grade levels (4, 6, 8, and 10), gender, and mother's educational level. Target children are those who received the highest achievement test scores (pooled verbal and quantitative measures) and who are above the mean in attendance for their gender-grade group. Instead of 64 children, the design now calls for 72 children to be included in the study.

To date, a group of 142 potential subjects have been identified. A letter explaining the research has been sent to parents. We are now in the process of making a second contact with each
Research Hypotheses. The interviews, which will be completed this spring, will attempt to determine the patterns of attitudes and support structures that exist for the successful Indian child. The hypotheses guiding this research are associated with our classification variables. We expect to find that for some subjects, the family will be their major source of support. Families in which parents have themselves attained higher academic levels may well engage in generally successful pro-educational strategies. If, on the other hand, the families' strategies are not generally facilitative of academic success, the successful child may have developed an ideosynchratic strategy within the family or be receiving his/her most significant source of support from some external source.

We further suspect that the patterns of support structures will differ for Indian boys and Indian girls. Research suggests that, in a wide variety of groups, females fare better than males when confronted with "problem" backgrounds. It is also known that Indian boys engage in delinquency and other deviant behaviors at earlier ages and in greater numbers than do Indian girls.

Finally, we suspect that patterns of behavior and social configurations predictive of success will change as we examine children from fourth to tenth grades. National and local research suggests that absences increase and achievement decreases steadily between grades four and ten for Indian children. Because successful children from "problem" backgrounds have probably adopted a wide range of strategies to orient themselves to school, it would not be surprising to find that some of those strategies at earlier ages become nonfunctional as intellectual, social, and emotional demands become more complex with increasing grade level. We are particularly concerned with the ways in which Indian children have mobilized their educational competencies. We will examine where the emotional support structures come from, the temporal sequencing of these supports, and the sources of the stress in the child's view. Our focus will be on the differences among children from various classifications in the strengths they bring to the educational setting.

If the analyses of the interviews suggest significant differences among Indian children, depending on the grade, gender, and mother's educational classifications, profiles or models will be constructed, perhaps even one for each classification.

Potential Uses of the Results. It is anticipated that this research project will provide the Indian Education Section of the Minneapolis Public Schools with useful data about the characteristics of Indian students who are "survivors" in our school.
system. These data should provide information about when support structures should be made available and should suggest children for whom they may make a difference. Such information will allow us to design and test appropriate intervention programs. For example, where parents may be mobilized, we can develop parenting programs to help Indian parents learn to better provide crucial support. Where parents cannot be mobilized to provide support, alternative supportive individuals for our diverse categories of children may be identified. If successful children have learned some useful skills or strategies, there are possibilities for cognitive training directed at the child's beliefs about self and education.

The results will also give us data to use in our role as an advocate of Indian children in meeting with teachers and principals who control the delivery of day-by-day school services to children. We expect this research will also contribute to the theoretical body of knowledge dealing with development and learning among minority children from problem backgrounds; provide a basis for a larger, possibly multiple-year research project; and yield timely information for use by local district personnel.

**Project Details.** This project is funded by the National Institute of Education at $15,000 for one year. The principal investigator is well-known Indian psychologist, Marigold Linton, from the University of Utah. Dr. Linton was able to arrange her schedule this year—her sabbatical year—to spend three months in our school district at timely intervals.

**The Indian Drop-Out**

The central question that this research project addresses is, "Can the excessive absenteeism of urban Indian children in the public schools be understood within the context of 'youthful problem-behavior'?" Deviant behavior has been of continuing interest to both sociologists and psychologists. When deviant behavior occurs in the schools, it also becomes interesting to educators. For purposes of this research, deviance is defined as behavior that runs counter to social norms to such an extent that social controls are imposed. Within the context of the public schools, then, excessive absence is certainly a deviant behavior.

The work of Dr. Richard Jessor suggests a theory of youthful problem behavior wherein young people engage in deviant behavior to accomplish specific goals. These goals may include coping with frustration, expressing rejection of the dominant culture, and demonstrating solidarity with peers or a subculture. Dr. Jessor's theory has been systematically tested and found to be useful in understanding marijuana use, premarital sexual activity, and political activism among white high school
and college students. If Jessor's theory of youthful problem behavior is truly generalizable, then it can be expected to also be useful in understanding other particular behaviors, such as excessive school absenteeism, among other youth subcultures, such as urban Indian public school students. This research is an attempt to replicate a test of Jessor's theory.

**Research Methodology.** The instrument that Jessor used in his research was 50 pages long and required one and a half hours to complete. We believed that the length and complexity as well as the content of some of the questions made the original instrument unacceptable for use with our population. We adapted the questionnaire to make it shorter, simplify the language, and design items that are relevant to both the culture of our population and to the documented problems that our population experiences in the public schools. Because Indian children begin to fall behind non-Indians in both achievement and school attendance after about fourth grade, it was decided to design a questionnaire suitable for use with children as young as 10 years old. Instead of studying marijuana use, sexual activity, and political activism, as Jessor had done, this adaptation studied absenteeism, drinking, fighting, running away from home, and general delinquent behavior. Several other problem behaviors, such as illegal drug use and incest, were considered too controversial to include, even though they may well be important to the understanding of the problems of Indian youth.

The adapted questionnaire was pilot tested on a group of 50 Indian students, made up of both high- and low-academic achievers. Pilot test students understood the questionnaire and, with the exception of one student, were willing to complete it. The results suggested that the adapted scales had acceptable levels of reliability and that simplified methods of coding responses and computing secondary measures were possible.

The final version of the questionnaire used in our study was 11 pages long and required 20 minutes to complete. It was administered to 124 Indian students in grades 4, 6, 8, and 10 during an Indian summer school program. Students were paid for attendance at those classes, and the questionnaire was administered during regular class hours. The questionnaire was not personally identifiable: we, therefore, decided not to secure parental permission for participation in the study, since such permission was not required by the district. This was probably a mistake, since some elements of our Indian community perceived the content of the questionnaire to be controversial and took exception to our procedures. Through our experience we have learned, once again, what a low trust level exists between the community and the schools and how hard we must continue to work to improve that situation.

The research design, which was implemented, has several notable limitations, as most applied educational research will
always have. First, the sample of students surveyed represents all Indian students in attendance at a number of summer school classes. While the sample represents 20 percent of all Indian students enrolled at the same grade levels in the Minneapolis Public Schools, the sample was not randomly selected; thus, the relationship of the sample to the parent population is not certain. A second limitation placed on the study by the research design is the total reliance on self-report data, with only one attempt at verification by independent data. This verification revealed a .74 correlation coefficient, significant at the .001 level, between the self-report of days absent from school and actual school records for the 65 students who optionally signed their questionnaires.

**Research Results.** The analyses of the results of this research are not yet complete. Preliminary results suggest that rates of participation in the problem behaviors under study do vary by age and gender of respondents. The proportion of students who reported participating in the problem behaviors ranged from a low of 7 percent of 10th grade girls who reported participating in general delinquent behaviors to a high of virtually 100 percent of 10th grade boys who reported participating in excessive absenteeism from school.

An important second preliminary finding is that the problem behaviors under study covary together, as Jessor's theory suggests. That is to say that, although participation in any one problem behavior cannot be understood as causing participation in other problem behaviors, students engaging in one problem behavior also engage in the other problem behaviors at a higher rate than do other students.

The final preliminary result that I have to report further confirms the applicability of Jessor's theory. This result suggests that the variables that most correctly predict which students engage in problem behaviors are those relating to the models for that behavior which the student perceives in his/her environment. What this means is that demographic variables and variables related to how generally supportive or controlling his/her parents and friends are do not predict a student's behavior as accurately as do the student's perceptions of his friends' and parents' participation in those same problem behaviors.

These preliminary results are based on a series of analysis of variance. Still to be completed are a series of multiple regression studies, which we expect will suggest a small number of specific key variables that can be used to predict participation in problem behavior for each grade-gender classification.

**Potential Uses of the Results.** The results of this research have two important implications for Indian education services. First, since participation in a range of problem behaviors is interre-
lated, programs designed to improve school attendance should sensibly be expected to address an entire cluster or class of behaviors at once and not focus on absenteeism in isolation. Second, the results of this research could suggest improved methods for targeting for service those students most in need of help. Indian education programs are understaffed. There are not enough people to give all Indian students the same intensive service that has shown promise of success in increasing Indian student school performance. There is no evidence that Indian paraprofessionals placed in the schools and allowed to allocate their time as they choose are able to impact existing problems. By predicting the onset of problem behaviors, we hope eventually to be able to identify potential problem students early enough so that appropriate interventions can be effective and efficient, and actual problems can be prevented.

BARRIERS ENCOUNTERED

Many of the barriers we face in conducting our research efforts are the same ones that impede service delivery in the school district. We have logistical problems that smaller districts do not have. We have an extremely mobile population (our biggest problem) that suffers enormous social problems not being dealt with adequately by the state, city, and federal institutions. Every day our staff must deal with alcohol and drugs, child abuse and neglect, sexual abuse and other problems that impinge on the child's attendance in school.

In addition, we are a focus of the Indian community's anger and frustration. More and more, communities feel the schools should provide all the answers and solve all the problems. This expectation causes conflict between us and the community. We are all too familiar with the current buzz word--burnout--which staff deals with on a daily basis. It is one of the problems that I, as a manager, must deal with.

Staff skill building is another issue in conducting research. I have a staff of 54 people, six of whom are non-Indian. Most of these people are paraprofessionals from the community, working in about 40 schools. Our professional staff have the requisite degrees in the disciplines in which they work: our head researcher has training in quantitative analysis, our associate researcher has had extensive experience in national Indian educational research, and our assistant researcher is presently in training to learn research skills. But, we believe, few Indians have the skills necessary to undertake or understand research. Therefore, it is our obligation to train people as we engage in educational research. Coupled with the fact that we must provide services at the same time as we do research, staff size and training needs are a critical constraint.
The funding problem is with us always, and, apparently, we are going into a decade of leanness. We are also constrained by funding sources, rules, and regulations. A curious aspect of the funding reality, which seems apparent to me but may be a figment of my imagination, is the penchant for funding sources to prefer reservation Indians to those who reside in urban areas. There seems to be an aura surrounding reservation Indians that urban Indians cannot match. I mention this possibility, not to denigrate our brothers and sisters on the reservations, but to put into perspective a point of view that does not discriminate against urban Indians. To my mind, these geographic areas are whiteman-made, anyway. But Indians reside all over the country; and most of the Indian students in the country reside in urban areas. Take a look at the ten school districts in the country with the largest Indian student populations, and you will find that seven out of the ten are urban. In the state of Minnesota, close to half of the student population attends school in the three large urban areas.

Despite these barriers, I am very pleased with the kind of research we are doing in the Minneapolis Public Schools, Indian Education Section, while at the same time delivering services that we hope will eventually make a difference in the Indian child's achievement and attendance, thereby increasing his school performance to the ultimate end—graduation. We accept the problem of a minimally trained Indian staff, and we realize that well-trained Indian people are not too interested in working in the local school district at wages that public school districts pay. We know that we have the population that most researchers have difficulty gaining access to, and in large part, we have cut out the middle man in most research designs. That is, research begins where the school population is—at the elementary and secondary school level—and we search for researchers to work with us right in the school district. We attempt to educate our on-site staff, so as to increase our research skills, and we work hard to educate the Indian community so they will accept the idea of research. We, in the Minneapolis Public Schools, are committed to the idea that research is a tool—a tool that, if used wisely, consistently, and accurately, will allow us to do our job.
National Assessment of the Status of Minorities in American Higher Education: A Project Overview

Patricia Porter McNamara
Higher Education Research Institute
Los Angeles

This paper describes a national research project that focuses on the four groups most underrepresented in American higher education: American Indians, Blacks, Chicanos, and Puerto Ricans. The project's research plan, designed to determine what progress these groups have made toward equitable educational representation over the past decade or so, and the staff's experience in carrying out the research investigation are discussed. Research problems and issues related to the study of Native Americans' educational status, some preliminary research findings on this population, and suggestions for future research on Indian education are presented.

In January 1979, the Ford Foundation asked the Higher Education Research Institute (HERI) to undertake a comprehensive national assessment of the status of the four minority groups most severely underrepresented in the nation's colleges and universities: American Indians, Blacks, Chicanos, and Puerto Ricans. A considerable history preceded this request. Since 1950, the Ford Foundation had been actively involved in supporting efforts to promote higher education access, opportunities, and achievement for these four groups. This commitment was reflected in grant awards totaling some $180 million; $67 million of this amount had provided scholarship and fellowship support for 9,200 individuals.

