The rationale of this study was that a planned, systematic approach was necessary to identify major problems in educating American Indians, to analyze the problems, to determine the evidence needed for solutions, and to indicate research and developmental needs and priorities. Thus, this study consisted of three major phases: (1) identification of 20 or 25 priority problems, (2) development of position papers by scholars who were particularly knowledgeable about the problems, and (3) analysis of the position papers for recommendations in terms of research and developmental needs. It was expected that the project would provide valuable information to those individuals and agencies interested in research in Indian education and that the findings would have some implication for the allocation of research funds. In the document, research and developmental recommendations from 20 of the selected position papers are reviewed and analyzed. (LS)
RESEARCH AND DEVELOPMENT NEEDS AND PRIORITIES FOR THE EDUCATION OF AMERICAN INDIANS

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I. INTRODUCTION

Dissatisfaction with Indian education has been widespread. A survey of the literature, past and present, reveals almost unanimous agreement that formal education for American Indians has been largely unsuccessful.

Two Surveys of Indian Education

In 1928 the famous Meriam Report, probably the first extensive and best critical appraisal of Indian affairs ever made, presented a highly unfavorable evaluation of Indian education. Low achievement and high attrition were noted; policies, programs, and facilities were strongly criticized and sweeping changes were recommended.

Some forty years later, in 1969, a report by the Senate Subcommittee on Indian education was equally unfavorable, repeating many of the same criticisms and recommendations. The Subcommittee took testimonies from hundreds of Indians and "experts" on Indian affairs at hearings around the country, received reports from numerous consultants, made many site visits to Indian homes and schools, and gathered volumes of literature. After the two-year investigation, members were reported as being shocked at what they had discovered. They concluded that Indian education is a national tragedy and a failure of major proportions.
The report of the Senate Subcommittee on Indian Education has been criticized as being slanted, overstated, sometimes inaccurate, and totally and intentionally negative, with complete disregard for the encouraging, and even dramatic, educational advances which Indians are making. The basic conclusions of the report, however, concerning the serious educational disadvantages of Indian Americans are not challenged.

Educational Deficits of American Indians

The educational deficits of American Indians have been well documented. In spite of some encouraging advances in recent years, Indians continue to lag behind the general population in educational attainment.

In 1960, the average number of years of schooling for Indian adults was 8.4 years, compared to a national average of 10.6 years. For young adults (14-24) the average number of years of schooling was 9.0 for Indians and 10.8 for the general population.

Recent studies reveal continuing high dropout rates and low achievement levels. The dropout rate for Indian students, grades eight to twelve, is 48% in the Northwest, and 39% in the Southwest, which is from one and one-half to nearly twice as high as the national rate of 26% for the same grades. In academic achievement, as measured by standardized tests, Indian high school students fall progressively farther below national norms as they advance through school. On the average, Indian students enter ninth grade achieving at slightly more than one year below grade
level and complete twelfth grade nearly three years below grade level. When the average overageness of more than one year for high school graduates is added to this deficit, the degree of academic retardation is seen to be great.

College enrollment rates are comparatively low and attrition rates high for Indian youth. About 32% of Indian high school graduates enroll in college, but only about 7% obtain a four-year degree. The national averages are 54% college enrollment and about 20% completion.

Other findings often cited as evidence of the failure of education are the high degree of underenrollment, absenteeism, and tardiness among Indian students.

Also frequently mentioned by writers, especially social scientists, but with much less documentation than the quantitatively measurable deficits already cataloged, are such undesirable outcomes as alienation, anxiety, apathy, and low self-esteem.

Rationale for the Project

While there is general agreement that Indians are seriously disadvantaged educationally, there is not agreement as to causes or remedies. Among the causes frequently advanced are irrelevant curricula, inappropriate learning materials, inadequate teachers, poor home environment, poverty, isolation, lack of student motivation, language handicap, cultural conflict, and absence of Indian involvement and control. Remedies strongly advocated, mostly based upon social science theory,
include bicultural education, bilingual education, special training and cultural orientation of teachers, more Indian teachers, development and use of Indian cultural learning materials, and more involvement and control of education by Indians.

