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Sample forms are presented for interview information obtained from teachers, administrators, students, guidance counselors, and dormitory staff personnel in Bureau of Indian Affairs schools, from parents of Indian students, and from community leaders. A classroom observation guide and checklists for dormitory and school facilities, curriculum and school services, and school atmosphere are included. Two educational planning games are presented which reflect teacher and student preferences and priorities. A section on program descriptions includes the problem which a program seeks to alleviate and the rationale for the program with specific information on pilot programs in operation. Management report forms, a cost-effectiveness model, and bibliographic citations are also included. Related documents are RC 003 749, RC 003 750, and RC 003 751. [Not available in hard copy due to marginal legibility of original document. (JH)]

ED0 32994

**System Analysis, Program Development,
And Cost-Effectiveness Modeling
Of Indian Education**

For the Bureau of Indian Affairs

VOLUME V

APPENDICES

**U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION**

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APPENDIX A

INTERVIEW GUIDES, OBSERVATION GUIDES
AND EDPLAN GAME

1. School Principal/Superintendent Information Guide
2. Teacher Interview Information Guide
3. Student Interview
4. Guidance Counselor Interview Guide
5. Interview Guide for Dorm Personnel
6. Parent Interview Guide
7. Community Leader Interview Guide
8. Classroom Observation Guide
9. Dormitory Checklist
10. School Facilities Checklist
11. General Atmosphere of School
12. School Planning Exercise
13. Ideal School Game

SCHOOL PRINCIPAL/SUPERINTENDENT INFORMATION GUIDE

School _____ Name _____

To get from principal if possible:

1. Syllabus
2. Teacher Handbook
3. Student Handbook
4. Table of Organization of School System
5. Table of Organization of School in relation to other agencies
6. Number of high school grads/year for last five years
7. Number of grads to college/year for last five years; number graduated or still there.
8. Budget
9. Sample pupil record card

I. Personal Background

1. Age _____ Sex _____
2. Race; if Indian, what tribe _____
3. What part of the country were you raised in: rural _____
urban _____
local _____
4. What activities or programs do you participate in in the community?

5. Degrees held, from what school _____
6. Work beyond highest degree held _____
7. Years principal _____
8. Years principal of this school _____
9. Years teaching experience prior to becoming principal:
BIA schools _____
Other _____
10. Have you had any specific courses, experiences, or guidance for teaching and working with Indians since you've been in BIA?

11. Do you plan to remain at this school? In Indian education?
With minority groups?

12. Do you plan to remain within BIA system?

13. What do you consider the role of the BIA to be

I. School Activities and Goals

1. Time Budget:

% of time during the week in
following activities:

	Workday	Evening	Weekends
Supervision			
Teaching			
Administration (paperwork)			
Individual contact with students			
Group meetings with students			
Individual contact with staff			
Group meetings with staff			
Contact with parents			
Contact with community			
Travel			
Personal			

2. Order the following by amount of time spent on them. What % of
time on the first two?

curriculum
personnel
reports
budgeting
materials purchasing, ordering

3. Are you planning any major changes -- priorities, obstacles, strategies?
4. What things would you like to be doing that for one reason or another you feel you can't? What would you need to be able to do them?
5. What programs would you drop if the budget decreased by 10%?
6. What are you most pleased with having done?
7. What has been most discouraging?
8. What is the most important thing the school should do for the students?
Obstacles.
9. What makes a teacher especially successful with working with Indian kids?
10. What special problems are there with students, staff, community?
11. Your relationship with Area office:
12. How often do you meet with students individually? What is discussed?
Are you satisfied with frequency and results?

13. How often do you meet formally with staff? What is discussed?
Are you satisfied with frequency and results?

Community

1. Are there any current programs or activities involving local community?
2. Are there plans for future community programs; what constraints do you foresee?
3. Is school used for any activities other than school-sponsored activities and programs? Describe them.
4. Frequency of meetings with parents or community members; who initiates meetings; what's discussed and decided? Are you generally satisfied with these meetings?
5. Is school area fenced off (literally or socially)?
6. Housing provided teachers? Social or spatial proximity to school or community?
7. Local school politics related to school program:
8. How are people informed about school; what kinds of things does the school say formally about school to community?

School

1. Who determines content of school curriculum? What is your role?
2. How are students assigned to ability groups or courses of study?
3. How easy is it for student to move from one course of study or ability group to another?
4. How would you describe relevance of current curriculum to your Indian students?
5. To what extent do you communicate with staff of other schools and for what purpose?
6. How do Indian students compare with non-Indian students?
7. Average hours per week all students spend in extracurricular activities after school; during school time:
8. Are there faculty advisors; how are they assigned?
9. Is there coordination between formal curriculum and extracurricular activities? Explain.
10. What encouragement is given students to participate?
11. What kind of research is needed in Indian education?

TEACHER INTERVIEW INFORMATION GUIDE

Name _____ School _____

Age _____ Sex _____ Marital Status _____

Race: Indian White Black

Tribe _____

Subject taught _____

Personal Background

1. Raised in what part of the country _____
2. What activities or programs do you participate in in the community? _____
3. Degrees held, from what school _____
4. Major(s) in college _____
5. Teaching certificate: yes/no _____
6. Teaching in field for which certified: yes/no _____
7. Work beyond highest degree held _____
8. Years teaching outside BIA _____
9. Years teaching in BIA _____
10. Years in non-teaching BIA jobs _____
11. Length of time teaching at this school _____
12. Do you plan to continue teaching Indians? Or if unsure, do you plan to work with other minority groups?

School-Related Activities and Attitudes

1. What subjects taught? _____
 2. Pros and cons of teaching at this school _____
- _____

TIME BUDGET

Approximate % of time spent during
average week on:

	Workday	Evenings	Weekends
Teaching			
Preparation			
Administrative (paperwork)			
Individual contact with students (outside class)			
Student activities			
Staff meetings			
Individual contact with staff			
Contact with parents			
Contact with community			
Personal			

3. What do you think are the most important things this school should do for students?
4. What are the major problems in teaching Indian students?
5. What teaching techniques are most effective with Indian students?
6. If you have participated in pre-service or inservice training programs, how have they affected your techniques and materials?
7. What would you change about training programs?
8. What are the five most important characteristics for teachers of Indian students?

9. Are there resources--people, material, authority--that would make you a more effective teacher if they were at your disposal; if so, describe.
10. How is context of curriculum determined at this school?
11. Besides teaching basic subjects, is it also necessary to develop the personality and social skills of Indian students? If so, how do you accomplish this?
12. What class activities do your students enjoy most?
13. What class activities do your students dislike most?
14. Should the parents be more involved with the school either formally -- planning, advisory boards -- or informally?
15. For teachers at boarding schools: How often should students be allowed (1) to visit their families (2) to visit the community around the school?
16. Do you find the area a comfortable one to live in: describe why or why not.

Techniques and Equipment

1. How satisfied are you with the books you use? Are they appropriate to students level of ability?
2. What materials are used to supplement the text?
3. What materials are most effective with Indian students?
4. For math and English teachers: is there any coordination of instruction in these skills with content of other courses?

5. Speaker of reservation language: If so, how often used in speaking with students, in class or out?
6. How often does teaching staff meet? Altogether? By Department? What is usually discussed at these meetings? What decisions taken?
7. What are the best disciplinary procedures?
8. Average time per week children sent to higher authority--e.g. principal?
9. Do you ever go on field trips or bring outside people in to class as resources? How often? How do students respond to this?
10. If you had one extra working hour a day, how would you use it?
11. If you had one less working hour a day, what subjects or activities would you drop first?
12. What kind of research is needed in Indian Education?
13. Are school officials responsive to teachers who might want to try innovations which might be helpful in teaching Indian kids?
14. Describe your non-class contacts with students -- in the buildings, homes, around town; frequency and matters most often discussed.

15. Describe your best student.

16. Describe your most problematic student.

17. What subjects do students achieve best in?

18. What subjects do students achieve most poorly in?

Community

1. What are the major reasons for students dropping out?

2. What kinds of encouragement or discouragement do students receive from their parents? Compare with non-Indian parents.

3. Of those students who complete high school, what are their major reasons for leaving or remaining on the reservation?

4. What are the most common job-hopes expressed by your students?

5. How do students feel about the white community on the reservation?

6. Do you have contacts with parents and other community people? What is the nature of these contacts? What do you usually talk about? Who initiates them?

STUDENT INTERVIEW

Name _____ Age _____ Sex _____ Tribe _____
School _____ Grade _____ Rank in Class _____

How far away do you live?
How big is your family?

How often do you see them?

father

Education

- none
- primary
- secondary
- more _____
- don't know

Occupation

- unemployed
- occasional work _____
- steady work _____
- don't know

mother

- none
- primary
- secondary
- more _____
- don't know

_____ brothers _____ older _____ younger
_____ sisters _____ older _____ younger

Who do you live with? If different from above, why? Education? Occupation?

Who would you like to be like in your family? Why?

Where do you want to live when you get out of school? _____ reservation _____ rural _____ urban
_____ off-reservation (unspecified) _____ don't know

What do you want to do when you get out of school? Where and from whom did you hear about it?

Does school prepare you for this? If so, what courses or activities prepare you?

Do you think you'll succeed?