1. The term "minority" is used in this paper because it is commonly accepted and descriptive of these four groups' pro-
By the late seventies, several of these programs had been or were being phased out, and the foundation felt that the time had come to "take stock," that is, to learn what progress had been achieved and, in the words of Mr. Fred Crossland, Program Officer in the foundation's Division of Education and Public Policy, "to identify unresolved problems, capitalize on past experience, and recommend future courses of action in both the public and private sectors" (1978, p. 7). Certainly, the foundation was also aware of the growing concern within minority communities that the Bakke and Weber cases signaled the end of an era of national commitment to redressing past injustices.

The need for a national assessment, as well as what its content and focus should be, were discussed with other 150 invited guests at eight foundation-sponsored meetings held in spring 1978. Based on the response at these meetings and additional solicited input, the Division of Education and Public Policy recommended that the foundation support a comprehensive analytical study of the status of minorities in American higher education and that HERI be asked to assume the responsibility of managing and coordinating the proposed project. HERI was awarded a modest four-month planning grant to produce a feasibility study--essentially, a research proposal and design.

Why HERI? A series of criteria had been developed by the foundation staff to describe the organization that should assume this responsibility and HERI met their criteria. HERI had never been involved in administering any of the minority-oriented programs supported by the Ford Foundation, nor was it identified, exclusively or primarily, with any one of these four minority groups. Its resources and personnel were adequate to the proposed task; its staff had extensive experience in conducting higher education research, particularly large-scale, quantitative studies; and the institute had established a favorable national reputation since its founding in 1973. HERI also had a good "track record" with the foundation: work on three Ford Foundation grants had been successfully and satisfactorily completed. Institute staff members had recently completed a policy-oriented study of graduate and professional school admission programs to provide information that would enable educational institutions and legislators to respond constructively to the U.S. Supreme Court's decision in the University of California vs. Bakke case (see Astin et al., 1978).

Thus, a Ford Foundation press release announced that HERI had been awarded a $700,000 grant to conduct the national assessment under the direction of Alexander W. Astin, the institute's president. Two additional supplemental awards totaling $46,000 were given to support the cost of collecting data and preparing and disseminating the results of the study.

The terms "American Indian," "Indian," and "Native American" are used interchangeably and, unless otherwise specified, are meant to include Alaskan Natives, Aleuts and Eskimos.
were provided in the course of the project— one to fund an effort to reach student survey nonrespondents by telephone, the second to support an additional project advisory board meeting. It would be an oversimplification to say that one-fourth of this amount ($186,500) was allocated to a study of the status of Native Americans in higher education. The project's research design (described later in this paper) called for general-purpose studies that would yield findings relevant to each group—as well as to the majority population as a basis for comparisons—not four independent research studies.

While HERI was to provide the research staff services and Mr. Astin was the study director, the comprehensive assessment was officially the responsibility of a national commission chaired, at the foundation's invitation, by O. Meredith Wilson. Mr. Wilson, past president of the Universities of Oregon and Minnesota and of the Center for Advanced Study in Behavioral Sciences at Stanford University, chaired the Commission on the Rights, Liberties, and Responsibilities of the American Indian, sponsored by the Fund for the Republic from 1957 to 1961. The Commission on the Higher Education of Minorities, as it was titled by its members, includes Frank Bonilla, professor of sociology and director of the Center for Puerto Rican Studies at the City University of New York; Cecilia Preciado Burciaga, assistant provost at Stanford University; Yvonne Braithwaite Burke, attorney-at-law; Albert Hastorf, professor of psychology at Stanford University and head of the Boys Town Center for the Study of Youth Development; Calvin B.T. Lee, vice president in charge of educational planning at Prudential Insurance Company of America; Alfonso Ortiz, professor of anthropology at the University of New Mexico; and Stephen Wright, senior advisor to the president of the College Board. The commission and HERI are essentially partners in this two-and-a-half year research enterprise.

RESEARCH DESIGN

The research team developed a multifaceted research design to fulfill the foundation's specification of a systematic, comprehensive, empirical analysis of minority educational progress and current status. The design included review and assessment of existing research studies and of national, regional, state, and institutional data and reports. These resources would contribute information relevant to our goal of presenting an overview of the progress made to date. Other researchers had had opportunities to examine particular issues—pieces of this whole picture—far more thoroughly than we would be able to, given the scope and scale of our task. For example, historical accounts of Indian education; published research reports and studies of the educational status and problems of American Indians; and Census Bureau, government task force, and United
States Commission on Civil Rights reports were all studied for information that would assist us in understanding and defining the issues we needed to explore and in placing our study within a historical context.

We also requested institutional information from colleges and universities that enrolled significant numbers of American Indian students. Although tribally controlled colleges represent an important innovation in providing educational opportunities within Indian communities, our research design could not accommodate primary data collection, case-study analysis, or site visits at these schools. However, by reviewing legislation and materials provided by a number of these colleges, we have been able to obtain information about their philosophies, goals, and achievements that will contribute to the final report.

We also knew that a number of national data bases included data relevant to our concerns. Routinely collected by the government or for some general or other purpose, these data had unexploited potential to provide empirical insights into our research issues. The Census Bureau's October Current Population Surveys (CPS) provided data that enabled us to construct a simulated longitudinal and comparative description of the educational status and attainments of Whites, Blacks, Chicanos, and Puerto Ricans between the ages of 14 and 25 from 1974 to 1978. This survey does not include a reporting category for American Indians, who are classified as "other"; prior to 1974, all CPS subjects were classified as White, Black, or Other based on the interviewer's judgment. Data collected from American Indian, Aleut, and Eskimo respondents for the Census Bureau's 1976 Survey of Income and Education provide more recent information on their educational and occupational status than the 1970 decennial census.

The National Research Council (NRC) annually collects basic demographic information via a self-administered questionnaire, the Survey of Earned Doctorates, completed by persons receiving doctoral degrees. A race/ethnicity item was added to this survey in academic year 1972-73; 107 (0.39 percent) of the doctoral-degree recipients described themselves as American Indian. The most recently published data (Syverson, 1980) show 165 American Indians earning 0.5 percent of the doctorates awarded in 1978-79. The figures reported by the NRC appear inflated: preliminary unpublished tabulations from the National Center for Education Statistics (NCES) report that 104 American Indians were awarded doctorates in 1978-79. However, both surveys show a similar pattern in the distribution of doctorates by field: education appears to be the most popular field of doctoral study among Indian students, 38 percent (NRC) or 41 percent (NCES) of whom earned doctorates in education compared with 23 (NRC) to 24 (NCES) percent of White 1978-79 doctoral-degree recipients.
In 1968, DHEW's Office for Civil Rights (OCR) began collecting biannual data on enrollments by race/ethnicity from the nation's colleges and universities. This data collection task was part of a larger effort to monitor compliance with Title VI of the Civil Rights Act of 1964. In 1976, OCR ceded the responsibility for collecting these data to NCES, which incorporated it into the Higher Education General Information Survey (HEGIS). A systematic effort to collect degrees-conferred data from all higher education institutions was initiated during academic year 1976-76.

These reported statistics have proven to be a valuable resource to the project staff, because they indicate patterns that suggest important questions. For example, in 1978 over half (55 percent) of all American Indians enrolled in college were attending two-year colleges, as compared with about one-third (34 percent) of white students. What are the practical implications of this disproportionate representation of Indian students in community colleges? Does attending a two-year college reduce an Indian student's chances of earning a college degree? About 88 percent of Indian students and 78 percent of white students attend public rather than private colleges and universities. Are Indian students more likely to enter public schools because they are less expensive and, typically, have less stringent admissions requirements or because they prefer to attend schools closer to their homes, most of which are public? Does enrolling at a small, more personal, private college enhance an Indian student's chances of achieving—or raising—his/her educational goals?

The reliability of the NCES data, in terms of the number of Indian students they show enrolled in college (77,873 in 1978), is suspect, as both Brown and Stent (1977) and Dean Chavers (1979) suggest. Essentially, the problem is that the manner of collecting information on students' race/ethnicity is left to the discretion of the college or university reporting the data. The federal government's official definition of an American Indian or Alaskan Native is "a person having origins in any of the original peoples of North America, and who maintains cultural identification through tribal affiliation or community recognition."2 Higher education institutions, I strongly suspect, do not include this official definition on the statistical reporting cards or survey forms that students are asked to complete.

Let's look at an example of the kind of discrepancy that definitional ambiguity or imprecision can create. Both HEGIS and the American Association of Community and Junior Colleges (AACJC) have reported 1976 enrollment figures for students attending two-year colleges in Alaska. HEGIS reports that American Indians and Alaskan Natives account for 8.5 percent of the total enrollment; AACJC says they account for 42.3 percent of enrollment. Data-users have no way of knowing how institutions collected these data, what institutions participated in the AACJC survey, nor probably in many cases that two such
discrepant reports exist. Evidently the distinction between being a native Alaskan and an Alaskan Native is one that eludes or confuses a significant proportion of the persons attending two-year colleges in Alaska.

The National Longitudinal Study (NLS) of the High School Class of 1972, supported by NCES, has been following the educational and career development of a nationally representative sample of young adults. As is the case with samples selected to be representative of the nation's population, the number of American Indian students included in the data base is so small that generalizing from the sample's behavior is questionable. Petters, who studied student withdrawal from higher education using this data base, reports in a footnote that "American Indians . . . were not included because their numbers were too small for making statistically reliable national estimates" (1977, p. 30).

The Cooperative Institutional Research Program (CIRP), under the direction of Alexander W. Astin, has collected data annually from entering college freshmen at colleges and universities across the nation since 1966. The survey instrument has always included the category "American Indian" in the item that asks students to report their race/ethnicity. These in-house data provided a resource for studying trends over time in the characteristics, behaviors, and goals of students choosing to attend college. Furthermore, two longitudinal files developed to study other research issues were available for analysis: (1) a two-year follow-up study of students who had entered college in 1975, and (2) a file that links pre-college admissions test information with CIRP questionnaire responses at college entry. The CIRP data base has its own idiosyncratic shortcomings in terms of the reliability of data on American Indians, which will be discussed later in this paper.

The research plan was designed to get as much information as possible via secondary analyses of these data bases. It also called for HERI to conduct several studies to specifically address questions raised by its research assignment. The most ambitious of these primary data collection efforts is a longitudinal follow-up of approximately 55,000 students who completed CIRP survey instruments when they entered college in 1971. This sample included every respondent who had checked the category "American Indian," approximately 2,300 persons. To increase the Indian, Chicano, and Puerto Rican sample sizes, additional names of 1971 freshmen were obtained from four colleges and one city multi-campus system that enroll significant numbers of these students but did not participate in the 1971 CIRP. These longitudinal data will be examined using step-wise regression techniques for predictors of educational

---

persistence, achievement (undergraduate GPA), and success (degree attainment).

A survey of 1,349 Ford Graduate Fellowship recipients was conducted to study the graduate experience, the impacts of financial assistance, and the facilitators of and barriers to advanced degree completion. Outdated addresses reduced the sample size to 878 persons, and, although 599 (68 percent) responded to the survey, only 30 are American Indians.

Two surveys of higher education faculty and staff members were conducted. All faculty and administrators at 98 colleges and universities—a sample of about 31,000 educators—were selected for the first study. This survey was designed to replicate on a smaller scale, two earlier national surveys of the nation's faculty, conducted in 1969 by the Carnegie Commission and the American Council on Education (ACE) and repeated in 1972-73 by ACE. By comparing the 1980 survey findings with those of the earlier surveys, we hoped to learn whether the composition, characteristics, attitudes, and behaviors of educators had changed over time. Were educators' attitudes and beliefs different at institutions with significant minority enrollments? Were the minority students responding to our student follow-up more likely to remain enrolled and to report a satisfactory college experience at institutions where the faculty were more integrated or exhibited a particular pattern of beliefs and behaviors?

The second faculty and staff survey, designed to tap the experiences and perceptions of minority educators, was integrated into our research design midway through the project. Despite cultural, academic, social, financial, and psychological barriers, these individuals have succeeded in the academic world. Further, they are likely to understand what barriers hinder and what experiences facilitate educational achievement among students from their ethnic group as a result both of their own experience and of observing and working with these students. This study surveyed almost 600 faculty and staff members, including 149 Indians, using a "delphi" approach. That is, we sent an open-ended survey that posed 13 questions about educational barriers, facilitators, and what higher education could do to better serve minority students. Responses were compiled and categorized to produce a second questionnaire with summaries of the responses to each of our questions. Sample members were asked to review these response options and to indicate, in order of priority, which three they perceived as most important or significant. Indian educators were exceptionally cooperative; overall, 112 (75 percent) responded to one or both of the questionnaires.