The above recommendations may be excellent, but there is not sufficient evidence now available to determine what impact their implementation would have in ameliorating Indian educational deficiencies.

The following comment on one of the suggested remedies, bilingual education, by one authority, illustrates the need for further research:

The very obvious implication for bilingual education is that it should open its doors to research and evaluation. There are too many facets in bilingual education that are relatively unknown; some of them are as yet not even couched in good theory. To embark on a course of action just because it seems logical is to commit the age-old sin of educational practice with the possibility of bringing about the same disastrous effects. 10

In the same vein, another writer, implying the need for further research, comments as follows on the theory that community action would cure educational retardation of minority group school children:

Community control might improve the school performance of school children. It might not. No one knows. It might have other effects that are quite desirable, or undesirable. It is a perfectly reasonable proposal to try out. But at this time it is unforgivable that it should be put forward as a 'proven' remedy for anything. 11

It is evident that there are many unknowns in education of Indians, and without more knowledge educators can only continue to grope their way. To upgrade education of Indians it is essential that solutions be
found to the problems that stand in the way of realizing educational objectives. It was the rationale of this study that a planned, systematic approach was necessary that would identify major problems, analyze them, determine the evidence needed for solutions, and indicate the research and development needs and priorities. It was expected that the project would provide valuable information to those individuals and agencies interested in research in Indian education. It was also anticipated that the findings would have some implications for the allocation of research funds.

The Plan of the Study

The study consisted of three major phases as follows:

1. Identification of 20-25 priority problems for further examination and the identification of scholars who were particularly knowledgeable about the problems.

2. Development of position papers by selected scholars, based upon problems identified.

3. Analysis of position papers to recommend research and development needs.
II. METHODS

First Panel Meeting

To begin the task of identifying problems in the education of American Indians, a first committee of experts met on October 10, 1969. Participants on the first panel were: Dr. Vera John, Yeshiva University; Mr. Francis McKinley, Far West Education Research and Development Laboratory; Mr. Anthony Purley, Thiokol Corporation; Mr. Joe Sando, All Indian Pueblo Council; Dr. Murray Wax, University of Kansas; Mr. Willard Bass, Southwestern Cooperative Educational Laboratory. Nineteen problem areas were identified and discussed at length, and a good start was made toward final determination of a list of problems to be considered for position paper assignment.

At this first meeting, the Project Coordinator sought direction from panel members on ways of getting input from Indian people and educational practitioners as to what they consider to be the crucial educational problems. It was recommended that such input could best be obtained from Indians who are classroom teachers and are instructing Indian pupils.

Meetings With Indian Teachers

Six meetings were held during November and December by the Project Coordinator with groups of Indian teachers of Indian pupils,
from both public and BIA schools, in Arizona, New Mexico, Oklahoma, and South Dakota. As teachers identified and discussed problems in Indian education, notes were taken and later compiled into a report for presentation at the next panel meeting.

**Second Panel Meeting**

The meeting of the second panel was held on December 23 and 24, 1969, for the purpose of finalizing a list of priority problems on which position papers might be written, and to compile a list of scholars from which authors of position papers would be selected. The problems identified by Indian teachers were considered by the panel in making its selection. There was representation on the panel from the disciplines of anthropology, sociology, psychology, education, and medicine, as well as from a number of Indian tribes and many geographical areas.

Panel members were:

- Dr. Lionel de Montigny
  - Research and Development Specialist
  - Northwest Regional Educational Laboratory
  - Portland, Oregon

- Dr. Vera John
  - Department of Psychology
  - Yeshiva University

- Mr. Francis McKinley
  - Staff Member
  - Far West Education Research and Development Laboratory
  - Berkeley, California

- Mr. Anthony Purley
  - Assistant Director for Educational Development
  - Thiokol Corporation
  - Roswell, New Mexico
A list of 30 priority problems was compiled as follows:

1. School Boards and Local Community Control

2. Federal Programs and Their Consequences (Including Proposed Legislation)

3. Indian Education and Reservation Economic Development

4. Education of Urban, Unenrolled, and Mobile Indians

5. Pros and Cons of Individualized Programmed Instruction for Indian Students

6. Research and Evaluation of Bilingual Education Programs

7. English as a Second Language Instruction

8. Training in Communicative Competency

9. Teaching the Role of the Indian in American History and Updating Present Curricula
10. Peer Societies of Indian Children and Their Relationship with Education Problems

11. Differential Educational Achievement Among Contemporary American Indian Cultures

12. Principles of Learning Applied to Indian Education

13. Health Factors Influencing Education of American Indians

14. Evaluation of Vocational Programs for American Indians

15. The Teachers of American Indian Children: Attitudes Toward Their Own and Other Cultures

16. Vocational and School Counseling of Indian Students

17. Desirable (Innovative) Training Programs for the Teachers of Indians

18. Impact of Transfer of Schools and Pupils from BIA to Public Schools

19. Higher Education for Indians

20. Power Structure and the Place of Tribal Authority in Indian Education

21. Goals and Philosophies of Indian Education Held by Organized Groups

22. State Systems of Educational Control

23. Bureaucracy and Indian Education

24. Resources in Living Indian Languages

25. Parent Involvement in Language Development

26. Research in Effective Ways of Teaching Local Indian History

27. Research in Materials for Teaching Contemporary Conditions and Problems

28. Mental Health (Including Alcohol and Drugs)
29. Teacher Subcultures on the Reservation

30. Adult Basic Education

The first 20 topics on the list were assigned to selected scholars for the production of "state of the art" papers. Each author was asked to prepare a brief and concise paper of about 10 pages, using the following format:

1. Nature and scope of the problem
2. Status of research on the problem
3. Specification of knowledge still needed, why needed, and possible use
4. Recommendations on needed research
5. Methodological considerations

Third Panel Meeting

The third panel convened for sessions on June 1 and 2, 1970, to review position papers. Eighteen papers were completed and were submitted to the panel for review and analysis. Participants on the third panel were:

Dr. James Cooper
University of New Mexico

Mr. Francis McKinley
National Indian Training and Research Center
Tempe, Arizona

Dr. Deward Walker
University of Colorado

Dr. Murray Wax
University of Kansas
Mr. Willard Bass  
Southwestern Cooperative Educational Laboratory

When the papers were reviewed and analyzed for research and development recommendations it was found that they varied greatly in quality and in the degree to which they conformed to the specifications which had been outlined for their composition. Unfortunately, limitations of time and funds for writing position papers proved to be inadequate to ensure quality production and control. The broad representation of disciplines and the expertise of the members enabled the panel to make recommendations beyond those extracted from the papers.
III. RECOMMENDATIONS FOR RESEARCH AND DEVELOPMENT

Selected problems in Indian education in order of priority, with research recommendations and estimated costs, are presented in this section. Suggestions for development are offered for some problems. Selection of problems and determination of recommendations for research and development represent the work of the panel groups, but the responsibility for assigning priorities and estimating costs was assumed by the writer and do not necessarily represent the views of members of the panels.

The selected problem areas cover, among others, such widely diversified, but highly interrelated, facets of education as control, funding, curriculum, learning, guidance, and teachers, all of which are of great, and seemingly equal, importance. Setting research priorities proved to be a very arbitrary exercise. The problems of "School Boards and Local Control," "Federal Programs and Their Consequences for Indian Education," and "Education of Urban, Unenrolled, and Mobile Indians" were placed at the top of the list because they currently are urgent issues of great concern to many Indian people.

Because of differences in cultural patterns found among the many American Indian tribal groups, research findings for one group may not
be universally applicable. This suggests the need for conducting some of the recommended studies with a number of different tribal groups rather than with only one. Thus, it will be noted that often a recommendation is made for "studies" rather than "a study."

Cost figures, which are presented for most study recommendations, are, of course, no more than very rough estimates, since geographic location and scope, study design, size of sample, availability of graduate students, use of participant observers, and other variable factors will greatly affect the expense of a study.