How much school do you want? high school vocational college academic college
graduate level

What have you accomplished that helps your objectives?

courses _____
training _____
personal qualities _____
other _____

What do you need most to prepare for what you want to be?

courses (H.S.) _____
vocational college (subjects) _____
academic college (subjects) _____
training _____
personal qualities _____
other _____

What do you like most about school?

courses _____

activities _____

students _____

routine _____

other _____

What do you like least about school?

courses _____

regulations _____

discipline _____

students _____

other _____

What would you change if you ran the school? Hours? Length of school year?
Courses? (add new ones, stop others, make harder, easier) Facilities and equipment?

Curriculum _____

Activities _____

Regulations _____

Facilities _____

Other _____

What kind of teachers do you like best? What kind are easiest to learn from? (Note: do not feed these words to kids except to clarify spontaneous remarks; use "other" category in preference to shaky interpretation of kid's meaning.)

- Cheerful (funny, nice, etc.)
- Explanatory (one who makes you understand, explains clearly)
- Personal interest (cares about you)
- Empathetic (one who understands your problems, who you can talk to)
- Responsive (acts on kids' requests)
- Knowledgeable (really knows what he's talking about)
- Taskmaster (one who makes you work, who doesn't let kids get away with stuff)
- Supportive (one who helps you, gives encouragement)
- Enthusiastic (one who makes it interesting, likes what he's doing)
- Fair (not one who gets on you for stuff you haven't done)
- Other _____

Who do you go to for advice?

Do you ever have trouble learning things? What makes it hard?

subject _____

teacher _____

students _____

material _____

ability _____

other _____

GUIDANCE COUNSELOR INTERVIEW GUIDE

Information, Goals, Etc.

Background Description of Guidance Counselor

1. Age _____
2. Sex _____
3. Race: Indian White Black
 If Indian, what tribe, reservation: _____
4. Marital status _____
5. Other activities (community or professional) currently involved with

6. Raised in what part of the country: urban _____
 rural _____
 local _____
7. Degrees held, from what schools _____
8. Previous work experience:
 years in teaching _____; years in counseling _____
 years with Indians _____
9. Length of time at this school _____

Job Description: Counseling Students

Time Budget:

Approximate % of time you spend on the following activities in an average week:

	Workday	Evenings	Weekends
Individual counseling			
Group counseling			
Non-counseling contact with students (activities, etc.)			
Administrative (paperwork)			
Supervision			
Meetings with staff			
Individual contacts with staff			
Contact with parents			
Contact with community			
Personal			
Other			

1. What do you think are the most important things this school should do for the students?
2. What are the biggest obstacles to accomplishing this?
3. How do you perceive your own role (disciplinarian, etc.)?
4. Counselor-student ratio: _____
5. % of students with whom you meet once or a few times _____; frequently _____.
6. Of those you see frequently, why do they come?
 Own initiative _____
 Teacher's initiative _____
 Counselor's initiative _____
 Other _____
7. Is there also an informal or "open hours" time for meeting and do students use the opportunity?

8. Age/sex breakdown of types and frequency of disciplinary problems:

offense	frequency	offender

9. What are the major problems which the students seem to have?

10. How many of these do you feel are the result of:

Indian culture: _____

reservation socio/economic situation: _____

type of school (boarding, day, size, etc.) _____

11. What do you discuss with students (rank order):

course selection _____

emotional problems _____

disciplinary problems _____

post-graduation _____

academic problems _____

12. What type of information does guidance keep on each student?

13. What kinds of follow-up work do you do on graduates? Suggest better methods for follow-up.

14. What kinds of assistance does the school offer in helping kids find work after school, vacations, etc.?

15. Are there local programs which allow dropouts, young marrieds, pregnant students, etc. to continue their training?

16. Can a girl return to school after having a kid? _____

17. Are dropouts accepted back in school?

18. During what month of pregnancy must a girl leave school?

Job Description: Non-Counseling Time

1. How often do you meet with teachers? Formally _____ Informally _____
Do these meetings accomplish all you would like?

2. How often do you meet with parents or guardians? Formally _____
Informally _____. Do these meetings accomplish all you would like?

3. How often do you meet with other guidance counselors? Formally _____
Informally _____. Do these meetings accomplish all you would like?

4. How often do you meet with dormitory staff? Formally _____ Informally _____
Do these meetings accomplish all you would like?

5. How often do you meet with administration? Formally _____ Informally _____
Do these meetings accomplish all you would like?

6. How often do you meet with physical health personnel (at school
or agency)? Formally _____ Informally _____. Do these meetings
accomplish all you would like?

7. What do you do with extra hours/day?

8. What kind of research is needed in Indian education?

INTERVIEW GUIDE FOR DORM PERSONNEL

Name _____ School _____

Age _____ Sex _____ Marital Status _____

Race: Indian _____ White _____ Black _____

If Indian, what tribe? _____

What part of the country were you raised in? _____ rural _____ urban _____
local _____

Education

Degrees held, from what schools _____

Experience

1. How long have you been in this school? _____
 2. Years of previous dorm work with Indians _____
 3. Years of previous dorm work with non-Indians _____
 4. Any courses, experience, or guidance specifically Indian-relevant _____
-
5. Do you intend to continue at this school? _____ Working with Indians? _____
Working with minority groups? _____ Why? _____

Job

1. Time Budget - approximate % of time spent in each of the following activities in an average week.

	Workday	Evening	Weekend
individual counseling			
group counseling			
discipline			
supervision			
administration (paperwork)			
meetings with staff			
individual contact with staff			
contact with parents			
contact with community			
personal			
other _____			

2. What are the most important things the school should do for the kids? Obstacles.
3. Compared to the classroom, how important is the dorm in educational development of students? in social and personal development?

<input type="checkbox"/> dorm more important <input type="checkbox"/> dorm less important <input type="checkbox"/> same	<input type="checkbox"/> more <input type="checkbox"/> less <input type="checkbox"/> same
---	---

Interview Guide for Dorm Personnel - 2

4. Are dorm factors or classroom factors more important in students' dropping out

- dorm more important
- classroom more important
- same

5. Are there resources--people, materials, authority--that would make you more effective at your job if they were at your disposal?

6. Do teachers visit the dorm? _____ How often? _____

7. Do they know what they should about dorm life and what goes on in the dorm?

8. Do you meet with teachers formally or informally to discuss individual students; what is usually discussed in these meetings/ do any decisions result; what kinds:

- meet formally
- don't meet informally

9. What are the usual kinds of infractions? Frequency, sex/age breakdown. Discipline for each?

infraction	frequency	offender	discipline

10. What unexpected problems did you find when you began working in Indian dorms?

11. What do kids like most about the dorm? What do they like least?

12. What aspects of dorm life do students adjust to most easily? least?

13. How often do parents visit the dorm? _____

14. Do you usually talk with parents when they come? Who initiates? What is usual discussed? Decisions?

15. How do you feel about parental visits?

16. What do you think the kids feel about parental visits

Interview Guide for Dorm Personnel - 3

17. What would you do with an extra hour every day?
18. How often does the dorm staff meet? What is usually discussed at these meetings; what decisions taken?
19. How often does the dorm staff meet with the guidance counselor? What is usually discussed at these meetings, decisions taken? Who initiates the meetings?
20. Are there any conflicts between dorm and school program; how are they resolved?
21. How well do students from different tribes get along in dorms?
22. Are school officials responsive to dorm personnel who want to try innovations which might enhance dorm life for the kids? _____
23. What kinds of things do kids usually do around the dorm?
24. How often should students be allowed to visit their families, visit the community around the school? (Hours/day, weekends, etc.) Why?

PARENT INTERVIEW GUIDE

Name _____ Age _____ Sex _____ Tribe _____
Grade Achievement: (H) _____ (W) _____ School: On Res _____ Off Res _____
Type: Public _____ Day (BIA) _____ Brdg. (BIA) _____ Mission _____ Other _____
Occupation: (H) _____ (W) _____
Annual Salary _____ Employer _____
Age of Children: _____ Grade Achievement _____

Family Relationship

1. How often do your children talk to you about school? What about?
2. What does your child like about school? Dislike? Why?
3. Do you care if your child went to school? What do you do to make your child go to school?
4. What language do you speak most often at home? Eng. _____ Native _____ Both _____
5. How much education do you think your child needs? Why?

Goals

1. What kind of job would you like your child to have after he leaves school?
2. What do you think your child's goals are (education, occupation, marriage, etc.)?
3. What are you doing that will help your child reach his goals?

4. What type of school do you think is best for your child to attend in order to achieve his goals? Public _____ Day (BIA) _____ Brdg (BIA) _____
Mission _____ Other _____ Why?

5. Where do you want your child to live when he is grown up? Off Res _____
On Res _____ Why?

School Activities and Programs

1. Do you have a local PTA? Do you attend? How Often? Degree of involvement? What do you talk about?

2. Do you visit the school by yourself? When?
Why?

3. Who do you see?
What do you talk about?

4. What would you change if you ran the school?
a) Courses: add, stop others, make easier, harder - why?

4b. Hours: length of time during year - why?

4c. Facilities and equipment: gym, library, grounds, shop - why?