By aggregating the information collected through each of the project's research components, we hope to produce a comprehensive descriptive picture of what progress has been achieved, of what each group's current status is, and of where our ener-
gies and resources can be focused in the future to assist minority educational achievement most effectively. Most important, we hope to learn more about what works in higher education for these students: What kinds of policies, programs, and practices have positive effects on their educational and career development, and what kinds of benefits do they produce for which students?

REACHING THE AUDIENCES FOR OUR RESEARCH RESULTS

The project's sponsor, commission members, and staff are committed to reaching as large and diverse an audience as possible in order to share the research findings and to encourage the utilization of the research-based recommendations for educational policy and practice. We have identified a number of audiences that we hope to address as we write recommendations based on our research results: policy-makers at the federal, state, and local levels; foundation officials, administrators, faculty, and counselors at the secondary and post-secondary levels; data collectors and researchers; minority students; organizations concerned with furthering the educational and social status of minority people; and the general public. Large numbers of student and faculty survey respondents have asked that we share our research findings with them.

The principal vehicle for disseminating the project's research findings will be a five-volume report: a summary report providing an overview of the project and its research results and four separate subreport volumes providing an in-depth examination of the educational status of each of the four groups. The institute's newsletter, "The HERI Quarterly," will be used to inform a large audience of educators, researchers, and policy-makers of the study's completion and major findings. Our research results will also be disseminated through published articles or monographs and presented papers designed to address the interests and needs of specific audiences: for example, college counselors, institutional researchers, top-level university administrators, or minority educators.

PROJECT STAFFING

Currently, there are eight full- or part-time staff members working on this project at the institute, excluding support staff and computer programmer consultants. Staff members' responsibilities have changed or been redefined as pieces of the project were completed or begun and as persons joined or left the research staff. Both black and Chicano staff members have worked on the research team, while a Puerto Rican and an American Indian have contributed their expertise and perspective on the issues as project consultants. Dean Chavers, presi-
dent of Bacone College, is the consultant on the American Indian report.

Mr. Astin (PhD in psychology), Helen S. Astin (PhD in psychology), and Lewis C. Solomon (PhD in economics) have been actively involved in the project from its inception; all are professors of higher education at UCLA and officers of the institute. With two exceptions, current and former staff members are--or were--graduate students completing work toward PhDs in education.

Project work has been allocated to individuals or small task groups throughout the course of the study. For example, my responsibilities include preparing the final report on the status of American Indians in higher education and, to this end, I can call on Mr. Ortiz and Mr. Chavers. Subcontracts to produce substantive contributions to the project have been made in two instances: The Center for the Study of Community Colleges prepared a review and analysis of the literature on minorities in two-year colleges, and Dr. Janice Petrovich examined the characteristics of Puerto Rican high school students on the mainland and in Puerto Rico, as well as the higher education system on the island.

PROBLEMS ENCOUNTERED

Defining the scope of the study and staying focused on the research issues has not always been easy. Project goals can be obscured by the day-to-day logistics of conducting a large-scale research effort. In this regard, staff meetings with the commission have been especially helpful. These regularly scheduled, two-day meetings provide an opportunity to review and assess our progress and to reevaluate our research design. They also create deadlines for drafting instruments, papers, and sections of the final report for review with commission members. Their concerns and suggestions have contributed to the overall project design as well as to the content and conduct of individual research studies. Mr. Ortiz's direction and guidance have been of particular assistance in preparing the American Indian report.

The mailed surveys to 31,000 faculty and administrators and to 55,000 students have produced their share of sampling, survey-management, and nonresponse problems. Three questionnaire mailings to educators yielded only about a 40 percent rate-of-return, considerably below those obtained in the earlier surveys. Faculty addresses were relatively current, but the only addresses we had for members of the student sample were 1971 home addresses. Address updates were requested from the students prior to the first questionnaire mailing and from the colleges they attended as freshmen. After a second copy of the
questionnaire had been sent to all first-wave nonrespondents, we contracted with a Chicago-based firm for telephone interview follow-ups of a sample of nonrespondents. Though not included in our original research design, this component was added to achieve two objectives: (1) to learn if survey nonrespondents differed in any significant or systematic way from persons who had returned questionnaires and (2) to increase the size of the sample for whom outcome measures (e.g., educational attainment and employment and occupational status) were available. Following this effort, a final attempt was made to collect information on students' educational outcomes. Rosters of the names of all remaining nonrespondents were sent to the colleges they entered in 1971, with a request for answers to three questions: What degree did this individual earn? How many terms was s/he enrolled at the college?, and, Had his/her academic transcript been forwarded to another college or university?

The study of the educational status of American Indians presented unique difficulties. As the earlier review of secondary analysis resources indicates, national data bases are weak in one of three ways: They fail to collect or report data on American Indians, incorporating them into an "other" category; they include Indian samples too small to produce statistically reliable estimates of the characteristics and behaviors of the larger Indian population; or they report data that appear to be inflated as a result of definitional imprecision or ambiguity. These data bases did provide a sense of the estimate range for a given statistical indicator--for example, the number of Indians or the proportion of the Indian population attaining a particular educational level--and they also reflected trends in the types of higher education institutions and fields of study attracting Indian students.

The sample of "Indian" students in the project's longitudinal follow-up included both students whose principal self-identification was Indian and students with other primary identifications. The CIRP questionnaire that sample members had completed at college entry listed seven racial/ethnic categories, including "American Indian," and instructed respondents to "mark all that apply." Of 288,526 students entering 487 institutions who completed this questionnaire in 1971, 2,533 (0.87 percent) at 415 colleges checked "American Indian"; 585 of them (0.2 percent of all respondents) marked only "American Indian."

All students who had checked the American Indian response option, except for those who had also described themselves as black, were selected for the follow-up sample--a total of 2,332 persons. Our follow-up survey included a race/ethnicity item that asked respondents to select only one response option and, if they chose American Indian or Alaskan Native, to write in their tribe or band. Thus, we intended to identify for our analyses those members of our Indian sample who maintained, as the
government definition puts it, "cultural identification through tribal affiliation or community recognition." This strategy was effective in screening questionnaire respondents. Of the 474 persons who returned questionnaires, 95 (20 percent) again identified themselves as Indian and listed their tribal affiliation. Forty respondents failed to complete the race/ethnicity item, and their survey forms are being screened to determine whether or not they belong in the Indian sample. Another ten surveys were returned by persons who had not identified themselves as Indian in 1971 but did so in 1980; two are Aleuts who chose the "other" category in 1971, and the other eight are our only questionable Indians. An additional 22 questionnaires were returned by Indians who had attended colleges that were added to our sample and for whom 1971 data were, therefore, not available.

All Indian nonrespondents whose questionnaires had not been returned as nondeliverable were included in the telephone interview sample. Interviews were completed with 332 of them, and 175 (53 percent) reported that our records indicating that they were American Indian were correct. However, our screening question was still too imprecise: About one-third (56) of these 175 people subsequently returned survey forms, and 33 (59 percent) identified themselves as non-Indian. A recent telephone conversation with a nonrespondent explains this discrepancy. Our records indicating that she was an American Indian were correct, she said. Asked if she was an enrolled member of a tribe, she explained that her father was part Cherokee but that she had little Indian blood. Would she identify herself as white or Indian in a forced-choice situation such as that presented by our follow-up survey item? "Probably white."

Outcome information has been obtained for 29 percent of the 1971 Indian sample via survey returns or telephone interviews: Only 14 percent of these respondents can be unquestionably classified as Indian, and another 25 percent may be Indian. Efforts are being made to enlarge our Indian sample through screening on the basis of 1971 home address and telephone follow-up interviews.

Our experience reviewing data bases and collecting data suggests that, for whatever reason, people take great pride in claiming some degree of Indian ancestry. One probable study recommendation, addressed to researchers, data collectors, and educational institutions, is that, in cases where "clean" samples or accurate counts are desired, persons identifying themselves as American Indian or Alaskan Native be screened either by adding an explanation of whom this category is intended to include or by requesting the name of their tribe, band, or Indian community.
SELECTED CHARACTERISTICS OF FOLLOW-UP RESPONDENTS

Most of our data are available only on computer tapes now being prepared for processing. A cursory scan provides some basic information on 122 Indian follow-up respondents that gives a sense of their diversity and achievements. These respondents lived in 25 different states at the time they entered one of 55 colleges. They appear to be a mobile student group: Almost half (46 percent) report attending at least two colleges during their undergraduate career, and several discrepancies between the college that our records show a student as entering in 1971 and the last and only college that the student reports attending suggest that an even higher percentage have attended more than one college. Some of those who attended only one college withdrew after a short period of time and have never returned to school.

We know that respondents to this type of survey will have achieved a higher level of educational attainment overall than their nonresponding peers. Among these Indian respondents, almost half (47 percent) report that their highest educational degree is less than a baccalaureate, 41 percent have earned a bachelor's degree, 9 percent hold a master's, and 3 percent have been awarded advanced professional degrees. What is especially interesting is the fact that, over eight years after they first entered college, almost half (20) of the 42 respondents who hold no degree beyond the high school diploma report that, to some extent, a desire to expand one's job opportunities and to increase one's work compensation contributes to continued interest in earning a college degree.

What kinds of jobs do these respondents hold? Only seven, all women and only one of whom holds a degree beyond a high school diploma, were unemployed and neither seeking work nor attending school. Of the remaining 36 who had earned no degree since high school graduation, 14 worked in a range of skilled or unskilled nonclerical jobs, including a machinist, a computer programmer, a commercial fisherman, a warehouseman, and a factory worker. Thirteen held clerical-secretarial positions, seven worked in community-service-oriented jobs (e.g., educational aide, client service welfare agent, highway patrol officer), one owned a bar, and one worked in the family Indian museum and gift shop. Four of the eight who have earned vocational certificates held service-oriented jobs (two nurses, a home-high school liaison, and an assistant field coordinator for a social service agency), two were clerks, one was a groundskeeper, and one worked as head housekeeper at a motel. Seven have received associate degrees: four worked in technical positions (three medical technicians and a data processor), and the other three included an Alaskan village administrator, a bus driver, and a worker in a home insulation business.

Thirty-five of the 50 respondents who held bachelor's degrees work in community-service-oriented jobs: Twenty work in the
field of education, 14 as elementary or secondary school teachers. Five each work as service-providers or administrators in social service organizations; in health-care organizations; and in public service, government, the police, or the military. Seven work in the business world in positions ranging from management trainee to copywriter. One is unemployed and not looking for work, and the remaining seven hold a variety of other jobs: ironworker, geologist, locomotive engineer, fashion model, bookkeeping business owner, apartment manager, and custodian. Eleven persons held a master's degree: nine work in service fields and two graduate students work as research project staff members. The four people with advanced professional degrees include two attorneys, one medical doctor, and a veterinarian.

To summarize: Even within this small group of sample members, we find a considerable range of educational and occupational attainments. Researchers and educational institutions need to recognize the diversity that exists within the Indian population and among Indian students; too often these students are labeled and channeled into educational institutions and programs as if they were identical and interchangeable. The longitudinal data base will enable us to examine respondents' characteristics, attitudes, goals, behavior, and achievements at two points in time, as well as the evolution and predictors of their educational and career development.

BARRIERS TO INDIAN PARTICIPATION IN EDUCATIONAL RESEARCH

In a recent article, Chavers (1980) suggests a number of reasons why more Native Americans are not participating in or conducting educational research studies. Education may be the most popular field among Indian doctoral students, but the absolute number of Indians holding a doctorate in education or in any other field is very small. For the most part, PhDs in anthropology and history are more likely to conduct research in their respective fields than in education; master's degree-holders are trained as practitioners, not researchers.

Indian educators' responses to our delphi survey suggest that they are simply overworked. Conducting research becomes something of a luxury when, as the only Indian or one of few on campus, one's basic responsibilities include administration, teaching, committee work, student advising, and advocacy. It is difficult if you are one of the few who have "made it" in the academic world to ignore the many time- and energy-consuming demands for service made by students, the institution, and the community. Your research may eventually have a larger impact on the educational attainments of Indian students, but how do you turn your back on the student sitting outside your door who wants to drop out of college or on the committee meeting convened to discuss the elimination of special admissions or funding for the ethnic studies programs?
Most Indians with advanced degrees appear to gravitate toward educational institutions or government employment and, of course, this is where most job opportunities lie for the social scientist. But I think the tendency also reflects a strong community-service orientation among Indians. Research and service need not be, but often are seen as, mutually exclusive or antithetical. Perhaps, by working to counteract this perception and by showing master's and bachelor's degree-holders how being a researcher as well as a practitioner can enhance their effectiveness as educators, we can enlarge the pool of Indian researchers.