For background information and greater detail about a particular research or development recommendation the reader is referred to the position paper for the problem area under which the recommendation appears. Position paper titles and authors are listed in the Appendix. It is anticipated that many of the papers will be submitted to the ERIC Clearinghouse, New Mexico State University, Las Cruces, New Mexico, for publication and dissemination.

Recommendations

1. School Boards and Local Community Control
   a. Recommendations for Research
      (1) A study of different types of school boards, including their election or appointment procedures, for federal, public, and private schools enrolling American Indian students.

      Estimated cost: $30,000.
(2) A study of the characteristics of Indian school board members and the way in which these variables relate to their participation and effectiveness as board members.

Estimated cost: $35,000.

(3) A study of how parents, tribal officials, and staff members regard the authority and participation of their school boards.

Estimated cost: $40,000.

(4) A study of strategies that have proved successful in effecting involvement of Indian people, particularly parents, in school affairs.

Estimated cost: $25,000.

(5) Given the nature of Indian communities and the nature of the tasks of Indian education, what are desirable models for control (including school boards) of school systems. Particular attention should be given to parents, tribal officials, and staff.

Estimated cost: $40,000.

Comment: The above five recommended studies could be conducted separately or could be combined into one comprehensive study at a considerable reduction in cost by eliminating some duplications of travel, correspondence, and personnel time.

Estimated cost of one comprehensive study: $90,000.
b. Recommendations for Development

(1) A summary of the findings and recommendations from the above studies, including descriptions of models of strategies, could be incorporated into a booklet to be distributed to tribal leaders, Bureau of Indian Affairs officials, Indian school board members, school administrators, and other interested individuals and agencies.

(2) Projects to promote Indian involvement and election to school boards.

(3) Projects to train Indian leaders in alternate ways of influencing non-Indian board members, administrators, and teachers when Indian representation on the school board is nonexistent or inadequate.

(4) Institutes to better inform Indian parents about the objectives, methods, and operation of schools and to educate them in ways of reaching and influencing non-Indian administrators and teachers.

2. Federal Programs and Their Consequences for Education of American Indians

a. Recommendations for Research

(1) A comprehensive study of federal funding for education of American Indians under Public Laws 874, 815, and Johnson-O'Malley.

Estimated cost: $100,000.

(2) A study of allocation and use for Indians of funds from Title I and Title II of the Elementary and Secondary Education Act of 1965,
Public Law 89-10.

Estimated cost: $100,000.

(3) A study of allocation and use for Indian students of federal funds under Title VII of the Bilingual Education Act, Public Law 90-247, and Title VIII (Dropout Prevention) of the Elementary and Secondary Education Act of 1965, Public Law 89-10.

Estimated cost: $40,000.

3. Education of Urban, Unenrolled, and Mobile Indians

a. Recommendations for Research

(1) A study of adjustment problems of urban, relocated, and mobile Indian students.

Estimated cost: $40,000.

(2) A study of federal funding for education of Indian pupils in urban public schools.

Estimated cost: $30,000.

(3) Several pilot studies at different urban sites to test the effectiveness of special education programs for Indian students, each program to include at least some of such features as Indian teachers and aides, an Indian counselor, cultural awareness training for teachers, courses in Indian history and culture, courses in Indian arts and crafts, work experience in the community, and an Indian community aide to provide liaison between school and Indian parents. Each project would serve a different age group and should be scheduled for at least three
years duration in order to adequately evaluate its effectiveness in terms of such factors as attendance, achievement, participation in school activities, and dropout.

Estimated cost: $35,000-$75,000 per year.

(4) An assessment of the sources and adequacy of financial aid for post high school education and training for urban and unenrolled American Indians.

Estimated cost: $18,000.

b. Recommendations for Development

(1) Projects to locate and provide remedial education for urban Indian pupils and adults.

4. The Teachers of American Indian Children: Attitudes Toward Their Own and Other Cultures

a. Recommendations for Research

(1) A study of the teacher subculture where teachers of Indian pupils live in a distinct enclave, with emphasis upon characteristic attitudes toward Indians generally and pupils particularly and the daily experiences and interactions which maintain and strengthen these attitudes.