5. Would you like your child to be taught how to speak and write the native language? Why?

6. What types of teachers do you prefer? (sex, age, Ind. or non-Ind.) Why?

Community Activities

1. Do you belong to any non-school organizations?
Tribal Council _____ Church _____ Other _____

2. How often do you meet?
What do you talk about?

3. Does the organization work with the school on education projects?
How often?
What kind?

4. Does the school cooperate with the community on non-school activities?
What activities?

To what degree?

COMMUNITY LEADER INTERVIEW GUIDE

I. Personal Background

Name _____ Age _____

Sex _____ Tribe _____

Type of work now doing _____

Source of income if it can be found out discreetly:

A. Education:

1. Years formal schooling _____

2. Did you attend school on/off reservation? _____

BIA

Public

Parochial

3. College _____ Type _____

Major _____

B. (If a formal leader of the community:)

1. What position do you hold? _____

2. What responsibilities does it entail? _____

3. Is it an elected or an appointed position? _____

4. Is it a paid position or volunteer? _____

5. Is it part or full time? _____

6. If part time what do you do rest of time? _____

Community Leader Interview Guide - 2

C. Do you participate in many community-related activities?

1. What activities? _____

2. How often? _____

D. Have you always lived on a reservation? _____

1. How long on this reservation? _____

2. Where else have you lived and what were you doing there? _____

E. Children

1. Are you also a "parent?" _____

2. What is education history of kids? _____

II. School and Education-Related Activities and Attitudes

A. Visits to reservation schools

1. Do you ever visit the schools on the reservation? _____

What ones? _____

2. How often? _____ For what purposes?

a. non-school related (movie, basketball game, etc.)

b. related to your children

c. associated with school specifically

Community Leader Interview Guide - 3

3. During school session vacation evenings
4. How far away are you from school; is distance a limiting factor on visits?
5. Other reasons why you do not visit more often:

B. Awareness of Activities

1. What activities are sponsored by the school?
2. Other activities which take place there:
3. What other activities would you like to see sponsored?

Measure: unaware; aware but non-participating; participating

C. Meetings related to school or education

1. Do you attend meetings of local group dealing with schools or education (tribal council, advisory board, etc.)
2. How often do you go to these meetings?
3. Who else attends?
4. What is usually discussed at these meetings?

Community Leader Interview Guide - 4

5. What other things would you like them to discuss?
6. What kinds of decisions are usually made?
7. Do you ever serve on any committees, chair meetings, etc.?
8. Would you like to get together with other people in the community to talk about education or the schools?
9. What kinds of things would you like to talk about with these people?
10. Would you like to get together with the school board or the officials at the school to help make decisions about the school?
11. What kinds of things would you like to see the school board or school officials doing about the schools? Why?
12. Do you think they will ever do these things? Why/why not?
13. Do you think you can say or do anything that will make them do the things you want them to do? Why/why not?

D. Attitude Towards Education

1. Would you like to change the ways the money the school now has is being spent? How? Why?

2. If there were more money to be spent for the schools, how would you like to see it spent? Why?

3. Do you think the schools do a good job of preparing youngsters for living on the reservation? What are the things the school does that helps the kids most?

4. What could the schools be doing to better prepare kids for living on the reservation?

5. Some youngsters want to move off the reservation. Do you think the schools do a good job of preparing these kids for living off the reservation? What things are they doing that are most helpful?

7. What things could the school be doing to better prepare youngsters for living off the reservation?

Community Leader Interview Guide - 6

8. Do you think the schools should teach adults as well as young people? Why/why not?

9. If yes, what kinds of things could the schools do to be of help to adults?

10. Do you think the schools should try harder to get more kids in college or in jobs after high school? What kinds of things should they do?

CLASSROOM OBSERVATION GUIDE

School _____

Grade _____ Subject _____

Size of Group _____ Approximate ages of kids (range) _____

Teacher _____ Age _____ Sex _____

Atmosphere

1. Seating arrangement - describe briefly. Find out how kids choose or are assigned to their seats.

- _____ Fixed desks
- _____ Moveable individual desks
- _____ Small group tables
- _____ Other _____

2. Layout of room - describe briefly or draw picture over.

3. Decor - describe briefly. Much decoration (student work, Indian stuff, plants, etc.)?

4. Learning resources around room (aide, a-v stuff, non-text books, toys, pets, etc.)

5. General environment - describe briefly. Relaxed? light? colorful? etc.

CLASS OBSERVATION GUIDE - 2

[put general comments on back]

Time _____

Activity

lecture _____ non-programmed (i. e. _____
 question & answer _____ essay) at desk _____
 reading at desk _____ reading aloud (individual) _____
 programmed (i. e. work- _____ work in groups _____
 book) at desk _____ lab or shop work _____
 _____ other _____

Materials

Text date _____
 Non-text books _____
 Other _____

Kinds of questions asked by teachers

[One check (✓) if it occurs; two (✓) if frequent]

Cognitive

recognition _____ indiv. designated _____
 recall _____ group designated _____
 demonstration _____ no one designated _____
 of skill _____ spontaneous response _____
 comprehension _____ mass response _____

Teaching behavior

analysis _____ encouraging _____
 synthesis _____ presenting _____
 Affective _____ assisting _____
 opinion _____ analyzing _____
 attitudes or _____ directing _____
 values _____ discouraging _____

% of talk time used by teacher _____ [Rate high, medium, low]
 kids ask questions _____ class/teacher agreement on _____ teacher substantive knowledge
 direction and purpose _____

Teacher mood and attitude

_____ very involved with class & lesson
 _____ slightly involved with class & lesson
 _____ involved in class, not lesson
 _____ involved in lesson, not class

Spatial relationship

_____ teacher in front, kids at desks all the time
 _____ teacher in front, kids come to desk
 _____ kids at desks, teacher walks around
 _____ teacher touches kids
 _____ kids touch teacher

Pupil enthusiasm (select sample of students - check every 7 minutes or so; record %)

_____ glazed
 _____ lack of attention
 _____ poor posture
 _____ aimless physical activity
 _____ unapproved purpose
 _____ misconduct

 _____ glazed
 _____ lack of attention
 _____ poor posture
 _____ aimless physical activity
 _____ unapproved purpose
 _____ misconduct



DORMITORY CHECKLIST

Number of kids in each dorm

Number of dorm personnel in each dorm

Age spectrum of kids in each dorm

Number of kids per room

Number of closets per kid

Are kids allowed to hang pictures, etc. ?

Number of dressers per kid

Number of desks per room

Number of chairs per room

Lights provided?

Overhead?

Desk?

Windows?

Curtains provided?

Furniture in rooms movable?

Mirrors in rooms?

Any other facilities each room provided with

Can kids lock rooms?

Any closet or lockers kids can lock?

Are rooms inspected?

How frequently?

Who does it?

What are they looking for and what happens when they find it?

Number of kids per bathroom

Lounge or recreational facilities in dorm

Mixed sexes in lounges?

Time opposite sex must leave public areas of dorm

Restrictions on activities in lounges (can they dance, hold hands?)

Time kids must be in dorm

Time kids must be in room

Lights out time

Dormitory Checklist - 2

Magazines or papers dorm subscribes to or receives regularly:

TV? Controlled use?

Record player? Controlled use?

Record library in dorm?

 What records?

 Who selects?

Student laundry? In dorm, send out?

Irons and ironing boards in dorm?

Kitchen in dorm for student use?

Refrigerator available to kids?

Sewing machines for girls?

Candy, soda or food vending machines in dorm? Restrictions on use?

Kids allowed outside unchaperoned at night?

Dating? What possibilities exist for this (school dances, movies
athletic events, etc.)?

Kids allowed to date off campus? Do they?

Any places boys and girls can be alone together? (Where do they go
to kiss, and can they?)

Jobs and duties of pupils?

Any form of pupil dorm organizations?

Describe organization.

Explain functions

SCHOOL FACILITIES CHECKLIST
(Including School Services and Curriculum)

Average number of instruction rooms per building _____

Average number of improvised or makeshift instruction
rooms per building _____

Percent of students in school plants of specified age: _____

Less than 20 years _____

20-39 years _____

40 years or more _____

Average number of pupils per:
instruction room _____

Teacher _____

Average total enrollment in school _____

Library Services

Public library with at least 5,000 books in walking
distance of school _____

School has a centralized school library _____

Number of librarians serving school library: _____

None _____

1 part time _____

1 or more full time _____

School has at least 3 sound-equipped movie projectors _____

Average number of volumes in school library _____

Average number of volumes in school library per pupil _____

Textbooks

School has free textbooks _____

School has sufficient number of textbooks _____

Age of the school's textbooks: _____

No texts furnished _____

Texts under 4 years old _____

Texts 4 or more years old _____

School Facilities Checklist - 2

Copyright date of biology textbooks:

- Biology not taught _____
- Under 4 years old _____
- 4 or more years old _____

Auditorium (solely) _____

Cafeteria (solely) _____

Gymnasium (solely) _____

Shop with power tools _____

Space and equipment available for laboratory work in
biology _____

Space and equipment available for laboratory work in physics _____

Space and equipment available for laboratory work in
chemistry _____

Foreign language laboratory with sound equipment _____

Typing classroom (solely) _____

Baseball or football field _____

Kitchen for preparing hot meals _____

Infirmery or health room _____

Special rooms _____

Science laboratory facilities _____

School store _____

Facilities available: _____

Snack bar or recreation place _____

Restrictions on use (dancing, no holding hands, etc.): _____



School Facilities Checklist - 3

<u>Extracurricular Activity</u>	<u>How often Meet</u>	<u># Participating Students</u>	<u>Activities</u>
Student Government	_____	_____	_____
School newspaper	_____	_____	_____
School Annual	_____	_____	_____
Boys' interscholastic athletics	_____	_____	_____
Girls' interscholastic athletics	_____	_____	_____
Boys' intramural athletics	_____	_____	_____
Girls' intramural athletics	_____	_____	_____
Band	_____	_____	_____
Chorus	_____	_____	_____
Honor Society	_____	_____	_____
Subject clubs (specify)	_____	_____	_____
	_____	_____	_____
Chess clubs	_____	_____	_____
Hobby clubs (specify)	_____	_____	_____
	_____	_____	_____
	_____	_____	_____
Drama	_____	_____	_____
Debate team	_____	_____	_____
Social dances	_____	_____	_____
Service clubs	_____	_____	_____
Religious clubs	_____	_____	_____
Other:	_____	_____	_____
	_____	_____	_____

To be Used with Head Administrator or Guidance Counselor
SCHOOL CURRICULUM AND SERVICES CHECKLIST

School provides separate classes for the following groups:

- Low IQ or mentally retarded pupils _____
- Pupils with behavior and adjustment problems _____
- Non-English-speaking pupils _____
- Rapid learners _____
- Special skills or talents (e.g., art, music) _____
- Pupils with speech impairments _____
- Physically handicapped pupils _____

Separate classes for special cases _____

Curriculum Alternatives

- College Preparatory _____
- Commercial _____
- General _____
- Vocational _____
- Agriculture _____
- Industrial arts _____

Other Specific Courses

- Driver Education _____
- Personal Economics or Consumer Education _____
- First Aid or Health _____
- Sex Education _____
- Home Economics _____
- Cooking _____
- Sewing _____
- Family Psychology _____
- Personal Psychology _____
- Other Courses: _____

Summer Programs:

Alternative or Competing School Systems:

Accreditation:

To be Used with Head Administrator or Guidance Counselor

SCHOOL SERVICES CHECKLIST

Free lunch:

Average percent getting _____

Percent in schools with none _____

Free milk:

Average percent getting _____

Percent in schools with none _____

Attendance law in the school district:

No compulsory school attendance law _____

Has a compulsory school attendance law _____

Has a well-enforced school attendance law _____

Psychologist (full- or part-time) in the school _____

Nurse (full- or part-time) in the school _____

Attendance officer (full- or part-time) serving the school _____

Art teacher:

No art teacher _____

Part-time _____

4 or more days a week _____

Music teacher:

no music teacher _____

Part-time _____

4 or more days a week _____

Average full-time equivalence of art and music teachers _____

Speech therapist (full- and part-time) _____

Remedial reading teacher (full- and part-time) _____

Accelerated curriculum in one or more subjects _____

School Services Checklist - 2

Percent of pupils in school in remedial reading classes:

0-4

5-9

10-14

15-19

20-24

25 or more

Not offered

Percent of pupils in school in remedial math classes:

0-4

5-9

10-14

15-19

20-24

25 or more

Not offered

Transportation in day schools

% of students walking to school

% of students using private means

% of students bused (free? _____)

TESTS ADMINISTERED

Intelligence Tests

Yes, 1 grade only _____

Yes, 2 or more grades _____

No _____

Standardized Achievement Tests

Yes, 1 grade only _____

Yes, 2 or more grades _____

No _____

Interest Inventories

Yes, 1 grade only _____

Yes, 2 or more grades _____

No _____

PROMOTION POLICIES

Average Percent of Total School Population/Year

	<u>Elementary</u>	<u>Secondary</u>
Repeat grades in which failed	_____	_____
Repeat courses failed	_____	_____
Slow learners not enrolled or transferred to other schools	_____	_____
Promoted with age group	_____	_____
No response	_____	_____

GENERAL ATMOSPHERE OF SCHOOL

(Everyone who visits a school should fill this out. It's mostly impressionistic and shouldn't take long.)

1. General atmosphere of nonclassroom parts of school, (halls, etc.) Please comment briefly on decoration, color, light, etc.
2. General atmosphere of dining room: (pleasant, light, noisy? long tables? small ones?)
3. Cluster patterns at meals: free selection? regulated? If regulated describe arrangements?
4. How much time do kids get to eat meal?
5. Do all students get the same meal, or can kids with more money buy other things?
6. Comment briefly on cluster patterns at recess, who leads games, who follows, etc.

General Atmosphere of School - 2

7. Who commands use of play equipment, on what terms?

8. Play area: general condition (dust, asphalt, etc.) Facilities: (swings, trees, tables, etc?), when it is used, by whom, are kids allowed to stay around and play after school, weekends? Any restrictions on use?

9. Library: general atmosphere; selection of books; book circulation (ask librarian which ones read most;) Is it well used? Ever used for classes or study halls? Hours open, etc.

10. Who goes into school first? last? planned order? if so, describe.

11. School dismissal, general description of student behavior; planned order? If so, describe.

SCHOOL PLANNING EXERCISE

This game, called EDPLAN, is designed to elicit teacher and student preferences and priorities in school planning and to sensitize the players to some of the major educational issues and the financial problems involved in solving them.

The EDPLAN exercise is divided into three successive phases of approximately 20 to 30 minutes each.

1. Weighting of school objectives.
2. Allocation of a budget to a variety of programs.
3. Evaluation of the degree to which the budget formulated maximizes the achievement of the previously determined objectives.

After a short explanatory briefing, the "players" are divided into three competing "teams". The three teams (A, B, and C) then each weigh the six (or more, if they wish to add any) school objectives listed on the school goals sheet, to express their group opinion concerning priorities and relative importance. A weight of zero is lowest priority and a weight of two points per objective is highest priority. The three teams decide among themselves what their team position is on the relative weighting of school objectives, and these are noted on the blackboard. This completes the first phase.

Phase II involves an allocation of the \$200,000 budget to the improvement programs listed on the programs sheet. When the team has decided what mix of programs it wants and has filled in the appropriate program costs, it is ready to have the success of its programs evaluated by another team (Phase III). There must be at least three teams so that, when this evaluation occurs, each team will be considering a different team than the one that is considering it. The winner is the team with the most successful program in terms of its own stated priorities, as determined by the individual votes of one of the other teams. This final phase, when the results are discussed, is important for the expression of attitudes and ideas by the players.

School _____

Group _____

Team _____

SCHOOL GOALS

Priorities*

- | | | |
|-----|---|-------|
| 1. | Prepare students to get jobs right after high school. | _____ |
| 2. | Get more students into college | _____ |
| 3. | Give students more pride in Indian culture | _____ |
| 4. | Prepare students to live off reservation in white culture | _____ |
| 5. | Prepare students to contribute to their home community | _____ |
| 6. | Give students an interesting time at school, help them have a good social life | _____ |
| 7. | Concentrate on preparing a few talented students for professional positions (doctors, lawyers, engineers) | _____ |
| 8. | Help students grow up, gain confidence and emotional maturity | _____ |
| 9. | Prepare students to behave as good citizens | _____ |
| 10. | | _____ |

- *0 = Lowest
- 1 = Medium
- 2 = Highest

School _____ Group _____ Team _____

SCHOOL IMPROVEMENT PROGRAMS

Budget: \$200,000

<u>Name of Improvement</u>	<u>Cost</u>	<u>Choice</u>
1. Several small, new schools nearer home	\$150,000	_____
2. New gym/recreation building for present school	150,000	_____
3. More books and class materials	25,000	_____
4. More teachers	75,000	_____
5. Different teachers	75,000	_____
6. Teachers who can speak the tribal language	75,000	_____
7. More guidance counselors	25,000	_____
8. More tutors	25,000	_____
9. More health assistants	25,000	_____
10. Vocational training in carpentry	50,000	_____
11. Vocational training in auto mechanics	50,000	_____
12. Vocational training in _____	50,000	_____
13. Vocational training in _____	50,000	_____
14. Develop new courses in Indian history	50,000	_____
15. More field trips to schools and towns	25,000	_____
16. Parent education program	100,000	_____
17. School beautification by planting trees and flowers	10,000	_____
18. Educational T.V. system (video tape)	25,000	_____
19. Mobile schools, by bus or helicopter	100,000	_____
20. _____	_____	_____
21. _____	_____	_____
TOTAL BUDGET		\$200,000

IDEAL SCHOOL GAME

(for elem. students)

Pretend you and your friends are going to start your own school. You want it to be the best school possible. You must decide how big your ideal school is going to be and where it is going to be.

Then, you must decide what the goals of your school are going to be. On page one is a goal sheet which lists some school goals. If you think of different goals for your school, add them to the list.

Decide which goals are most important and which are not so important. If you think a goal is very important, mark a 2 in the blank space next to the goal. If you think the goal is not very important, mark it 0. If you think the goal is sort of important but not one of the most important ones, give it a score of 1.

On the second page is an improvement sheet that lists things you can do to improve your school. No school can do all of these things at once because they all cost a lot of money. Pretend you have enough money to do five things to improve your school. Keeping in mind the goals for your school, decide which five improvements will be best for your school.