There are, of course, "larger picture" barriers to participation in educational research. Academic credentials and a research-and-publications track record never hurt anyone's chances of receiving research funding. It's more or less the same story as the college graduate who can't get a first job because he has no job experience. A large proportion of Indian PhDs earned their doctorates relatively recently, and those in tenure-track positions are concentrated at the lowest rungs of the academic ladder. Institutional and foundation support for small research studies, with release time, could give these recent doctorates an opportunity to gain experience and demonstrate their abilities at a time when the prospects for government support of research related to social issues suggests that a track record may become increasingly important.

I believe that research funding will continue to be available, but it will be harder to come by: Proposals will have to be well justified and studies well designed. It would be wise for persons whose research is funded to anticipate that their work will receive closer scrutiny when they next apply for research support than it might have in the past.

FUTURE RESEARCH TOPICS

It would be difficult to identify a research area or issue where no further work is needed. I do think that it would be valuable to spend more energy examining success rather than failure. Educational barriers and causes of attrition have been identified over and over again, but how much do we know about the correlates, predictors, and facilitators of educational achievement and success among Indians? Perhaps, instead of discussing whether financial or academic barriers are more critical, we should be learning how Indians who overcame these barriers did so and teaching that to young people and to the institutions that educate them.

There are practically no data on the tribally controlled colleges and certainly no systematic data that I have been able to identify. If these colleges are to justify their existence, as they
will have to in order to receive continued federal support, data must be collected to document their achievements and to identify areas where their programs and services must be strengthened.

Longitudinal studies of cohorts of Indian students and young adults are needed. Institutional studies and some federal government studies have followed students only until they withdrew or graduated from a particular college. Do they transfer to other colleges? go to work? reenter college after a period of time? A better understanding of key events and developmental phases in their lives may suggest the need for new kinds of educational interventions and opportunities geared to the needs and situations of persons who do not fit the description of the traditional 18-22-year-old college student. Similarly, adult and continuing educational needs and interests would be productive areas of research. How can we tap the potential for leadership and skilled manpower among people in their thirties and forties?

A follow-up of a recent cohort of Indian respondents to the NRC's Survey of Earned Doctorates would be an interesting study. Can the discrepancy between the numbers of Indian doctoral-degree recipients reported by the NRC and by the NCES be explained? If NRC's respondents include non-Indians, what leads these persons to identify themselves as Indian? Misguided altruism or romanticism?

An interest in possibly benefitting from affirmative action goals? Simple confusion as to who should respond to this reporting category? What employment options interest these Indian PhDs? What jobs have they been offered and accepted? To what extent do they end up in positions where, directly or indirectly, they serve Indian people and communities? What factors contribute to the Indian communities' loss of talented and well-educated Indian doctorates, and how might they be counteracted? Such a study would yield insights into the facilitators of academic success, the interests and goals of a highly-educated cohort of Indians, and current labor market conditions and opportunities for Indian PhDs.

Another parallel investigation would study Indians who have left graduate school prior to completing all of the requirements for a degree. My impression is that a not inconsiderable number of well-trained and highly-qualified Indians have left graduate school, many with all work completed except for the dissertation, to assume responsible and attractive positions that leave them with little time, energy, or motivation to finish their degrees. How are their career profiles similar to and different from those of Indian PhDs? What would encourage or enable them to complete their degrees? What long-range effects have or might their unfinished degrees have on their career development?
How can the mathematical, scientific, and technical talent and potential of Indian youth--and adults--be developed? There is evidence to suggest that Indian students dislike and avoid mathematics, a fundamental prerequisite for access to a range of careers in which skilled Indian professionals are needed (see Green et al., 1978). What innovative and experimental programs have successfully counteracted this fear of mathematics? How can their success be replicated? applied in other educational settings? or, in the case of short-term interventions, reinforced within the schools?

The findings of on-going and future research can help us to identify ways to encourage and enhance educational achievement among Indian peoples and, consequently, their occupational status and quality of life.

REFERENCES


Literacy and Educational Needs of American Indian Adults: Some Initial Results and Observations on Conducting the First National Study

Rodney L. Brod and John M. McQuiston
Department of Sociology
University of Montana

The National Indian Management Service of America, Inc. (NIMS), a nonprofit, Indian-owned and -controlled consulting firm, was funded over a three-year period (1977-80) by the United States Office of Education/Office of Indian Education to conduct the first national study identifying and accurately describing the extent of problems of illiteracy and the lack of high school completion among adult American Indians, Aleuts, and Eskimos.* To achieve a national sample representative of American Indian adults, the research was based on cluster sample of counties (census districts in Alaska and Hawaii) throughout the United States. Structured interviews were designed to provide information on the functional literacy, educational attainment, and social indicators of adult Indians as well as descriptions of federal- and state-supported programs providing adult education services. The results of the study have important implications for the future of Indian education: for the first time in history, a national data base accurately assessing the functional literacy, educational attainment and expressed needs of American Indian adults can assist educators.

*This research was funded under three separate grants from OIE (grant numbers G00702795, G007802770, and G007902676) originally under Subpart B of Title IV, Part C of the Indian Education Act and what are now sections AEA(a)(2) and (4) of the Indian Adult Education Act. The first phase of the study surveyed adult Indians east of the Mississippi, the second phase sampled those in the western states and the final phase included Alaska Natives and Indians residing in Hawaii, to achieve the first national assessment of adult Indian educational needs.
legislators, tribal decision-makers and others in their efforts toward Indian self-determination and achieving the goals, purposes, and funding levels necessary for the educational programs of all Indians, Aleuts and Eskimos of this nation.

PROBLEM

While American Indians remain at the bottom of almost every socioeconomic scale, virtually no attention within federal and state bureaucracies has been given to the systematic collection of information that would carefully (1) assess the educational needs of American Indian adults, (2) examine the accessibility of existing federal and state adult education programs to Indians, and (3) analyze the degree of relationship between adult educational services and levels of functional literacy and educational attainment among Indian adults. Each release of adult education data excluding Indian adults has served to heighten awareness among U.S. Office of Indian Education personnel, Indian educators, and Indian community leaders of the lack of an adequate data base from which to identify educational needs, to determine strategies to address those needs, and to justify a base funding source for Indian adult education. Furthermore, without documentation of the educational characteristics and needs of Indian adults, the Congress and decision-makers within the Office of Education have great difficulty in justifying the appropriation and operational decisions that can best serve Indian people and bring them to a position of parity with others.

This lack of an adequate data base with which to make decisions gave rise to the National Adult Indian Education Needs Survey conducted by the National Indian Management Service, Inc. (NIMS). Probably one of the most important corporate features of NIMS, relative to this research, is the fact that the firm is Indian-owned and-controlled, has a deep commitment to Indian people and to do more than merely "another educational needs assessment." The NIMS officers and personnel have witnessed the essential role that adult education plays in the exercise of self-determination for Indian people and, thus, saw the positive impacts of this study and its findings as crucial.

OBJECTIVES

Building on the general Adult Performance Level (APL) survey and a previous assessment of Indian adult educational status, Literacy and Education Among Adult Indians in Oklahoma, a study recognized for its excellence by the U.S. Office of Indian Education, the primary purpose of the present study is to
provide USOE/OIE decision-makers with an accurate assessment of the overall adult education needs of American Indians, Aleuts and Eskimos. Specifically, the research:

- Identifies national and regional levels of functional literacy and of educational attainment and need of adult Indians described by various social indicators;
- Provides information on the operations of federal and state ABE/GED programs and the extent to which these programs are providing services to adult Indians;
- Analyzes the relationship of certain social indicators and education services to levels of adult Indian functional literacy and educational attainment; and
- Summarizes possible policy and program implications and recommendations for addressing the educational needs of all Indians.

**METHODOLOGY**

Indian education consists of populations of users and potential users of educational systems and educational systems service providers; thus, in order to assess programs and needs in Indian education, data from both recipients and potential recipients, and providers and potential providers had to be obtained. For adult Indian educators, providers tend to be defined in terms of State Education Agency (SEA) programs that administer or supervise all non-federal adult education programs in the fifty states; and Indian Education Act (IEA) programs, which are responsible for federal adult Indian education programs. Data obtained from these two sources represent all state, local and federal educational programs (except for the BIA); their characteristics, goals, target populations and participant groups would for the most part define the educational system within which adult Indians receive their education and training. Defining both participants and potential participant population consists of inventorying and sampling not just the adult education program participants but all adult Indians. Therefore, in order to describe this population the entire United States population had to be surveyed by using a national sample of adult Indians.

Once data for the adult Indian population and educational service providers was obtained, perceived or implied educational needs could be associated with available programs and program experiences from both the user's and provider's point of view to determine the extent to which educationally appropriate programs exist and to describe programmatic needs.
SEA Survey

The SEA survey was designed to describe each state-administered education program and its participants, staffing patterns and services provided, community involvement, the relationship between adult education needs and program availability, factors influencing the decision process in adult educational program development and operation, and an analysis of why adults attend state-administered adult education programs. After an initial contact, each SEA administrator was sent a mail questionnaire containing questions pertaining to these areas of interest. The questionnaire was designed by project staff with the aid of state, federal and independent consultants. Where officials failed to respond to the initial mailing, they were telephoned and reminded of the importance of their input. These reminders persisted, followed by additional mailings where necessary, until 76 percent of the questionnaires were returned. Many of the returned questionnaires included incomplete or improperly aggregated data due to differences in recordkeeping requirements and systems or the lack of administrative interest in identifying Indian participants as such. Some data were, however, usable and are discussed below.

IEA Survey

Similarly the IEA survey was designed to describe each IEA project in local Indian communities, community involvement in and reactions to project programs, characteristics of personnel and participants, accessibility and success of programs. A pre-coded questionnaire was developed by NIMS staff with the aid of state, federal and independent consultants so as to measure the relevant areas. A list of projects, their locations and directors was obtained from the OIE staff, and the questionnaires were mailed to all project directors, with accompanying explanatory material included. For those directors who did not respond to the mailing, a telephone follow-up was undertaken. Additional mailings and phone calls were made as required to obtain a 60 percent sample of federally funded projects. The item response rates of the IEA project directors to the large number of items were quite good, in contrast to those of the SEA officials.

To supplement general information regarding all IEA programs, additional data were obtained from the Office of Indian Education.

Home Interview Sample

Although the study began as an assessment of the educational needs of eastern Indians, the ultimate goal of the research was to include all Indians. Therefore, Dr. Jim C. Fortune, who was responsible for the sampling design and methodology, developed a plan whereby the results of the study would be representative of Indians in each region and for the United States as a whole.
Selection of Sample Counties. As county boundaries may be overlaid over both census and cultural regions of the United States, the county was selected as the smallest geographical unit from which sample subjects were to be selected. (Census districts were used in Alaska and Hawaii, since they do not have the county form of government.) As the distribution of the Indian population by county in 1970 ranged widely, and as counties where relatively few Indians resided would probably not be targets for OIE programs, those counties with fewer than 250 Indian residents were dropped from the sampling frame. The 1970 census found more than 85 percent of adult Indians (408,339) 16 years of age and older were residing in 325 counties having Indian populations of 250 or more. The first stage of the sampling frame, then, consists of 325 counties within the larger geographical and cultural regions having Indian populations of 250 or more.

The sample could merely have been selected at random from these 325 counties, but as Indian educational programs might be thought to vary by population size/density, the counties were categorized by the number of Indians residing there in 1970 as shown in Table 1. Thus the sampling proportion was adjusted by size of county so that fewer subjects were interviewed in those small counties that were selected than in larger ones. As illustrated in Table 1 the two adjustments—more counties but fewer individuals sampled in the less populous counties, and fewer counties but more individuals sampled in the more populous counties—result in sampled populations by county size that are proportionate to their actual populations, plus or minus 3%. In addition, 17 counties (270 respondents) that included fewer than 250 Indians in 1970 were added to the sample in order to test the assumption that limiting the sample to counties having Indian populations of over 250 Indians in 1970 was an appropriate one.