Suggested methodology: It is recommended that the strategy of participant observation be employed, preferably at two or three sites, which could be done quite inexpensively.

Estimated cost: $25,000-$50,000.
(2) A study of the social situation of teachers of Indian pupils in an integrated school in a small town or city, with emphasis upon, attitudes of teachers and their social interaction in the community.

Suggested methodology: It is recommended that the strategy of participant observation be employed, preferably at two or three sites, which could be done quite inexpensively.

Estimated cost: $25,000-$50,000.

(3) A study of the attitudes of the supervisory force of penal institutions toward Indian inmates, toward Indian society and culture, and toward American society and its cultures.

Estimated cost: $40,000.

(4) A study of the attitudes of teachers toward Indian pupils in urban situations where Indian pupils are a small minority.

Suggested methodology:

(a) Schoolroom observation,
(b) Interviews with teachers and administrators,
(c) Interviews with parents.

Estimated cost: $50,000.

(5) An appraisal of programs of orientation for teachers of Indian pupils.

Suggested methodology:

(a) Surveying relevant literature,
(b) Interviewing teachers,
(c) Comparing teacher competencies with orientation program experiences.  
Estimated cost: $35,000.

(6) A study of the life and career histories of teachers recruited by the BIA and similar agencies educating Indian students.  
Estimated cost: $25,000.

(7) A study of the effectiveness of Indian teachers of Indian pupils.  
Estimated cost: $45,000.

(8) A study of the training and attitudes of administrators of schools enrolling Indian students.  
Estimated cost: $35,000.

b. Recommendations for Development

(1) Lengthy workshops to teach non-Indian teachers about traditional and contemporary Indian culture (most workshops of this type for teachers are too superficial).

(2) The development of handbooks for teachers of Indian pupils, which provide information about the local Indian community.

5. Principles of Learning Applied to Indian Education

a. Recommendations for Research

(1) A study to determine what rewards (reinforcers) are most effective for Indian pupils. The research paradigm should include the variables of sequence, amount, age, sex, grade, tribe, and types.
of behaviors (psychomotor, social, cognate, or affect).

Estimated cost: $50,000.

(2) A study of the kind and degree to which rewards are being currently employed.

Estimated cost: $25,000.

(3) Based upon the results of (2) above, an evaluative research should test the effectiveness of efforts made to modify teacher behaviors.

Estimated cost: $35,000.

(4) Ecological analyses should be conducted to determine the effects upon pupil behavior of school learning environments and to recommend changes.

Estimated cost: $30,000.

(5) Based upon (4) above, studies should determine the effects of changes in the ecosystem upon subsequent pupil behavior.

Estimated cost: $45,000.

(6) Studies to determine the extent and degree to which certain key concepts are possessed by Indian pupils. Independent variables should include age, sex, tribe, learning ability, and category of concept.

Estimated cost: $30,000.

(7) Studies to determine the kinds and levels of concepts required by different curricular formulations and the degree to which
these requirements are attainable.

Estimated cost: $35,000.

6. Desirable (Innovative) Training Programs for Teachers of Indians

a. Recommendations for Research

(1) A study to identify teacher behavior and strategies that are effective in teaching Indian children.

Suggested methodology:

(a) Review of the literature,

(b) Classroom observation,

(c) Teacher interviews,

(d) Pupil testing.

Estimated cost: $45,000.

(2) A study to identify and evaluate strategies that have been employed in attempting to modify teacher behaviors, such as micro-teaching, role playing, sensitivity sessions, interaction analysis, media presentations, and contingency management.

Estimated cost: $35,000.

(3) A study to develop and field test a training model for preparation of teachers of Indian pupils based upon the findings of (1) and (2) above.

Estimated cost: $85,000.

(4) A study, taking into consideration the power structure surrounding Indian education, to determine effective strategies for
introducing innovation in Indian education.

Estimated cost: $40,000.

b. Recommendations for Development

(1) Programs to bring about more extensive involvement of non-Indian teachers with Indian students and their parents outside of school.

(2) Development of degree programs in Indian education for those seeking career preparation in this area.