After your team has decided on school goals and improvements, your team will exchange goal sheets and improvement sheets with another team. Look at the other team's goals one at a time. Then look at their school improvement sheet to see what changes they planned to make. Your team will decide by voting whether or not the other team has selected the best possible improvements to achieve each of their goals;

The plan that gets the most total votes is the winning plan.

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GOALS FOR THE IDEAL SCHOOL

PRIORITIES*

- | | | |
|-----|--|-------|
| 1. | A big school away from home | _____ |
| 2. | A small school close to home | _____ |
| 3. | Learn more about Indians | _____ |
| 4. | Learn more about life off the reservation | _____ |
| 5. | Fewer kids dropping out of school | _____ |
| 6. | Fewer kids being absent from school | _____ |
| 7. | More kids getting good grades | _____ |
| 8. | More kids finishing high school | _____ |
| 9. | More kids going to college | _____ |
| 10. | More kids getting jobs | _____ |
| 11. | More people in the tribe being involved i
with the school | _____ |
| 12. | _____ | _____ |
| 13. | _____ | _____ |
| 14. | _____ | _____ |
| 15. | _____ | _____ |

* If not very important, put 0.

If sort of important, put 1.

If very important, put 2.

IDEAL SCHOOL IMPROVEMENTS

CHOICES
(Choose 5 only)

1. Build more and better classrooms _____
2. Build more rooms that aren't classrooms
(library, auditorium, cafeteria, playground) _____
3. Buy more interesting school books and other
course materials _____
4. Hire more teachers _____
5. Have fewer teachers but train them to teach
better _____
6. Hire more Indian teachers _____
7. Hire guidance counsellor to help kids with their
problems _____
8. Hire tutors to help kids with homework _____
9. Hire school doctor _____
10. Just teach English, arithmetic, science
and history, but make them more
interesting _____
11. Teach more courses that will help kids to
get jobs (like electronics, woodworking,
how to fix cars) _____
12. Teach courses about Indians _____
13. Teach more courses like art and music _____
14. Have more sports and other activities _____
15. Take kids on field trips to other schools and
towns _____
16. Get the parents to visit school more
often _____
17. Hire more men teachers _____
18. Hire more women teachers _____
19. Hire younger teachers _____
20. Hire older teachers _____
21. _____
22. _____
23. _____

APPENDIX B

PROGRAM DESCRIPTIONS

N. B. The first number on the top left-hand corner of each program description refers to cost-effectiveness rank. The number in parentheses refers to the number used to denote the program when computing the cost-effectiveness rating.

BIA EDUCATION PROGRAM DESCRIPTION

Problem: ACADEMIC FAILURE AND INADEQUATE ADMINISTRATION, INSTRUCTION, AND GUIDANCE

Rationale: To effect improvements in an organization, authority should be consonant with responsibility. The present organization deprives the responsible office, the BIA Education Division, of the authority to make budget, personnel, and other decisions on the regional and school level. This authority is essential to the effective implementation of educational reforms.

Program Description: Establish the Education Division as a semi-autonomous or autonomous administrative unit under the direction of the Assistant Commissioner for Education. He would become Superintendent of Indian Schools and have direct control over, and responsibility for, all BIA schools while reporting either to the Commissioner of the BIA or a separate Indian Education Commissioner.

	Pilot Program	Operational Program
What:	NONE	Break the Education Division out of the present administrative confusion that frustrates its efforts
Where:		
When:		As soon as possible
How:		Directive by a higher governmental entity
Schedule:		
Costs:		No additional cost if policy of change is agreed upon and it becomes an in-house priority
Personnel		
Facilities:		
Equipment:		
Other:		
TOTAL:	50	

BIA EDUCATION PROGRAM DESCRIPTION

Problem: INADEQUATE INSTRUCTION; LOW TEACHER MOTIVATION

Rationale: To maximize teacher motivation, it is necessary to have a flexible salary schedule that permits rapid responsiveness to unusual performance. To gradually reduce the number of ineffective teachers and replace them with more effective teachers, authority to retire teachers must exist within the system.

Program Description: Remove all BIA teachers and school staff from the Civil Service and treat the BIA schools as a normal school district. This will allow easier removal of poor teachers; possibilities for teachers to earn money in the summer; a more flexible daily work schedule for teachers; and greater motivation to treat teaching as a respected professional job.

	Pilot Program	Operational Program
What:	NONE	See above
Where:		All schools
When:		As soon as possible
How:		Change present regulations under which the Education Division operates
Schedule:		
Costs:		No costs if priorities for achieving this change is given
Personnel		
Facilities:		Priority within present operating budgets
Equipment:		
Other:		
TOTAL:	51	

3(5)

BIA EDUCATION PROGRAM DESCRIPTION

Problem: To change the role of the teacher from custodian to educator

Rationale: Some new modes of classroom student-teacher interaction are needed to increase the teachers' responsiveness to student interests. The center of attention should be the topic and the participants in its discussion, rather than the teacher. Seminar groups tend to be more responsive to group interests.

Program Description: SMALL SEMINAR GROUPS WITH STUDENT-SELECTED TOPICS, as part of the academic program. Students choose topics they are interested in studying and each teacher then picks the seminar that he would like to teach. The seminars will probably cover a wide range of topics -- some may be extensions of the academic curriculum, and others not. Hopefully, the topics would coincide with knowledge some teachers may have. Otherwise, they would have to educate themselves. This may serve to emphasize the teachers' academic role.

	Pilot Program	Operational Program
What:	4 specific topic seminars chosen by students each semester	Small seminar groups on student-selected topics
Where:	In at least 2 senior high schools in each major geographical area	In all BIA schools
When:	September, 1969	September, 1970.
How:	All students choose topics and teachers sign up for specific courses	Same
Schedule:	1 session/week as part of regular school day	As part of regular academic program, perhaps as many as 5 meetings/week
Costs:		
Personnel		
Facilities:		
Equipment:		
Other:	Administrative (minimal)	
TOTAL:	52	

(6) BIA EDUCATION PROGRAM DESCRIPTION

Problem: To change the role of the teacher from custodian to educator and to supply him with rewards during the transition. That is, evidence that the students are learning and that the teacher has played a major role in this process.

Rationale: Teachers rarely obtain sufficient student feedback to provide them with a basis for both satisfaction and correction. Direct feedback may be perceived as dangerous by students fearful of teacher retaliation, so that an anonymous procedure is required. The student ratings can also provide a realistic basis for teacher evaluation and in-service training by supervisors.

Program Description: STUDENT RATINGS OF TEACHERS based on what and how much they feel they've learned rather than on personality, etc.

	Pilot Program	Operational Program
What:	Student ratings of teachers	Student ratings of teachers
Where:	To start, in 2 schools in each major geographical area	In all Indian schools
When:	Fall, 1969	Fall, 1970
How:	At the end of each semester, students rate teachers on basis of academic performance	Same
Schedule:		
Costs:		
Personnel		
Facilities:		
Equipment:		
Other:	Administration (minimal)	
TOTAL:	53	

(7)

BIA EDUCATION PROGRAM DESCRIPTION

Problem: To provide teachers with immediate evidence that the students are learning, thereby reinforcing and motivating the teachers.

Rationale: Students need to develop a sense of accomplishment tied to recently completed work--the psychological sense of closure. The weekly review also reinforces what has been learned, as well as providing the teacher with feedback on the effectiveness of his instruction.

Program Description: WORK OF THE WEEK IN REVIEW PROGRAM. Every week to ten days the teacher would ask all the students to write a short essay on a specific topic taught within that time. A variation would be for the teacher to ask one student to orally discuss a topic. In either case, a class discussion would follow. An emphasis on this 'non-graded' informal quiz could be used with all subjects, especially science, social studies and languages.

	Pilot Program	Operational Program
What:	Work of the Week in Review. Unannounced quiz-discussion session on a topic which has recently been taught.	Same
Where:	In 2 elementary, junior and senior high schools in all geographic areas.	In all BIA schools at all levels.
When:	Fall, 1969.	Fall, 1970.
How:	The teacher would assign a specific essay topic, either to the whole class or to 1 student. Class discussion would follow.	Same
Schedule:	Once a week to 10 days as part of regular school day.	Same
Costs:		
Personnel		
Facilities:		
Equipment:		
Other:	Minimal.	
TOTAL:	54	

(8) BIA EDUCATION PROGRAM DESCRIPTION

Problem:
To change the role of the teacher from custodian to educator.

Rationale:
It has been widely observed that teaching a subject is the best way to learn it. Also, teachers can gain empathy for student learning problems by observing how they teach a subject.

Program Description:
Student-teacher role switching: Students take turns at instructing the class on a selected topic, with the teacher assuming the role of student. This role-playing could give the teacher insight into his own role as an educator by critically examining the students' teaching techniques. Private teacher-student conference would be held before and after the student presentation.