Table 1

<table>
<thead>
<tr>
<th>Population</th>
<th>Number of Counties</th>
<th>Adult Indian Population</th>
<th>Number of Counties in Sample</th>
<th>Number of Individuals Surveyed</th>
</tr>
</thead>
<tbody>
<tr>
<td>250-1,400</td>
<td>257</td>
<td>150,281</td>
<td>48</td>
<td>1,507</td>
</tr>
<tr>
<td>1,401-2,700</td>
<td>40</td>
<td>80,776</td>
<td>14</td>
<td>810</td>
</tr>
<tr>
<td>2,701-4,500</td>
<td>15</td>
<td>56,525</td>
<td>7</td>
<td>567</td>
</tr>
<tr>
<td>4,501-6,999</td>
<td>7</td>
<td>41,174</td>
<td>4</td>
<td>413</td>
</tr>
<tr>
<td>7,000+</td>
<td>6</td>
<td>79,583</td>
<td>6</td>
<td>798</td>
</tr>
</tbody>
</table>

325 408,339 79 4,095
Selection of Sample Subjects. Once the counties and their respective sample sizes were determined, age and sex quotas were used in the process of selecting sample subjects to be certain that the age and sex composition of the sample was in fact no different from the age and sex composition of the adult Indian population living in each region. The interviewer was responsible for making certain that the respondent selected from the sample household fit within the age/sex quota for that region. Locating the Indian population to be sampled in each county selected was a major methodological task. Originally, it was believed that the OIE, Part A Indian census could be used as an inventory of Indian families. This list, however, excluded Indian adults who were not in school or who had no children in school. Lists of Indian adults and families were obtained from health clinics, Urban Indian Centers, tribal rolls, tribal voter registration lists, Indian health and other organizations, and individuals, so as to supplement the Part A lists. Names from all of these sources were then merged to prevent redundancy, and non-Indians were excluded from the final list. A random sample of the names was then chosen, and this group was the final sample interviewed in each county by the field interviewers. Those who could not be contacted, who were found not to be Indian, or who exceeded the quota bounds were replaced using the same random-sampling procedure.

Sampling Summary. The sample, then, consists of random adult Indians selected within age and sex quota restrictions from random households within counties stratified by population where 250 or more Indians resided in 1970. The counties were selected from the 12 major Indian cultural regions of the United States (according to Gastil, Swanton and Stewart) so that the sample populations would be representative of each region in terms of age, sex and county population size within a .10 error tolerance. The 4,095 cases selected are also representative of the United States adult Indian population in terms of age, sex, region and the population size of the county in which they live (See the Appendix for the list of sites, samples, and interviews.)

Survey Instrument

The structured survey instrument was developed by NIMS staff and a panel of some 70 experts in adult education, federal administrators, questionnaire and data systems designers, and others. Drafts of the instrument were field tested using Indian subjects to determine readability, respondent reaction to questions, the ability to hold the respondent's interest, flow and singularity of question meaning. Pretest respondents were debriefed after the administration of the instrument to make certain that all possible questions might be answered and so that the instrument might be optimized.
Areas covered by the questionnaire were developed through a thorough literature search in keeping with the goals of the project. The final product covered 11 different kinds of information: eleven areas are:

- the demographic characteristics of household members;
- the demographic characteristics of the respondent;
- the respondent's involvement in Indian cultural activities;
- the respondent's language skills in English and other languages;
- the respondent's recent educational involvement;
- the respondent's employment profile;
- the respondent's income and economic self-sufficiency;
- the respondent's health profile;
- the Adult Performance Level of the respondent;
- the life satisfaction of the respondent; and
- the interviewer's comments on the success of the interview.

In all, there were some 492 items or questions that might be answered or completed during the interview.

The final instrument was printed in a format where optical scanning equipment could be used to easily translate responses into machine-readable format. Open-ended questions, or "thumbnail sketches," were included where categorization was not possible or where additional respondent information was appropriate. Flash cards were used extensively for clarity and ease of questionnaire administration.

Field Interviews

Interviewer Selection. In accordance with literature on status discontinuity, barriers to communication and the interview setting, NIMS took special care that the interviewers be experienced in interviewing, intelligent, and empathetic to those whom they were interviewing. Interviewer selection criteria were established with the interviewer–respondent dyad in mind. A three-step sequence was established for use in hiring interviewers. First, letters of nomination were given to tribal groups, organizations, and OIE staff. Material on the purpose and methodology of the study and the hiring criteria were enclosed, and nominators were invited to submit names to NIMS. NIMS then invited the nominees to apply, and after application, site visits were made to interview each applicant. During the interview, the study was discussed in length and applicants were rated as potential interviewers by NIMS staff. Those who were rated high by consensus were invited to come to an interviewer training session.
Interviewer Training. Training sessions were held in 14 cities throughout the United States during 1979. In all, some 200 interviewers were trained in groups of about 10-20. The training program, developed by Peter Hackbert, involved a three-day intensive course in interviewing that used the latest in instructional materials and techniques, including role playing, videotaping and a workshop atmosphere. On completion of the training course, the final group of interviewers was selected for each county. The interviewers selected were almost without exception Indians.

Conducting the Interviews. The field interviewers received a NIMS notebook, manual and interview materials, including a series of flash cards used in conjunction with the questionnaire. Letters of introduction were mailed to the respondents, and the interviewer carried one as well. A schedule of interviews was maintained at NIMS central office, and all travel plans and reservations were made. A WATTS line was established to facilitate two-way communication whenever it was needed. Each interviewer had a substitute no more than two hours away in the event of illness. Daily lists of interviews scheduled and those completed were maintained in the field and at the central office. Interviewers were evaluated in terms of completed schedule, respondent satisfaction with the interview, accuracy of data, neatness, and rate of unacceptable responses. Unacceptable work or irregular behavior resulted in dismissal with the standby interviewer replacing the interviewer. Because of the careful selection and training of the interviewers, personnel problems were minimal during the interview phase.

Data Control and Processing

As interview schedules were returned, they were checked for completeness, accuracy, internal consistency, and appropriateness of response; open-ended thumbnail sketches were coded. Editing was done as quickly as possible in order to follow up with the respondent while the interview was still fresh in his/her mind. Sample subjects who could not be located or who refused the interview were replaced through the use of the Kish technique, where another random individual of the same strata is selected.

Coding consisted mostly of coding the thumbnail information, as the bulk of the data were pre-coded. The coding process was completed at the central office in Philadelphia, Mississippi, where cross-coder communication could be used to assure reliability of interpretations by coders.

As the bulk of the data consisted of optically scanned items, data reduction was simplified. Hand-coded items and household characteristics questions were keypunched, verified, and then
RESULTS

Adult Indians

Preliminary analyses indicate that one-third of adult Indians in the United States are dissatisfied with their education and educational experiences, two-thirds feel that they received an improper education to meet their present needs, and 80 percent are anxious to receive more education now that they are adults. Although some 57 percent now have a high school diploma or its equivalent, initial review of the Adult Performance Level data shows that the performance levels of the U.S. Indian population are far below those of non-Indians on the traditional reading, writing, computation and economic dimensions. Other dimensions such as health, consumer education, law, occupational knowledge and community resources also show great differences as compared to the national data. These differences exist even though some 23 percent of the adult Indian population has attended school as recently as last year. Furthermore, the data show clear regional differences: adult Indian performance levels are consistently lower in the western states as compared to the eastern results.

Demographic statistics and characteristics reflect poverty. For example, 70 percent of homeowners live in homes valued at less than $10 thousand, and 86 percent of renters pay less than $40 rent per month.

Education Providers

While the response rates to items and return rates of the questionnaires were quite good for the IEA projects, only about 6 percent of the requested information was provided by the 39 (of 51) SEA programs returning their instruments. That is, whenever numbers of Indians participating in state adult education programs and activities were requested, virtually no data were reported. Some states admitted that they simply did not know or have the data; others indicated the information was not available. Three and sometimes four SEAs cooperated by providing most of the information regarding Indian participation; the rest, however, could not or would not provide such data. In addition to their poor response rate, it should be kept in mind that SEA officials' assessments of the education needs and problems of adult Indians may well be nothing more than speculation, since over 92 percent of them admit that they have
never conducted a formal, documented state assessment to ascertain adult Indian education needs.

The five most important needs of Indian adults identified by IEA directors are high school preparatory (GED), basic education, vocational/technical education, and life coping/consumer education.

When asked to describe the educational opportunities for adult Indians compared to those for non-Indians in their state, most SEA officials (71 percent) said Indian opportunities were "the same as," a few (10 percent) said "better than," and 19 percent said "worse than" those of non-Indians. The same figures for IEA project directors are 23 percent, 32 percent, and 39 percent, respectively.

Among the greatest difficulties they perceived in involving Indian adults as students in presently operating state adult education programs, SEA officials mentioned inadequate recruitment channels with Indian communities (44 percent), a lack of an identifiable community from which to recruit Indian participants (36 percent), and a lack of trained staff to deal with special problems of Indian adults (33 percent). They also cited problems with transportation (28 percent), children/childcare (23 percent), and a critical incompatibility between Indian adults and programs (21 percent). Fifteen percent of the SEAs could foresee no major problems, while others saw problems with Indian transience (15 percent), prejudice (13 percent), program design (10 percent), and language barriers (5 percent).

Although the typical Indian-operated adult education project receives 95 percent of its operating budget from Title IV, Part C funding, 29 percent of these projects have applied to their state agency (SEA) for direct funding. However, only 13 percent of the applicants were approved for funding, and only 35 percent ever received notification that their proposal was reviewed. Consequently, only about a fourth of the Indian projects applying for state funding were satisfied with the review process.

Finally, SEA officials were asked to characterize the relationship between their adult education coordinator and the Indian community in their state on a scale of 1 (very poor) to 5 (excellent). Their responses varied, but the median was 3.4 (i.e., between "average" and "above average"). This rating contrasts sharply with the median value of only 2.7 (between "below average" and "average") that IEA project directors ascribed to their relationship with the SEA. About three-fourths of the IEA directors gave reasons for their ratings. On the positive side, 19 percent reported a continuing or growing, supportive, mutual relationship with the SEA. Several (9 percent) were more neutral, saying that the SEAs were supportive and cooperative but that there were no funds and/or contact or affiliation.
tunately, however, the bulk (5 percent) of the comments tended to be negative: either there was little or no relationship, communication, money, or support forthcoming, or the SEA seemed to completely ignore or were not interested in the Indian community's adult education needs.

IMPLICATIONS

The results of this study have important implications for the future of Indian education and for educational research.

In regard to research, specific linkages from Indian adult educational needs and performance levels to specific social indicators (e.g., health, housing, occupation, employment, income) will have to be established using the national sample data. This will allow for the development of specific predictive models for future research. The data will also be used to detail more clearly micro-level and regional analyses, cultural differences, and census district comparisons. Because of the size and scope of the study, its socioeconomic results are going to be used in comparative studies using the 1980 Census data. The methodology and sampling procedures will serve for some time to come as the model for doing large-scale regional and national studies of American Indian populations.

In regard to Indian education as a whole, the most exclusive monetary support of education on the part of federal and state agencies neglects Indian community decision-makers who, when equipped with appropriate skills, could mandate and initiate changes in community institutions that would result in an improved quality of life within the Indian community. Until the Congress can be convinced of the presence of need and numbers of Indians who could benefit from adult education services and of the extraordinary success of many local Indian adult education programs, Indian adults of today and of the future, those young Indian men and women who are leaving school now, will be denied equal educational opportunity. Consequently, self-determination efforts in Indian communities will be stifled.