(3) Development and use of films for instructing educators in how to relate to Indian people and their children, and in showing the rewards that can be gained personally from bettered relationships.

7. Vocational and School Counseling of Indian Students

a. Recommendations for Research

(1) A study of the nature of current formal and informal counseling for Indian students.

Estimated cost: $30,000.

(2) A study of whether or not counseling must take a different form for the Indian student.

Estimated cost: $40,000.

(3) A study of the relationship between self-esteem and vocational and education aspirations.

Estimated cost: $25,000.
(4) A study of the factors affecting vocational decision-making, the self-concept, and overall goals of Indian students.
Estimated cost: $35,000.

(5) A study of the impact of current occupational and career materials upon Indian students.
Estimated cost: $30,000.

(6) A study of the extent that family and tribal interests affect career decisions of Indians.
Estimated cost: $25,000.

(7) A study of the occupational difficulties Indians suffer as a result of the social roles they play and the types of self-concepts they thereby develop.
Estimated cost: $40,000.

b. Recommendations for Development

(1) Programs to train special counselors for Indians at all levels in vocational and general counseling.

8. English as a Second Language Instruction

a. Recommendations for Research

(1) A comparative study of the effectiveness of the traditional audio-lingual, or "habit formation," method of teaching English as a second language to Indian students and a method based upon the more modern competence-performance, or "rules system comprehension,"
theory of language acquisition.

Estimated cost: $120,000.

(2) A study of the validity of the principle of teaching a unit for mastery before moving on to the next unit versus the principle of the spiral curriculum in teaching English as a second language.

Estimated cost: $25,000.

(3) A study of the effectiveness of employing various linguistic sequences in teaching English as a second language.

Estimated cost: $35,000.

(4) A study of the influence of semantic content of English as a second language materials.

Estimated cost: $45,000.

(5) Studies of the effectiveness of various innovative devices for motivating Indian children to learn English, such as reward systems within a school, or competitive contests and cooperative projects between schools enrolling different linguistic groups.

Estimated cost: $40,000.

b. Recommendations for Development

(1) Preparation of materials for teaching English as a second language based upon findings of the above research.
9. **Peer Societies of Indian Children and Their Relationship with Education Problems**

a. **Recommendations for Research**

(1) A study of the nature of peer social life of Indian boarding school students.

Estimated cost: $25,000-$60,000.

(2) Studies of the social adaptation of Indian students from rural (or reservation) backgrounds when they enter as individuals or small clusters into ethnically integrated classroom situations, such as a consolidated school in a small city or a typical urban school in a metropolis.

Estimated cost: $30,000-$70,000.

(3) Studies of the performance, the social adaptation, and the desirable peer society for the Indian student in college who derives from a rural segregated background.

Estimated cost: $25,000-$60,000.

(4) Studies of peer societies and the Indian in corrective institutions.

**Methodological recommendations:**

(a) That the basic approach be community study type of research, including participant observation;

(b) That each project consist of a number of subprojects, each involving one or two doctoral students, who could
appropriately be Indians, under the supervision of a principal investigator;

(c) That in urban areas the focus be upon tribal residential groupings rather than the urban school system.

Estimated cost: $25,000-$60,000.

b. Recommendations for Development

(1) Workshops to train teachers in methods of using/overcoming the influence of Indian peer groups in the school setting.

10. Research and Evaluation of Bilingual Education Programs

a. Recommendations for Research

(1) Language censuses to assess the status of various tribal languages.

Estimated cost: $1,000-$20,000 per census depending upon the size of the tribe.

(2) Studies of the attitudes of Indian communities toward language competencies and bilingual education programs. Such studies should precede plans to initiate bilingual programs to determine whether the climate is favorable and should continue as programs progress to note changes in attitudes.

Estimated cost: $2,000 to $20,000 per study depending upon the size of the community.
(3) Longitudinal studies of the comparative effects of various patterns of bilingual education.

Estimated cost: $140,000 per study.

(4) Studies of the problems of developing curriculum in Indian languages.

Estimated cost: $10,000-$30,000 depending upon the tribe.

(5) Studies of the problems of teacher selection and training.

Estimated cost: $10,000-$30,000.