	Pilot Program	Operational Program
What:	2 students/week acting as the teacher.	Student acting as teacher for a hour/day or for an entire day.
Where:	At at least 2 junior or senior high schools in each major geographical area.	In all BIA schools
When:	Fall, 1969	Fall, 1970
How:	Teacher orientation by principals followed by introducing idea to students.	same
Schedule:	To start, 2 hourly student sessions/week.	As a part of regular school day for daily hourly sessions. On entire days.
Costs:		
Personnel		
Facilities:		
Equipment:		
Other:	Administrative = Minimal.	
TOTAL:	55	

7(9)

BIA EDUCATION PROGRAM DESCRIPTION

Problem: TO CHANGE THE ROLE OF THE TEACHER FROM CUSTODIAN TO EDUCATOR and to supply him with rewards during the transition. That is, evidence that the students are learning and that the teacher has played a major role in this process.

Rationale: Student teams have demonstrated strong competitive motivation on the playing field. Since individual competition is frowned on in some Indian populations, group competition may be an effective means of mobilizing sanctioned competitive energies for scholastic activities.

Program Description: STUDENT INTRA-SCHOOL ACADEMIC COMPETITIONS. Classes at each grade level would compete with each other in scholastic quick recall games. Each teacher would act as the "coach" for his "team" -- i.e., his class -- and would be motivated by a desire for his class to perform well. Competitions could be arranged with neighboring schools and area winners would be determined.

	Pilot Program	Operational Program
What:	Intra-school competitions. 1 per month to start.	As many competitions as can be arranged without their seeming dull and everyday.
Where:	To start, in 2 schools in one area -- both intra- and extra-mural.	In all Indian schools with specific competitions for appropriate grades.
When:	September 1969	September 1970
How:	Teachers coach their class for the competitions which can be held during the school day.	Same
Schedule:	"Coaching" done as part of academic program	Same
Costs:	No cost	No cost
Personnel		
Facilities:		
Equipment:		
Other:		
TOTAL:	56	

BIA EDUCATION PROGRAM DESCRIPTION

Problem: STUDENT INHIBITION IN THE CLASSROOM

Rationale: It may be that academic efforts would be more concentrated in early puberty if the apparently inhibiting distractions of the opposite sex were temporarily avoided. During the student group activities Abt Associates Inc. undertook while in the field, we discovered that students (particularly junior high through high school) were more talkative and less shy about interacting in groups when they were working in sexually homogeneous groups. This probably relates to the roles men and women play in many Indian groups which are different and more clearly defined than those generally played by their counterparts in middle-class white society.

Program Description: SEPARATE STUDENTS BY SEX FOR CLASSROOM WORK.

This would perhaps be one per area or one per tribal group. A total class group (about 25 students) could be the same sex or a sexually-mixed class could be divided into separate boy and girl work and study groups. The critical population here is grades 6-9.

	Pilot Program	Operational Program
What:	Sexually homogeneous work study groups for classwork.	Same.
Where:	One school per area or one distinct tribal group: Grades 6-9 only.	Whenever it is clear that student interaction and academic achievement are enhanced by homogeneous groups. This is more likely among the more traditional Navajo than among the acculturated Chippewa.
When:	Beginning school year 69-70 Limit on experiment is three years.	Should be implemented as soon as it is clear that the experiment works.
How:	Assign boys and girls to different rooms or else train teachers to work with small, sexually homogeneous groups.	Same.
Schedule:	Begin school year 69-70 3-year experiment; becoming fully operational as soon as it is clear it works.	Pilot program becomes operational term after it is clear experiment is successful. Continues operation as long as it is necessary.
Costs:		
Personnel	Possible training costs to train teachers to work with small groups.	
Facilities:		
Equipment:		
Other:	Possible cost in class scheduling	
TOTAL:	57	

9(22)

BIA EDUCATION PROGRAM DESCRIPTION

Problem: Poor Motivation: Indian students, because of the rural environments in which they live, are probably understimulated and unable to relate their way of life to that of the economic mainstream.

Rationale: The student perceived gap between education and concrete economic activities might be reduced by an opportunity to apply this former to the latter in organized on-reservation development work. This involvement with real community problems would also tend to motivate and mature the students, while increasing parental involvement in student activities.

Program Description: THE INDIAN CORPS OR RED BERETS: This would essentially be a domestic peace corps or vista, especially designed for Indian high school students. They would become involved with community work, in both rural and urban areas, and would then be able to relate their experience to their own environments.

	Pilot Program	Operational Program
What:	A domestic peace corps in which Indian high school students serve rural and urban poverty areas.	Same.
Where:	The program should be begun, perhaps, near an Indian reservation.	Branching out to non-Indian poverty areas
When:	Beginning 9/69.	To be implemented upon evaluation of the first year's success: 9/70.
How:	By appointing 1 Indian corps Administrator/Recruiter.	1 Administrator for each reservation or major geographic area.
Schedule:		
Costs:		
Personnel		
Facilities:		
Equipment:		
Other:		
TOTAL:	58	

110) BIA EDUCATION PROGRAM DESCRIPTION

Problem: Lack of Involvement of the Indian Community in the Educational Process.

Rationale: On the assumption that increased parent involvement in schools supports student commitment to academic achievement, involving the adult community in school planning may result in increased student motivation.

Program Description: COMMUNITY PARTICIPATION IN PLANNING NEW SCHOOL FACILITIES: After basic requirements of the physical plant have been determined and programmed, a certain amount of money should then be appropriated for various community service facilities (e. g., library and reading room, theater, gymnasium, and similar recreation facilities). Design of the buildings and component services would be worked out among BIA staff, architects, and tribal leaders.

RE: Grey Hills High School - Tuba City, Arizona.

	Pilot Program	Operational Program
What:	Allow community participation in planning of new school facilities.	Same.
Where:	Where new school facilities are planned.	Same.
When:	As soon as possible.	Same.
How:	Prepare alternatives, with costing; invite architects, tribal leaders.	Same.
Schedule:		
Costs:		
Personnel	Existing.	Same.
Facilities:	Existing.	Same.
Equipment:	Existing.	Same.
Other:	Existing.	Same.
TOTAL:	Minimal	Same.

(119)

BIA EDUCATION PROGRAM DESCRIPTION

Problem: Lack of Relevance of Language Instruction to Other Academic Subjects.

Rationale: There is no point in wasting childrens' time and limiting their motivation by having them learn to read banal and irrelevant substantive material. Reading should be motivated by a student-perceived desire to become informed on the material being read.

Program Description: In the lower level BIA schools (junior and senior high school levels), language instruction should utilize texts from areas related to other subjects which the students are studying (history, social studies, geography, literature, etc.) rather than irrelevant readers of the Dick and Jane variety. Children will read with much less difficulty if the material has some relevance to the rest of their educational experience and offers opportunities for supplemental reading in areas of particular interest.

	Pilot Program	Operational Program
What:	Instead of "readers," teach reading from books for students' other courses.	Same.
Where:	20 schools; all grades. Navajo, Plains, Alaska, and Southwest.	All schools, upon evaluation.
When:	9/69-6/70	9/70-
How:		
Schedule:		
Costs:		
Personnel	Existing	Same
Facilities:	Existing	Same
Equipment:	Minimal Costs	Minimal Costs
Other:	Existing	Same
TOTAL:	Minimal Costs	Minimal Costs

20) BIA EDUCATION PROGRAM DESCRIPTION

Problem: Student Alienation; Anomie.

Rationale: Student motivation will be increased if students use educational materials of interest to them. It is the students themselves who are most competent to determine what interests them.

Program Description: Students should be encouraged to participate regularly in selection and programming of educational materials such as films and library books as well as other instructional and recreation programs at their schools.

	Pilot Program	Operational Program
What:	Students participate in choice of books, films.	Same.
Where:	4 high schools: Stewart, Mt. Edgecumbe, Phoenix, and Sherman Inst.	All schools.
When:	9/69-6/70.	9/70-
How:	Provide lists of available books, films, etc.	Same.
Schedule:		
Costs:		
Personnel	Existing.	Same
Facilities:	Existing	Same
Equipment:	Existing	Same
Other:	--	--
TOTAL:	MINIMAL COST 61	MINIMAL COST

3(64)

BIA EDUCATION PROGRAM DESCRIPTION

Problem: LACK OF POSITIVE ROLE MODELS FOR INDIAN STUDENTS

Rationale: Indian success stories would inspire and motivate student achievement.

Program Description: Production of biographical films on contemporary Indians who have successfully overcome the cultural barrier, both socially and economically. Three prints of each film would be distributed to schools on a rotating basis.

	Pilot Program	Operational Program
What:	Production of one 15-minute 16 mm color film describing the daily life of 1 successful Indian. Film would be shown in BIA schools.	Five 15-minute 16 mm. color films @ \$15K each
Where:	On location.	Same.
When:	Production to begin Sept. 1969 for release sometime that fall.	Production of additional films could be started as soon as positive results.
How:	Technical consulting crew to do filming and script writing.	Same.
Schedule:		
Costs:		
Personnel		
Facilities:		
Equipment:		
Other:		
TOTAL:		\$75,000 (cost/pupil: \$1.50)

BIA EDUCATION PROGRAM DESCRIPTION

4(38)

Problem: DISSEMINATION OF TEACHING RELEVANT INFORMATION TO TEACHERS.

Rationale: Teachers often feel a lack of professional guidance and enrichment, and a certain loneliness in dealing with their problems. A newsletter would disseminate useful information on techniques, as well as building morale and esprit de corps.