Until now of course, the information that would inform decision-makers of the nature and extent of Indian adult literacy and educational needs has not existed. Efforts to date to obtain dissemination funding from federal agencies sponsoring the research have not been successful. This seems strange indeed when we have, for the first time in history, a national data base accurately assessing the functional literacy, educational attainment and expressed needs of American Indian adults that can assist educators, legislators, tribal decision-makers and others in their efforts toward Indian self-determination and achieving the goals, purposes, and funding levels necessary for the educational programs of all Indians, Aleuts and Eskimos of this nation.
## Sites, Samples, and Interviewers

<table>
<thead>
<tr>
<th>State</th>
<th>County/Census District</th>
<th>Sample</th>
<th>Number of Interviewers</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Samples in Eastern States (alphabetical)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Alabama</td>
<td>Escambia</td>
<td>16</td>
<td>1</td>
</tr>
<tr>
<td>2. Connecticut</td>
<td>Fairfield</td>
<td>17</td>
<td>1</td>
</tr>
<tr>
<td>3. Florida</td>
<td>Dade</td>
<td>31</td>
<td>2</td>
</tr>
<tr>
<td>4. Illinois</td>
<td>Cook</td>
<td>92</td>
<td>5</td>
</tr>
<tr>
<td>5. Maine</td>
<td>Aroostook</td>
<td>14</td>
<td>1</td>
</tr>
<tr>
<td>6. Maine</td>
<td>enobscot</td>
<td>17</td>
<td>1</td>
</tr>
<tr>
<td>7. Mississippi</td>
<td>Leake</td>
<td>16</td>
<td>1</td>
</tr>
<tr>
<td>8. Mississippi</td>
<td>Neshoba</td>
<td>45</td>
<td>2</td>
</tr>
<tr>
<td>9. New Jersey</td>
<td>Hudson</td>
<td>15</td>
<td>1</td>
</tr>
<tr>
<td>10. New York</td>
<td>Cattaraugus</td>
<td>40</td>
<td>2</td>
</tr>
<tr>
<td>11. New York</td>
<td>Erie</td>
<td>77</td>
<td>4</td>
</tr>
<tr>
<td>12. New York</td>
<td>Franklin</td>
<td>59</td>
<td>3</td>
</tr>
<tr>
<td>13. New York</td>
<td>Kings</td>
<td>62</td>
<td>3</td>
</tr>
<tr>
<td>14. North Carolina</td>
<td>Robeson</td>
<td>134</td>
<td>8</td>
</tr>
<tr>
<td>15. Ohio</td>
<td>Cuyahoga</td>
<td>42</td>
<td>2</td>
</tr>
<tr>
<td>16. Wisconsin</td>
<td>Minnomicne</td>
<td>58</td>
<td>3</td>
</tr>
<tr>
<td>17. Wisconsin</td>
<td>Outagamie</td>
<td>27</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total for Eastern States</strong></td>
<td></td>
<td>782</td>
<td>42</td>
</tr>
</tbody>
</table>

| **Samples in Hawaii and Alaska** | | | |
| 1. Alaska | Upper Yukon | 23 | 1 |
| 2. Alaska | Anchorage  | 100 | 5 |
| 3. Alaska | Sitka      | 43  | 2 |
| 4. Hawaii | Honolulu   | 26  | 1 |
| **Total for Hawaii and Alaska** | | 192 | 9 |

<p>| <strong>Samples in Western States (alphabetical)</strong> | | | |
| 1. Arizona | Apache | 128 | 6 |
| 2. Arizona | Navajo | 122 | 6 |
| 3. Arizona | Maricopa | 106 | 5 |
| 4. Arizona | Pinal | 79  | 4 |
| 5. Arizona | Yuma | 54  | 3 |
| 6. California | Contra Costa | 50 | 2 |
| 7. California | Del Norte | 22 | 1 |
| 8. California | Los Angeles | 160 | 8 |
| 9. California | Orange | 73  | 4 |
| 10. California | San Diego | 89 | 4 |
| 11. California | San Francisco | 55 | 3 |
| 12. California | Tulare | 40  | 2 |
| 13. California | Araphaoe | 12 | 1 |
| 14. Colorado | Montezuma | 27 | 1 |
| 15. Idaho | ingham | 42  | 2 |
| 16. Idaho | Nez Perce | 23 | 1 |
| 17. Kansas | Sedgwick | 49 | 2 |</p>
<table>
<thead>
<tr>
<th>State</th>
<th>County/Census District</th>
<th>Sample</th>
<th>Number of Interviewers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kansas</td>
<td>Shawnee</td>
<td>26</td>
<td>1</td>
</tr>
<tr>
<td>Louisiana</td>
<td>Terrebonne</td>
<td>42</td>
<td>2</td>
</tr>
<tr>
<td>Minnesota</td>
<td></td>
<td>46</td>
<td>2</td>
</tr>
<tr>
<td>Minnesota</td>
<td>Hennepin</td>
<td>84</td>
<td>4</td>
</tr>
<tr>
<td>Minnesota</td>
<td>St. Louis</td>
<td>37</td>
<td>2</td>
</tr>
<tr>
<td>Missouri</td>
<td>Jackson</td>
<td>36</td>
<td>2</td>
</tr>
<tr>
<td>Montana</td>
<td>Big Horn</td>
<td>60</td>
<td>3</td>
</tr>
<tr>
<td>Montana</td>
<td>Missoula</td>
<td>16</td>
<td>1</td>
</tr>
<tr>
<td>Montana</td>
<td>Pondera</td>
<td>13</td>
<td>1</td>
</tr>
<tr>
<td>Montana</td>
<td>Roosevelt</td>
<td>47</td>
<td>2</td>
</tr>
<tr>
<td>Nebraska</td>
<td>Thurston</td>
<td>50</td>
<td>2</td>
</tr>
<tr>
<td>Nevada</td>
<td>Clark</td>
<td>29</td>
<td>1</td>
</tr>
<tr>
<td>Nevada</td>
<td>Washoe</td>
<td>49</td>
<td>2</td>
</tr>
<tr>
<td>New Mexico</td>
<td>McKinley</td>
<td>138</td>
<td>7</td>
</tr>
<tr>
<td>New Mexico</td>
<td>Sandoval</td>
<td>83</td>
<td>4</td>
</tr>
<tr>
<td>New Mexico</td>
<td>San Juan</td>
<td>96</td>
<td>5</td>
</tr>
<tr>
<td>New Mexico</td>
<td>Taos</td>
<td>29</td>
<td>1</td>
</tr>
<tr>
<td>North Dakota</td>
<td>Rolette</td>
<td>68</td>
<td>3</td>
</tr>
<tr>
<td>North Dakota</td>
<td></td>
<td>68</td>
<td>3</td>
</tr>
<tr>
<td>Oklahoma</td>
<td>Cherokee</td>
<td>65</td>
<td>3</td>
</tr>
<tr>
<td>Oklahoma</td>
<td>Custer</td>
<td>23</td>
<td>1</td>
</tr>
<tr>
<td>Oklahoma</td>
<td>Delaware</td>
<td>64</td>
<td>3</td>
</tr>
<tr>
<td>Oklahoma</td>
<td>Haskell</td>
<td>12</td>
<td>1</td>
</tr>
<tr>
<td>Oklahoma</td>
<td>Kiowa</td>
<td>14</td>
<td>1</td>
</tr>
<tr>
<td>Oklahoma</td>
<td>McKintosh</td>
<td>44</td>
<td>2</td>
</tr>
<tr>
<td>Oklahoma</td>
<td>Okfuskee</td>
<td>37</td>
<td>2</td>
</tr>
<tr>
<td>Oklahoma</td>
<td>Oklahoma</td>
<td>115</td>
<td>5</td>
</tr>
<tr>
<td>Oklahoma</td>
<td>Ottawa</td>
<td>59</td>
<td>3</td>
</tr>
<tr>
<td>Oklahoma</td>
<td>Johnston</td>
<td>23</td>
<td>1</td>
</tr>
<tr>
<td>Oklahoma</td>
<td>Seminole</td>
<td>49</td>
<td>2</td>
</tr>
<tr>
<td>Oregon</td>
<td>Multnomah</td>
<td>45</td>
<td>2</td>
</tr>
<tr>
<td>South Dakota</td>
<td>Dewey</td>
<td>58</td>
<td>3</td>
</tr>
<tr>
<td>South Dakota</td>
<td>Lyman</td>
<td>14</td>
<td>1</td>
</tr>
<tr>
<td>Texas</td>
<td>Harris</td>
<td>57</td>
<td>2</td>
</tr>
<tr>
<td>Utah</td>
<td>Unitah</td>
<td>30</td>
<td>1</td>
</tr>
<tr>
<td>Utah</td>
<td>Utah</td>
<td>14</td>
<td>1</td>
</tr>
<tr>
<td>Washington</td>
<td>Ferry</td>
<td>16</td>
<td>1</td>
</tr>
<tr>
<td>Washington</td>
<td>Grays Harbor</td>
<td>38</td>
<td>2</td>
</tr>
<tr>
<td>Washington</td>
<td>Kitsap</td>
<td>99</td>
<td>5</td>
</tr>
<tr>
<td>Washington</td>
<td>Yakima</td>
<td>66</td>
<td>3</td>
</tr>
<tr>
<td>Total for Western States</td>
<td></td>
<td>3,123</td>
<td>178</td>
</tr>
<tr>
<td>79 Sites</td>
<td>GRAND TOTAL</td>
<td>4,097</td>
<td>201</td>
</tr>
</tbody>
</table>
Indian Education, Wages & Labor Supply

Ronald L. Trosper
Social Welfare Research Institute
Boston College

A research project funded by the Department of Labor analyzed data from the Survey of Income and Education to identify the determinants of American Indian and Alaskan Native earnings, labor force participation, and labor supply. Estimated equations for American Indians were compared to those of Whites and Blacks. Earnings equations were used to compute imputed wages for use in estimating labor supply equations. Labor supply was measured by labor force participation and by annual weeks of participation in 1975. Comparisons of Alaskan Native to Whites in Alaska were inconclusive.

STATEMENT OF PROBLEM ADDRESSED

Since American Indians and Alaskan Natives have the lowest average income levels of all ethnic groups in the United States, studies exploring the patterns of Indian participation in the labor market are important for understanding causes of their poverty. To a great degree, poverty is connected with low labor market participation and low earnings. To what extent are low rates on these variables due to personal characteristics on observed variables such as education, age, health, and family structure, and to what extent are they due to unobserved factors such as labor market discrimination or different tastes? This important question had not yet been studied through statistical analysis with national data on individuals. The Survey of Income and Education provided a sample of American Indians large enough to allow such analysis. Although national data does not provide tribe-specific information, it appeared that a study based on a national sample would be worthwhile.
SIZE AND CHARACTERISTICS OF SAMPLE

In the Survey of Income and Education, the Bureau of the Census interviewed a random sample of persons in the United States during the spring of 1976. Approximately 141,000 households were visited nationally. A total of 3,848 persons identified as American Indian or Alaskan Native were enumerated. Table 1 gives the breakdown by age, sex, and (non-Alaskan and Alaska). Two subsamples for each sex were analyzed—civilian and military. Earnings equations were estimated for all adults with earnings in 1975; this was a total of 957 men and 722 women. Labor force participation equations were estimated for heads of households and wives of heads of households. Six hundred ninety Indian men were heads of households, and 727 Indian women were wives of heads of households.

For comparison purposes, samples of White and Black heads and wives were used. There were 1,257 black heads and 9,135 white heads, and 1,224 black wives and 9,168 white wives. These were one-fourth of the Blacks in the microdata file, and one-tenth of the whites.

RESEARCH METHODOLOGY

I used econometric analysis, specifically ordinary least squares (linear regression) and a related technique called 'logit' estimation. In both cases, coefficients are estimated that establish a significant relationship between dependent and independent variables. I had three different independent variables: the logarithm of the wage rate, a zero-one variable for labor force participation, and the number of weeks in the labor force in 1975.

PRINCIPAL FINDINGS

I summarize the report as a whole below. The second chapter of the report deals with the relationships between a person's wage rate and such factors as education, age, and marital status.*

Indian earnings equations for household heads differ from Whites. Rates of return on education for Indian men are lower than those for white men. Logit participation equations for

* A limited number of copies of chapter 2 of Dr. Troper's full report are available for review from the conference coordinator.
Table 1
American Indians and Alaska Natives
Total SIE Sample

<table>
<thead>
<tr>
<th></th>
<th>Men Adults</th>
<th>Children</th>
<th>Women Adults</th>
<th>Children</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Civilian</td>
<td>Military</td>
<td>Civilian</td>
<td>Military</td>
</tr>
<tr>
<td>US Out-side Alaska</td>
<td>994</td>
<td>36</td>
<td>414</td>
<td>1,176</td>
</tr>
<tr>
<td>Alaska</td>
<td>302</td>
<td>6</td>
<td>116</td>
<td>305</td>
</tr>
<tr>
<td>Total US</td>
<td>1,296</td>
<td>42</td>
<td>530</td>
<td>1,481</td>
</tr>
</tbody>
</table>


Indian and white household heads show both similarities and differences. Household income other than earnings of the head and his wife has a greater negative effect for Indian heads. Controlling for other factors, Indian heads living on reservations--proxied by residence in non-metropolitan areas of five states with many reservations--have a significantly higher probability of participating in the labor market than do those not on reservations. Weeks of labor force participation in 1975 serves as a dependent variable in equations estimated by ordinary least squares. A coefficient pattern similar to the logit results occurs. Observed differences in average weeks of participation are decomposed using estimated coefficients. Differences in characteristics explain about half of the average difference between Indian and white heads.

Indian wives are similar to white wives in all three comparisons. Earnings equations are the same. There are some differences in the response of labor supply to imputed ages, and young children had a smaller negative effect on Indian and black wives than on white wives. Region of residence mattered less than it did for household heads. Differences in characteristics fully explained differences in average weeks of labor force participation between Indian and white wives of household heads.