(6) Background studies of belief systems, language use and function, language acquisition and learning styles.

b. Recommendations for Development

(1) Programs for training teachers and others in the preparation and use of bilingual curriculum materials.

(2) Programs to train teachers in the use of Indian language informants as aides in bilingual instruction.

11. Higher Education for Indians

a. Recommendations for Research

(1) A study of sources and adequacy of financial aid for higher education for American Indians.

Estimated cost: $20,000.
A study of enrollment and retention of Indian students in various colleges, with analyses of successful and unsuccessful colleges, and including assessment of effective programs in terms of such elements as counseling services, recruitment strategies, admission criteria, tutoring programs, Indian studies, and financial aid.

Estimated cost: $75,000.

A study of sources and strength of motivation, breadth of knowledge about vocations, realism of educational and vocational goals, and adequacy of academic preparation of Indian students upon first entering college.

Estimated cost: $40,000.

b. Recommendations for Development

(1) College preparatory programs for potentially capable Indian high school graduates not yet ready for college.

(2) Expansion of summer programs, such as intern programs, Upward Bound, and other activity programs that will challenge creative abilities, develop talents, and broaden the base of experience and knowledge of Indian students.

12. Teaching the Role of the Indian in American History and Updating Present Curricula

a. Recommendations for Research

(1) An ongoing evaluation of the accuracy and adequacy of materials pertaining to Indians in textbooks and reference books in use,
or, being produced for use, in the nation's schools, by a recognized permanent national committee of Indian scholars. Findings of the committee should be widely disseminated. The committee should work closely with textbook authors and publishers.

Estimated cost: $40,000-$75,000 per year.

b. Recommendations for Development

(1) Preparation of instructional materials for general use that accurately teach the role of the American Indian in national history.

(2) Preparation of instructional materials for local use that accurately teach the role of the American Indian in local history.

(3) The development of such college courses as: The American Indian and Early European Contact; The American Indian in American History; The American Indian in American Life (influence, contributions, religions, lifeways, etc.); The Philosophy and Religions of the American Indians; The Literary Heritage of the American Indian; Indian Psychology and Medical Practices and Relationship to the Modern Medical World.

13. Differential Educational Achievement Among Contemporary American Indian Cultures

a. Recommendations for Research

(1) A feasibility study for a national center to accumulate, analyze, and disseminate comparable current statistical and other data
(2) A study to develop a holistic model of factors influencing Indian educational success, including variables such as the teacher, curriculum, economic level, language proficiency, size and type of family, religious behavior and attitudes, parental employment, parental education, parental goals for children, student peer group relations, student self-concept, student attitudes toward formal education, and other similar factors known to influence formal educational achievement.

Estimated cost: $50,000.

(3) A comparative ethnohistorical study of the factors contributing to relatively high and low educational achievement among groups of American Indians.

Estimated cost: $30,000-$80,000 depending upon how many tribal groups are included in the study.

14. Evaluation of Vocational Programs
   a. Recommendations for Research

(1) An assessment of vocational education programs offered in Bureau of Indian Affairs schools, to include teacher preparation and recruitment, curriculum, school organization, and the role of communities.

Estimated cost: $40,000.
(2) An assessment of vocational education programs for Indian adults, with special attention to adequacy of opportunities, training, and placement.

Estimated cost: $50,000.

(3) A study of on-the-job behavior of Indian employees, including job turnover, and including an analysis of differential values of employees and employers.

Estimated cost: $45,000.

(4) A study of the values, attitudes, motivations, and competencies beyond basic skills, needed by Indians for successful entry, persistence, and advancement in vocational training and employment.

Estimated cost: $25,000.

(5) Research in the use of tests to predict probable success of Indians in vocational training and employment, with special attention to establishing group norms.

Estimated cost: $90,000.

15. Bureau of Indian Affairs Boarding Schools and Bordertown Dormitories

a. Recommendations for Research

(1) A study of the differing effects of boarding schools upon Indian students of various ages.

Estimated cost: $60,000.
(2) A study of the eligibility criteria and selection patterns for Indian boarding school and bordertown dormitory students.