Program Description: INFORMATION EXCHANGE NEWSLETTER: for teachers and other concerned BIA staff: Teachers would send letters about their teaching problems, techniques, materials, etc. that they've found successful with different types of students in different situations, etc. to central newsletter office. These would be published and distributed to all teachers in the system. Teachers could then answer and respond to each others' problems. This could build up a stronger sense of community among all the teachers in the BIA, as well as communicate useful information (a third grade teacher at the Sioux school may have discovered certain methods that would be useful to a sixth grade teacher at the Navajo, etc.). Through the newsletter, teachers could bring both their problems and successes to the attention of those who may be helped or helpful.

	Pilot Program	Operational Program
What:	Information exchange newsletter	Same
Where:	Pilot program in one area only	Newsletter for all BIA staff concerned with teaching problems
When:	School year 69-70	School year 70-71
How:	Set up small office in one of larger area-offices. Part-time editor and secretary to run, publish & distribute letter.	Central editorial office somewhere in the West with editorial and secretarial staff and mimeograph.
Schedule:	Newsletter would be published monthly @ 300 distribution	Could be weekly publication if successful @ 3000 distribution - 48 weeks
Costs:		
Personnel	1/2 time editor @ 3500 1/2 time secretary @ 2500	Fulltime editor @ 8000 Fulltime secretary @ 5000
Facilities:	Room in area office @ no extra cost	Locate in existing BIA office @ no extra cost.
Equipment:	Mimeo machine @ 300 Supplies, etc. @ 500	Maintenance = 450/year Machine @ 300 File cabinet @ 50
Other:	Postage @ 300 one year	Supplies etc. @ 10k Postage for 48 wks. 3000 dist =
TOTAL:	\$14,000	8.2k \$22,500



BIA EDUCATION PROGRAM DESCRIPTION

Problem: ENHANCING TEACHER INTERACTION WITH STUDENTS.

Rationale: To relieve the boredom of many classrooms for both students and teachers, educational self-entertainment may be effective. Besides increased attention and motivation, many social studies and language arts topics can be dramatized to good instructional effect. Functionally sanctioned loud talking in various roles should stimulate and refine verbal facility in English.

Program Description: IMPROVISATIONAL THEATRE TECHNIQUES: would be incorporated in the BIA teacher training program. The exercises used to train actors for improvisational theatre would focus primarily on nonverbal communication (a way of sidestepping some of the communication problems between BIA teachers and Indian students). This would enhance perceptual awareness and, in general, develop more provocative and responsive behavior on the part of the trainees. Acting workshops could be incorporated as part of BIA summer teaching training programs, with one fulltime director working with several small groups a day.

	Pilot Program	Operational Program
What:	Training in improvisational acting techniques to be included as part of BIA pre- or inservice teacher training program.	Full time director to run acting workshops during summer training programs, and to travel to BIA schools during the school year to consult with teachers and run inservice workshops.
Where:	Summer training program	Ongoing summer training programs as well as at the local school level.
When:	Summer '69.	Following school year (69-70)
How:	Hire a director to set up and run the summer workshops as part of the summer teacher training program.	Hire a full-time director who would travel to schools, either as a regular circuit trainer, or as schools request training.
Schedule:	see when	see when
Costs:		
Personnel	one director/trainer to run workshops over 3 week training period @ \$3,000.	full time circuit director at \$12,000/year plus travel
Facilities:	none - Existing	space in existing schools - (class room, gym, etc.)
Equipment:		none
Other:	Travel @ \$400	Travel @ \$18k/year
TOTAL:	\$3,400	\$20k

BIA EDUCATION PROGRAM DESCRIPTION

Problem: STUDENT MOTIVATION

Rationale: To give students some concrete idea of the relevance of academic achievement to economic self-sufficiency, cash rewards for grades offer a simple and possibly inexpensive approach.

Program Description: CASH DIVIDENDS FOR STUDENT ACHIEVEMENT: The pilot program would consist of three experiments: Plan A: 10¢ for a "d," 20¢ for a "c," 50¢ for a "b," \$1 for an "a"; Plan B: \$5 for "a" only; Plan C: \$1 for a "c", \$2 for a "b," \$4 for an "a." The pilot program designed to identify age levels, geographic areas, and school size and type (boarding/day; on/off reservation) in which dividends will work best. Students would receive money shortly after they receive report cards at the close of each marking period (6 marking periods/year).

* 30 percent get "a's", 30 percent "c's", 15 percent "b's", 5 percent "a's". Basis

	Pilot Program	Operational Program
<u>What:</u>	Cash dividends for student achievement.	Same.
<u>Where:</u>	Far North-Unalakleet, Akiak, Kasiguk, Mt. Edgecombe, Chemawa; Sioux-OCS, Flandreau, White Horse, Standing Rock; Navajo-Wingate, Shonto.	Among school and tribal types where it works best (1/2 students in BIA or 25,000 students)
<u>When:</u>	PIHS, Greasewood, Wide Ruins 69-70, 3-year experiment	The year after a plan has been judged successful for a particular school or student type.
<u>How:</u>	Money allocated to agency office so children will receive it immediately after report cards are issued. A fulltime evaluator will gauge the success of each program.	The most successful plan for school & student type will be implemented. An ongoing evaluation & redesign program will be conducted by central administration.
<u>Schedule:</u>	School year 1969-70.	School year 1972-73.
<u>Costs:</u>	SEE FOLLOWING PAGES FOR DETAILED BREAKDOWN	
Personnel		
Facilities:		
Equipment:		
Other:		
TOTAL:		

CASH DIVIDENDS FOR STUDENT ACHIEVEMENT (PILOT)

Personnel: Because the schools selected for the pilot project are widely dispersed and are controlled by at least 6 different agencies, it is therefore recommended that allocations of funds be made to the schools. Overload of work is not foreseen.

Facilities: Existing,

Equipment: None.

Other: Cash Dividends:

Alaska Area - Unalakleet: grades 1-10/180 kids
Kasigluk: grades B- 8/ 72 kids
Akiak: grades B- 8/ 47 kids
Mt. Edgecombe: grades 9-12/632 kids

Plains Area - Chemawa: grades 9-12/847 kids
Oglala Com. grades B- 12/1, 047 kids
White Horse: grades 1- 8/ 43 kids
Flandreau: grades 9-12/675 kids
Standing Rock: grades 1-12/492 kids

Southwest Area - Wingate: grades 9-12/972 kids
Phoenix Indian: grades 7-12/1000 kids
Shonto: grades B- 8/695 kids
Greasewood: grades B- 8/700 kids
Wide Ruins: grades B- 8/178 kids

Alaska Area

Plan "A"
Unalakleet - 180 enroll.

30% "D" @ 10¢ = \$ 5.40
30% "C" @ 20¢ = 10.80
15% "B" @ 50¢ = 13.50
5% "A" @ \$1 = 9.00

Total Dividends
per month \$38.70
Or approx. \$40 x 6 = \$240
per year

Plan "B"
Mt. Edgecumbe - 632 enroll.
Kasigluk - 72 enroll.
Total Enroll. 704

5% "A" @ \$5 = \$175
dividends/month
Or, approx. \$175 x 6 = \$1,050
per year

Plan "C"
Akiak - 47 enroll.

30% "C" @ \$1 = \$14
15% "B" @ \$2 = 14
5% "A" @ \$4 = 12

Total Dividends per
month = \$40 or
approx. \$40 x 6 =
\$240/year

Total Dividends for Alaska Area = \$1,530

Plains Area

Plan "A"
O. C. S. - 1074 enroll.

30% "D" @ 10¢ = \$32.20
30% "C" @ 20¢ = 64.40
15% "B" @ 50¢ = 80.50
5% "A" @ \$1 = 54.00

Total dividends/month =
\$231.10 or approx. \$235
x 6 = \$1,410/year

Plan "B"
Flandreau - 675 enroll.
White Horse - 43 enroll.
Total Enroll. 718

5% "A" @ \$5 = \$180
Total dividends/month
or approx. \$180 x 6 =
\$1,080/year.

Plan "C"
Standing Rock - 49
Chemawa - 84
Total En. = 133

30% "C" @ \$1 = 402
15% "B" @ \$2 = 402
5% "A" @ \$4 = 268

Total dividends per
month = \$1,072 x 6
= \$6,432/year

Total Dividends for Plains Area = \$8,922

Southwest Area

Plan "A"
Shonto - 695 enroll.

30% "D" @ 10¢ = \$20.90
30% "C" @ 20¢ = 41.80
15% "B" @ 50¢ = 52.00
5% "A" @ \$1 = 35.00

Total dividends/month =
\$149.70 or approx. \$150
x 6 = \$900/year

Plan "B"
Wingate H. S. - 922 enroll.
Wide Ruins - 178 enroll.
Total Enroll. 1100

5% "A" @ \$5 = \$275
Dividends/month or approx.
\$275 x 6 = \$1,650/year

Plan "C"
Phx. Ind. - 1000
Greasewood 700
Total En. = 1700

30% "C" @ \$1 = 510
15% "B" @ \$2 = 510
5% "A" @ \$4 = 340

Total dividends per
month = \$1,360 or
approx. \$1,360 x 6
= \$8,160/year

Total Dividends for Southwest Area = \$10,710

Summary

Estimated Total Cost for Plan "A"

1,949 participants = \$2,550 per year

Estimated Total Cost for Plan "B"

2,522 participants = \$3,780 per year

Estimated Total Cost for Plan "C"

3,086 participants = \$14,832 per year

TOTAL COST = \$21,162 per year

Total Participating
School Enrollment = 7,557

Cost per Student = \$2.80

(121)

BIA EDUCATION PROGRAM DESCRIPTION

Problem: Inadequate Educational Stimulation for Students; Inadequate Facilities; Achievement Lag.