Comparisons of Alaskan Natives to Whites in Alaska were inconclusive due to small sample problems. An appendix presents national population and income estimates for American Indians and Alaskan Natives and compares them to American Blacks and Whites. Comparisons are cross-classified by age, education, labor force participation, occupation, and industry.
POTENTIAL USES OF RESEARCH OUTCOMES

Education Coefficients

The earnings regressions show that for men, the effect of education on the wage rate is smaller for Indians than for Whites. There was no difference for women. There is no specific policy implication from this result, for the research does not explain why the coefficients differ. Two reasons that have been suggested are that the quality of education for Indians is low or that labor market discrimination exists. Either of these hypotheses would need to be formulated in a way that explains why men and not women are affected.

Although one cannot draw a policy conclusion from the differences of coefficients across groups, one can suggest that the pattern of coefficients within groups supports investment in higher education. The effect of a year of education on earnings increases with level of education. (See table 2-16 of the report). This is indirect evidence that further investment in higher education should be favored over investment in primary and secondary education. Of course, schooling is a sequential activity, and the early years are needed for the later ones. These results suggest that on average, it has paid individual Indians to proceed to higher levels of education.

Discrimination and Unmeasured Factors

Many persons using the method employed in my second chapter conclude that much of the unexplained difference in wages is due to one main unmeasured factor—discrimination. I avoid this inference, for other variables not included also could matter, such as the quality of education, the choice of occupation and industry, personal characteristics, and family structure. One cannot obtain policy implications for variables that are not present in the study.

Labor Supply

Very few direct policy implications are available from the study of determinants of labor supply. About half of the difference in annual hours of work for men is explained by their characteristics, including imputed wage rates. There are some differences in coefficients, mainly the income coefficient and regional dummy variables. Although statistically significant differences were found, their quantitative importance is not great. The difference in other household income, using white coefficients, would account for one day's extra work a year by Indians; the Indian coefficient would make a difference of one and a half days (table 4-13 in the report).
Strategy and Target Groups for Dissemination of Results

The final report of the project is titled, "Earnings and Labor Supply: A Microeconomic Comparison of American Indians and Alaskan Natives to American Whites and Blacks." It is available from the National Technical Information Service, Accession Number PB 81-148512, at a cost of $23.00.

I plan to rewrite parts of it and submit the resulting articles to professional journals. This will circulate results among scholars, but not among Indians or educational policy makers. As presently written, the final report is too technical for persons unfamiliar with the methods used. The opportunity to attend this conference on Native American educational research gives me a chance to obtain other suggestions about dissemination.

SUGGESTED FUTURE RESEARCH TOPICS

Earnings equations can be improved using the Survey of Income and Education by including structural labor market and product market variables that are associated with the industry and occupation of each worker. Research by Barry Bluestone has suggested that normal human capital variables, namely years of school and years of potential experience, do not capture all of the effects of the characteristics of industry and occupation.

PROBLEMS ENCOUNTERED

Since this research was essentially a one-person project using data that had already been collected, there were few organizational or similar problems. Most difficulties came from the small size of the sample of Indians in the Survey of Income and Education. I had hoped to do a separate analysis of Alaska; I did so, but the results were inconclusive, because the sample was small. Similarly, I wanted to separate reservation from non-reservation residence. This proved difficult because the need for confidentiality caused the Bureau of the Census to suppress information about urban and rural residence for a number of states.

I learned recently that the Small Grant Program has been discontinued by the Labor Department and "folded into" the regular research program of the Office of Research and Development of the Employment and Training Program. No similar program has been started to replace it. I would think that research on American Indians would benefit from the existence of non-targeted research monies such as the Small Grant Program. The Office of Research and Development still accepts
research proposals on any labor topic, however, and might still fund similar research. The change eliminated use of an outside panel and particular application deadlines; it may represent only an effort to lower costs, rather than a change in emphasis.

BARRIERS TO NATIVE AMERICAN PARTICIPATION IN EDUCATIONAL RESEARCH

From a university perspective, barriers to research by native Americans might be divided into three categories: problems with funding, problems with data, and problems with the academic reward structure.

Funding

My project did not suffer from a lack of funding; I was fortunate to convince the review panel of the Small Grant Program that the research would be worthwhile. This convincing was a two-step process. I submitted a proposal in August 1978. The panel asked for revisions, which I made. The revised proposal was submitted in January 1979 and approved in March 1979. The revisions involved treating Alaska separately, a plan to control for reservation residence, and a review and critique of Gary Becker's work on Indians. All three seemed to me to be legitimate requests. (I am somewhat annoyed that Gary Becker's work remains influential; the ideas were established with data mistyped from the 1950 Census.)

Each year, the Employment and Training Administration of the Department of Labor publishes Research and Development Projects. This publication describes current research and lists reports from the previous two years. Judging from the list of Small Grant Program projects for 1980, it appears that competition for those monies was great. One needed a complete proposal and considerable previous experience in order to obtain one of the grants.

Most of the institutions are universities. (A refreshing number of topics, however, are about minorities or women.) Barriers facing Native American in attending the good graduate schools and working on university faculties are, therefore, also barriers to obtaining grants such as these. My application was surely strengthened by the fact that Boston College has excellent computer facilities and already had a copy of the data from the Survey of Income and Education.
DATA BASE

My project falls into a class of 'library-based' research. Taking data collected by the government or by other researchers, the scholar applies new or old statistical techniques to find something interesting or worthwhile. I have found that a general shortage of good data on Indians has posed obstacles to such work. I review in the introduction to my study the work of previous authors trying to use the data in the 1970 Census publication on American Indians. Serious problems occurred in their work because necessary data were not reported. Such data are often reported for other groups: person studying Whites, for instance, can use SMSA data, which are more detailed.

Of course, such a line of thinking has its dangers. I did not think that the sample of American Indians on the Survey of Income and Education would support any results regarding reservation residence. Yet, with some prodding from the review panel, I included a plan to proxy reservation residence by identifying those Indians from states with reservations whose residence was outside of metropolitan areas. To my great surprise, this rather inaccurate variable came up significant for men. Heads of households in these potential reservation areas were more likely than other Indians or Whites to offer labor, when all the other variables were controlled for. In spite of a few number of observations, a significant coefficient occurred. This suggests that one can complain too much about poor data and lack of observations. On the other hand, my whole chapter on Alaska is a study in frustration due to insufficient data.

Academic Reward Structure

Inasmuch as poor data inhibit the use of the latest techniques and academic economists tend to judge work by comparing it to the latest improvement in techniques, there exists a barrier in the academic reward structure. The latest theories of labor supply are tested using more advanced techniques than I did in my study. These studies are able to use data on the activity of households that have each been followed for about ten years by the Michigan Panel Study of Income Dynamics. I had to use methods that are older and, hence, somewhat out of date. I expect, therefore, that publishing the results will be slowed by the necessity to show that new answers to old questions are worthwhile when the answers apply to a group that has not been studied before using the old techniques. That persons such as myself find it difficult to obtain and keep positions at universities supporting independent research is a barrier to such research.
PROJECT DETAILS

Funding: Department of Labor (Employment and Training Administration): Direct Costs, $14,957; Indirect Costs, $7,659; Total, $22,616.

Boston College: Direct Costs, $6,928; Indirect Costs, $4,243; Total, $11,171. (Boston College offers faculty members free computer time. The contribution of such time is far understated by these budget figures.)

Staff: Principal Investigator, Ronald L. Trosper, Ph.D. and American Indian (Flathead)

Research Assistants: three part-time, all graduate students with B.A.; two white, one Japanese.
Indian Education Policy Reform:  
Policy and Implementation

Myron Jones  
Indian Education Training, Inc.  
Albuquerque, New Mexico

In 1979, Indian Education Training received a three-year grant from NIE to study Public Law 95-561, Title XI. The research focuses on the development of policy leading up to the writing of the statute and its enabling regulations and the problems and successes of actual implementation. The objectives of this study are to examine and document (1) the immediate history of this legislation and the development of regulations, policies, and procedures and (2) the actual implementation of the law. The final product is to be an in-depth analysis and report on the law and its implementation, with strong emphasis on its implications for the development of federal law designed to increase equal educational opportunity.

STATEMENT OF THE PROBLEM

When Indian education is compared with other education in the United States, it is usually placed somewhere among the stragglers. That's an understandable placement in terms of most criteria, but in terms of federal precedent, Indian education can be said to represent the avant-garde.

Every major federal policy and program for aid to public schools has followed a precedent established in federal aid to Indian education. This has never been conscious and deliberate; and it has never been purely accidental. The same historical, political and economic events that have shaped Indian education in public schools have also served to shape education policy for other minorities and low income whites.

Federal Indian education policy has always been a forerunner of aid to public schools. The chart on the next three pages pre-
sents a chronological summary of federal Indian education policy and its resulting impact on public schools.

On November 1, 1978, P.L. 95-561 was signed into law. This statute extends and amends the Elementary and Secondary Education Act of 1965. Its Indian section, Title XI, is the most comprehensive Indian education law ever passed. It follows all the earlier precedents established in other ESEA legislation and regulations, but it also extends the implications of the federal compensation and advocacy role beyond that attempted by previous legislation.

The primary purpose of this research project is to investigate the effects of a federal approach to equity using P.L. 95-561, Title XI, and its promise of increased financial compensation accompanied by the threat of the total removal of entitlement funding.

Our objectives are to:

- Define the intent of the legislation, regulations and emerging policy in the context of the problems they seek to address and the remedies they purport to offer;
- Determine the degree to which affected individuals and institutions understand the implications of the law;
- Determine to what degree the law achieves its purpose/intent; and
- Assess the implications for general federal educational policy that is designed to increase educational opportunity.

RESEARCH METHODOLOGY

The first year of the project was devoted to a study of the history of the law, a description of the intent of the legislation, regulations and emerging policy in the context of the problems they seek to address and the remedies they purport to offer, and a determination of the degree to which affected individuals and institutions understand the implications of the law. The second and third years focus on the implementation process through surveys and case studies.

First Year: History

P.L. 95-561, Title XI, is 20 pages long. Thirteen of the 20 pages concern themselves only with Indians in Bureau of Indian Affairs (BIA) schools or schools contracted through the Bureau
of Indian Affairs. Three pages deal with changes in Impact Aid, one page with Johnson O'Malley, and five pages with amendments to the Indian Education Act of 1972.

Our study concentrates on the Part A Impact Aid section, for the simple reason that 75 percent of federally connected Indians are in public schools.

Public Law 95-561, Title XI, Part A, is a typical advocacy program in that it advocates for a particular group--reservation Indians. It assumes that Indians are at a disadvantage within their school districts and that federal policy can change this situation. It calls for a redistribution of power and potentially a redistribution of funds within a school district.

The law is unusual in several respects:

- Although it provides a 25 percent increase in Impact Aid Funding, the money is not categorical: it goes into the school district general fund.
- Although the increased funding is on a per capita basis and applies to all students living on Indian land, the enforcement aspects of the law apply only to Indian students.
- The law gives enforcement powers to the tribal governments rather than the parents.
- The law provides a very specific complaint process with equally specific remedies. A school district that ignores the remedial actions ordered by the Department of Education risks losing all Indian Impact Aid funding (approximately $1,000 per pupil).
- If the funding cut-off does not produce school district compliance, the tribe or tribes may request a federal school (BIA or contract) and leave the public school.

There are 700 school districts across the country that receive Impact Aid funds for students living on Indian lands. The use of Impact Aid in this law is significant. It was the first major federal aid to education during a time (1950) when the concept was still considered subversive. It was acceptable to school districts because it was unfettered money. Its purpose was not to redistribute money or power within a school district but to redistribute federal money to those school districts that had been financially burdened by the federal government. The reasoning was simple. If federal land or federal activity diminished the local tax base, the federal government should compensate the school districts. From a school district's point of view, the only issue of equity has been the right to compensation. Until Public Law 95-561, the federal government agreed.

In all previous advocacy legislation, the redistribution was to be accomplished through supplementary funding and programs that
the federal government would supply to its clients. The use of Impact Aid even with increased funding means a redistribution of existing power and money. The 25 percent increase is tacked on in the form of payment; but it is not separate, and none of the funds are meant to be categorical. In fact, a major purpose of the legislation is to keep the funds noncategorical because they then remain inseparable from all other funding. This, in turn, gives the federal government access to the basic school program, whatever the source of funding.

The federal advocacy issue is increased exponentially because the law requires a timed, structured federal determination of equity that has been true in a relatively latent way only under Title VI of the Civil Rights Act and section 504 of the Vocational Rehabilitation Act. Enforcement of Title VI is a long process with uncertain enforcement that requires considerable local initiative. Section 504 represents a looming threat that has not been used. Public Law 95-561 requires nothing more than a written complaint from a tribe. No proof of inequity (or iniquity) is required.