Estimated cost: $5,000.

(3) An evaluation of the Bordertown Dormitory Program for Navajo students.

Estimated cost: $20,000.

(4) A study of the attitudes of Indian parents toward boarding schools.

Estimated cost: $50,000.

16. Indian Education and Reservation Economic Development

a. Recommendations for Research

(1) A study to analyze successful occupational and social adaptations of tribal groups.

Estimated cost: $25,000.

(2) Studies of the aspirations of reservation Indian adults for economic progress and the factors, with their relative influence, that determine aspiration levels.

Estimated cost: $5,000-$25,000 per tribe depending upon tribal size.

17. Pros and Cons of Individualized Programmed Instruction for Indian Students

a. Recommendations for Research

(1) Studies of the effectiveness of individualized
programmed instruction for Indian students, using such independent variables as sex, subject matter, and grade level, and such dependent variables as achievement, self-confidence, initiative, and peer relationships.

Estimated cost: $60,000 per study.

b. Recommendations for Development

(1) Projects to develop, select, and field test materials for use in individualized programmed instruction for Indian pupils.

(2) Workshops to train teachers and instructional aides in the techniques of individualizing instruction.

18. **Health Factors Influencing Education for American Indians**

a. Recommendations for Research

(1) Longitudinal studies of health records and learning problems of Indian students, with particular attention to malnutrition and sensory deficiencies.

(2) Studies of alcohol and drug use and related problems of Indian education, with particular attention to relevant social and cultural variables.

(3) A comparative study of suicide among Indian students of various tribal groups.

b. Recommendations for Development

(1) Projects to provide better nutrition for Indian students
in school lunches, and other meals, with similar school projects for
general health.

19. The Development of Communicative Competency

a. Recommendations for Research

(1) Research into the nature of communicative competence
in various groups.

(2) Studies of cross cultural communication.

Methodological recommendations for the above studies
are: that Indian scholars and interdisciplinary teams conduct the research.

b. Recommendations for Development

Programs to train teachers in special methods of improving
communicative competency. (Here consideration may be given to creating
special clinics resembling speech clinics, but with broader emphases.)

20. Impact of Transfer of Schools and Pupils from BIA to Public
Schools

a. Recommendations for Research

(1) Historical and comparative studies of the transition of
BIA (or other) to public school education of Indian children, with particular
emphasis on desirable strategies for transfer.

b. Recommendations for Development

(1) A program for preparing communities, pupils, and
teachers to reduce disruption and trauma when transferring from BIA to
public schools.
IV. GENERAL RECOMMENDATIONS

It is strongly recommended that this report receive wide dissemination. It is considered especially vital that it reach all agencies that have an interest in funding research studies or development projects in Indian education, as well as research oriented individuals and agencies interested in engaging in studies and projects. The Southwestern Cooperative Educational Laboratory could assist in identifying prospective recipients and continuing dissemination of the report if desired.

Since, in most instances, a study of the position paper for a certain problem area would be very helpful to a researcher desiring to write a proposal for a research study or development project in that area, it is recommended that position papers be made available upon request. An alternative for even wider and easier access to position papers would be to submit them to ERIC Clearinghouse on Rural Education and Small Schools in Las Cruces, for review and possible inclusion of some or all in the ERIC system.

Some scholars who authored position papers, and many panel members, stressed the desirability of more Indian involvement in research, both as principal investigators and as assistants.
Also, it was recommended that the continuance of the panel could provide many useful services in the area of research and development for education of American Indians. Such a group could serve to invite and review proposals and advise on proposed research or development projects. It also might advise on ways of getting action in priority areas of development. Finally, such a permanent committee might review the research and development needs for education of American Indians periodically, provide additional input on already identified problem areas, and identify emerging problems needing research and development.
Footnote References


Appendix

POSITION PAPERS AND AUTHORS


7. "Impact of Transfer of Schools and Pupils from BIA to Public Schools," Edgar L. Wight.


17. "The Teachers of American Indian Children: Attitudes Toward Their Own and Other Cultures," Murray L. Wax and Deward E. Walker.