School districts must apply for Impact Aid if they have a significant number of federal Indian students. The funding level ($1,000 per student) is so high that they cannot turn it down. For some districts, this means millions of dollars and up to 50 percent of their budget. They are stuck with an enlarged 30-year-old carrot as a primary ingredient of their assumed operational funding and they have to risk what they considered unjustified federal interference.

Essentially our study deals with the gap between good intentions and observable results. The first year of study involved an in-depth analysis of previous laws affecting Indian education, documents and testimony before Congressional committees leading up to the development of the statute, and an analysis of the statute itself. It also involved interviews with selected individuals who testified before the committee, legislative assistants, officials from the Department of Education (then HEW) and the BIA, and the key Congressmen responsible for the legislation.

The documentation on the legislative development was readily available, and all key legislators were easily accessible. Governor Quie of Minnesota, former ranking minority member of the Education and Labor Committee, granted a one-hour interview. Former Congressman Blouin, who had been the ranking majority member of the committee that passed the legislation, was available for two separate interviews and provided 40 typed pages of transcript. All the key staff members involved were available both for extensive personal interviews and intermittent follow-up telephone interviews.

Members of state legislatures, tribal councils, intertribal councils, tribal and state attorneys have come to us to share their
information and to keep up with ours. We testified before the President's Commission on Impact Aid and presented the only documentation that related to policy questions on Indian Impact Aid. Four out of seven members of the commission requested follow-up information.

A paper based on the study was presented at the American Education Research Association. We have been invited to submit another paper at next year's conference of the Coalition of Indian Controlled School Boards. The staff director participated in a panel discussion on equity at the NIE-sponsored conference on Research in Law and Government at a September 1980 meeting in Annapolis.

Our abundance of riches gathered in the legislative history proved a mixed blessing. It offered us insights into the issues involved in the implementation study that we never could have guessed at without the products of our first year. It also created serious but challenging problems in the development of the implementation design, because we had to spend an inordinate amount of time sifting out information that was highly interesting but ultimately not of high research priority.

The Second and Third Years

The fact that legislation has been written does not in itself change the situation it was intended to change. Legislation directly requires the actions some individuals and groups, and intentionally or unintentionally elicits actions or reactions from others. This would be too obvious to mention if it were not for the fact that many legislators consistently ignore this unpleasant reality.

Research Design. Five groups will potentially be involved in varying degrees in the development and implementation of advocacy legislation: (1) federal bureaucracy, (2) states, (3) school districts, (4) clients, and (5) advocacy groups (for any of the above). Each of these groups will be involved because they will be affected in some way by the outcome. The degree to which the legislative branch welcomes their involvement and the degree to which they are able to insist on their involvement, welcome or not.

The ultimate recipients of the legislation—parents and students—will be involved less than any other group. The states and school districts will be in favor of federal funding and against federal requirements. The advocates will represent the interests of their particular clients and their own group interests in some combination. The actual position of the federal bureaucracy will depend on whether the legislation is perceived as strengthening or weakening their present position. The official position of the bureaucracy will be filtered through
several layers of governmental and political concerns and may appear to totally violate their most obvious self-interest (e.g., although education represents 60 percent of the BIA budget, the Department of Interior formally requested that Indian education be taken from them and given to the new Department of Education).

Those enacting the legislation will be concerned with three basic questions: (1) What legislation is desirable? (2) What will work? (3) What can they get passed? The answers to those questions may overlap or intersect, but they are separate questions.

Since the five groups will be affected by the legislation, they will have an active interest in all three questions. Since the five groups will be the ones who will carry out the legislation or receive intended benefits, the legislators must take their views, interests and history into account or risk writing legislation that will not achieve its purpose.

Our contention is that legislation can neither be designed to meet its purpose nor implemented properly without a careful consideration of the groups who will be affected and an even more careful study of the factors that will determine their behavior.

Essentially, our research design is to describe the actual implementation against a set of scenarios that we expect to be played out during the course of implementation. These scenarios are based on a step-by-step analysis of what the law requires of the affected parties. Our assumption is that each of these groups will respond to the law and shape the implementation based on its reactions to predictable determinants.

We have developed a set of five determinants, described at length in the Implementation Design, that we feel determine the effective implementation of any advocacy legislation: (1) structure and clarity of the law, (2) dissemination, (3) enforcement, (4) critical social and economic relationships, and (5) political incentive. A law requires actions from individuals, groups, and institutions. They cannot act as intended unless the law is clear and they know about it (structure, clarity and dissemination). Once those issues are settled, they will or will not carry out the law. The ways in which they will act will depend on their history, their present relationships, and the real or imagined effects the law will have on their future (enforcement, social, and economic relationships, and political incentives).

Our purpose is not to arrive at a mathematical determination of the relative importance of each question or issue (e.g., force field analysis) but to give ourselves a systematic device for scanning and probing. Our design objective is the discovery of those critical and overriding issues that will determine the
degree to which the law is implemented. For this purpose, we plan to conduct longitudinal surveys of selected districts and six longitudinal case studies.

The research design is structured to obtain information at three levels: (1) a sort/survey of the universe of 700 school districts; (2) two sample surveys; and (3) six case studies. To use Elmore's terms, we will use a forward-mapping procedure to obtain general information on which to base backward-mapping studies.

The sort of the entire population of school districts with reservation Indian children will be conducted primarily through data available to use from the Impact Aid office. This sort of the approximately 700 sets of policies and procedures filed by school districts will give us important information on how the absence of clarity in the law and absence of compliance on the part of the enforcers (Department of Education) affects school district compliance. This will be a test of superficial compliance behavior and Department of Education enforcement.

Applications, policies and procedures, and any additional correspondence between the school districts and the Impact Aid office will be reviewed in light of the initial scenarios. Telephone interviews will be conducted with the Impact Aid Officer. This will give us a gross indication of the degree to which the law has been implemented and provide a sort for two of the purposive sample surveys.

Two surveys will follow. These are purposive samples consisting of approximately five districts each. One of the survey populations will be selected as a result of the universal survey. The other survey will be made up of all those districts against whom complaints have been filed. (As of this writing there are three.)

There will be six case studies: three in districts in which complaints have been filed and three in non-complaint districts. Further details about selection criteria for these districts are discussed in the Implementation Proposal.

Procedure. Data collection will take four forms: review of documents, questionnaires, telephone and personal interviews, and site visits. Documents of record, which provide substantial data for the complaint districts, will include (1) initial complaint; (2) related correspondence; (3) hearing transcript; (4) information submitted after the hearing; (5) hearing officer’s findings; (6) response to the findings; (7) Secretary’s findings; (8) response to Secretary’s findings; (9) follow-up correspondence; and (10) any tribal-BIA correspondence.

We have developed a tentative set of indicators to guide our data collection. They are organized under the determinants and
further divided into specific indicators that seem significant for each group.

**Analysis, Organization of Findings.** One dominant pattern is that of the interactions of the five groups brought together by this law; another the conditions, the determinants. We are not interested in providing empirical proof that these patterns exist, but in describing how they affect the implementation process. We believe they are useful tools for treating certain parts of the implementation process. From the surveys, which provide a measure of normative data, and the case studies, which provide a greater body of descriptive information, we will use these two patterns as a means to explain why certain aspects of the implementation process become more important than others.

Data will be analyzed using each of the groups as the focus: the degree to which a particular portion of the law was implemented as intended will be documented and described in terms of how each group reacted to each of the determinants. The degree of implementation will be measured against our own scenarios. Our own predictions were based on what we currently know about the law, the groups and determinants.

We will describe the role the Department of Education played in regulation and policy development and dissemination. Reactions of school districts as determined by our survey of the 700 will be presented. This will be based on broad statistical information, patterns of school districts' reactions as they relate to our scenarios, and a description of the Department of Education's enforcement mechanism. (Emphasis will be on the importance of structure and clarity, dissemination and enforcement.)

The survey that comes out of the 700 sort will provide information on what a school district with exceptional involvement looks like--what motivates it and what effects the involvement has had on the school program. In those districts with complaint proceedings, we will document the history of conflict before P.L. 95-561, the attempts at negotiations before the hearings, results of the hearings, and enforcement of any recommendations made by the Secretary's office. Case studies will provide richer descriptions. Gallup-McKinley, a prototype of large Indian districts, will be one of the case studies. It is important to obtain a description of what the law looks like from the perspective of the five groups in the type of district where it would be expected to affect the greatest number of Indian students.

We will look for differences in how the law works in an exemplary district: Does the district build on its program of involvement? Does it shift to meet the specific requirements of the law? Is there evidence that involvement of parents before the law or the involvement of parents and tribes after the law has
had a measurable effect on the school program offered Indian students?

In the district that rejects the law, we will examine information to determine factors that made the school district turn down high funding. What particular aspects of the law made it unacceptable? What do they do to make up their funding loss? What effect did the rejection of the law have on district/Indian relations?

Complain districts provide an opportunity to follow the law as far as it goes. The complaint proceedings and the ensuing enforcement are at the heart of the leverage of the law. This is where the federal government steps in and sorts out the difficulties. Does this in fact, happen? What are the significant contributing factors?

Our final analysis will summarize the roles of the groups as they were motivated by critical determinants and take this five-by-five back to the initial legislative process. To what extent did the legislators look at the groups and issues that would determine their behavior? Using the results of our first year history, we will describe the factors that determined the behavior of the legislators and their staffs and the degree to which they paid attention to those who would be affected by their proposed law. A former Senate staff member involved in this legislation resisted answering any questions concerning implementation problems. He described the legislator's job as one of "laying the tracks, period." We accept his metaphor but find it incomplete. Those who lay tracks must know where their tracks should go and what they're going to carry.

Principal Findings and Conclusions to Date

The House Advisory Study Group on Indian Education has unusual jurisdictional authority. They were empowered to write legislation that covered Indian education under HEW and the Department of Interior. They were also isolated from the customary lines of authority. Because they were a special and temporary committee, they answered directly to the full Education and Labor Committee and not to any of the standing subcommittees.

All the active congressmen, their staff members, and the powerful lobbying groups were preoccupied with the other 14 titles of P.L. 95-561. The Indian lobbying groups had Title XI all to themselves. In fact, many of the Indian lobbying groups opposed major sections of the bill, but that was all during the stages of preliminary drafts.

On the one set of hearings (three days) when groups had a chance to react to a complete version of draft legislation, there was no opposition except from the Bureau of Indian Affairs, and their opposing line was totally predictable.
The Advisory Study Group used its obscurity to move their title through the House with relative ease. Senator Abourezk agreed to support it on the other side, and though the Senate staff members made several minor changes, Title XI was tacked on to P.L. 95-561 without any major opposition.

If it was passed as if it were legislation with consensus support, it was also written as if it would generate consensus support. It has not. The agency responsible for the enforcement of Part A, the Department of Education, was never asked to testify, because their opposition was assured. They have no incentive to enforce it and several compelling reasons to hope it goes away.

Indian-controlled public school districts were asked to testify at a time when they were exempt from the public school requirements, and they predictably supported the titles that didn't apply to them. No other public school district was invited to testify, and it's hard to imagine that any would have supported the legislation. No states were invited to testify for the same reason.

In summary, because the strategy of the Advisory Group was a systematic exclusion of opposition, they wrote their legislation with a serious lack of information about the opposition and an almost total absence of negotiation on the most obvious implementation issues.

POTENTIAL USE OF RESEARCH RESULTS

We will write an extensive report that will attempt to answer the following questions: "When you set out to pass a law that will help someone, what do you have to know? How do you find out?" This will be written for a wide audience: legislators, legislative staff members, political scientists, researchers in law and government, Indian lobbying groups, and other advocacy groups.

BARRIERS TO NATIVE AMERICAN PARTICIPATION IN RESEARCH

We have encountered no barriers to date. On the contrary, it has been to our advantage to be an Indian organization. We want to know what the legislators thought they were accomplishing for Indian students, and because we are an Indian organization, they described for us the ideal world that would be created by their legislation. They reaffirmed the pure advocacy stance that they followed throughout the legislative history. If we had been Brookings, they might have hedged a
If we had been the Heritage Foundation, they might have claimed the law was written by somebody else.

PROJECT DETAILS

Funded By: National Institute of Education
Grants for Research on Law and Government in Education

Duration: Three years

Total Funds: $208,778.00

Staff: Principal Investigator - Myron Jones, Indian
       Research Analyst - Dr. Kathryn Jagoda Jones, High Middle Anglican
       Consultant - Dr. Richard Elmore, Polish Norwegian, Northern Baptist
       Consultant - Dulcie Wolfe, Indian
       Consultant - Suzy Erlich, Eskimo