Rationale: An increased intellectual level may be attained in high schools by involving high school students in some college activities, and some college students in high school tutoring. The theory is that simple human communications would effect some transfer of knowledge and interest, as well as providing models for academic success.

Program Description: Various institutions of higher learning which are located near existing BIA facilities might be induced, and even subsidized to allow Indian students to make use of college facilities (libraries, special lecture series, athletic and similar recreational facilities, etc.). A program might also be instituted where students from local colleges would be recruited as tutors for nearby BIA schools, and an arrangement made with the college to accept such work for partial fulfillment of requirements in fields such as education, American history and civilization, sociology, anthropology or other related disciplines in the social sciences. Tutors recruited under such a program might also be offered a small stipend.

	Pilot Program	Operational Program
What:	Indian students to make use of nearby college facilities.	Same.
Where:	Phoenix, Haskell, OCS, Albuquerque Ind. School, Intermountain, Stewart.	30 schools.
When:	2/69-	Upon satisfying evaluation.
How:	Negotiate cooperative agreements; recruit tutors.	Same.
Schedule:		
Costs:		
Personnel	} MINIMAL COST }	} Same.
Facilities:		
Equipment:		
Other:	Possible coll. stud. incentive 6/sch. @ 300 ea. = 1.8k	Same: 6/school @ 300 ea. = 9k
TOTAL:	\$1,800 69-	\$9,000

(101)

BIA EDUCATION PROGRAM DESCRIPTION

Problem: Student Motivation

Rationale: Role play experience has shown that people formally and self consciously playing roles will often behave in ways in which they don't usually behave. By rotating roles each time (by teacher assignment, drawing roles out of a hat, etc.), all the students in the class will safely be able to experiment with different kinds of behavior.

Program Description: CLASSROOM ROLE PLAY: periodically (once a week or so for one or two class periods) students would be given roles of different student types (eager student who always raises hand, student politico, trouble maker, quiet type, etc.) which they would play for the assigned class period. The teacher would conduct the class as usual responding, however, to student characters rather than the students themselves. The critical thing here is that the roles include a variety of types of "desirable" student behavior which it has been hard to elicit from Indian students. The hypothesis to be tested during the pilot program is that students will adopt new behaviors which they discovered were successful during the role plays.

	Pilot Program	Operational Program
What:	Classroom Role Plays kids in grades 4-8 (C 130 kids)	Same (C 15, 000 kids)
Where:	Greasewood Boarding School grades 4-8	All Schools grades 4-8
When:	School year 69-70	School year
How:	Develop roles & Teacher Guide Implement program with on-going evaluation	Refine materials Implement all schools grades 4-8 On-going evaluation
Schedule:	Spring 69- Develop materials Implement school year -69-70	Refine materials Summer 1970 Implement operational program school year 70-71
Costs:		
Personnel	Evaluator - 1-1/4 time @ 15 k/year \$3, 750	Full time Evaluator @ 15 k/year =15k
Facilities:	Existing	Existing
Equipment:	None	Travel & Adm. = 10k
Other:	Develop materials - 3mm @ 1, 200 = 3, 600	Refine materials - 1mm @ 1200 Publication of materials 15k
TOTAL:	Overhead = 5k \$12, 350	(time & materials) \$41, 200



(105)

BIA EDUCATION PROGRAM DESCRIPTION

- Problem:**
1. Student Motivation
 2. Lack of Skilled Human Resources on the Reservation

Rationale: The unclear understanding of many students of the options available both on and off the reservation, plus the uncertainty concerning the relevance of school studies to life decisions, suggests the need for an exercise relating these concerns. Such an exercise would teach options and arouse interest in students obtaining more information.

Program Description: GAME FOR HIGH SCHOOL STUDENTS illustrating the material and cultural costs and benefits to both themselves and their tribe of their decision to leave or remain on the reservation. Game will also describe some of the skills and values they will need to "make it" either on or off the reservation and alternative strategies for achieving success (or failure) either place.

	Pilot Program	Operational Program
What:		Education Game for all Indian High School Students
Where:		All Indian High Schools
When:		For use Winter 1970
How:		Spring 69 - Development Fall 69 - Production Winter 70 - Distribution
Schedule:		
Costs:		Game Design & Development @ 2 men/mo @ 1200 ea = 2,400 Overhead costs @ 15K
Personnel		
Facilities:		
Equipment:		
Other:		Production Costs - 50 games of 4/game @ \$10/game = 50 x 4 x \$10
TOTAL:	71	\$19,400 2K

0(41)

BIA EDUCATION PROGRAM DESCRIPTION

Problem: VOCATIONAL TRAINING OTHER THAN DESIRED BY STUDENT IN THE FIELD: results in dislike for school, poor achievement, and dropout from vocational training. This happens frequently because administrators are unable to cope with the amount of paper work involved in transfers to new and desired fields and because of improper staffing.

Rationale: Forcing students into vocational studies of no interest to them not only wastes time, but also de-motivates student interest in any vocational training. Free choice of training seems essential to its effectiveness

Program Description: VOCATIONAL MOBILITY IN SCHOOL: whereby a student may change his desired occupational goal and transfer into a field which he chooses. Direct counseling would be made available to a student, informing him of all the things which are involved and required in taking a certain course. Teachers would get extra pay depending on the amount of counseling. Students would also be allowed to choose their teacher-counselor.

	Pilot Program	Operational Program
What: Permitting a student to move from one social goal to another.	Can be implemented at Haskell/with all students. Provide for student counseling prior to selection of courses	It would require extra scheduling and earlier enrollment. However, it should decrease dropout rate and discontentment among the students.
Where:	Haskell Institute and Chillico	All vocational high schools and post-high schools
When:	Sept. 1969	Sept. 1971
How:	Acquire adequate staff to handle paperwork and counseling can be conducted by teachers whom student chooses.	Same
Schedule:	Sept. 1969 to June 1971	Sept. 1971 to June 1973
Costs:		
Personnel	Existing teachers 2 adm. aides. to handle transfers @ 7k ea. = 14k	Cost will depend on number of vocational schools in operation at approximately 12k/school
Facilities:	Existing:	
Equipment:	typewriters, desk, files, etc. @ 1,250 ea. = \$2,500	\$12,000 Est.
Other:	teacher incentives @ 12 @ 500 each @ 6 per sch. = 6k	Per additional school
TOTAL:	\$22,500	



21(57)

BIA EDUCATION PROGRAM DESCRIPTION

Problem:

To familiarize BIA teachers with the professional aspects of teaching. To change the role of the teacher from custodian to educator.

Rationale: Many teachers are unaware of instructional innovations and curriculum developments, and need stimulation of their professional interests.

Program Description:

Present BIA teachers with a one-year gift membership and subscription to a professional teaching organization and journal. This may serve to emphasize their role as educators by encouraging innovative thinking and stimulating teaching techniques.

	Pilot Program	Operational Program
What:	Present a 1-year gift membership/subscription to an organization and journal to sample of BIA teachers.	Present subscription/membership to all BIA teachers.
Where:	In 2 schools in each major geographical area.	In all BIA schools.
When:	Fall, 1969 -Summer, 1970	Fall, 1970-Summer 1971
How:	BIA enrolls teachers in professional organization and orders journal subscriptions.	same
Schedule:	Weekly, monthly, or quarterly journal.	same
Costs:		
Personnel		2500 X \$5/up = 12,500
Facilities:		
Equipment:		
Other:	Subscription @ \$5/yr x 100 teachers = \$500	
TOTAL:	\$500 73	\$12,500

22(55) BIA EDUCATION PROGRAM DESCRIPTION

Problem: Lack of Educational Research, which results in a low rate of determining how to solve educational problems and, ultimately, lower educational cost-effectiveness than would be possible with more research.

Rationale: The modest political base of support for Indian educational research is a result of the small Indian population. Support could be increased by broadening the relevance of it to include added funding sources.

Program Description: Increase research and development sources of funding support by broadening applications to other cross-cultural education and training programs, such as for AID, Peace Corps, etc.

	Pilot Program	Operational Program
What:	Increase R&D funding by broadening applications: develop a few specific programs of R&D, having both Indian and non-Indian application.	NA
Where:	NA	
When:	Immediately	
How:	Study contract to organization experienced in cross-cultural educational research.	
Schedule:	4/60-4/70	
Costs:		
Personnel	2 man-years @ 15k ea. = 30k	
Facilities:		
Equipment:		
Other:	Overhead = \$70k	
TOTAL:	\$100,000	

BIA EDUCATION PROGRAM DESCRIPTION

Problem: CULTURAL AND GEOGRAPHIC ISOLATION; POOR MOTIVATION

Rationale: Given the mass media, field trips within the U.S. are not as exciting to students as they once were. Some of the intellectual stimulation of strange places can be captured by trips to more distant and culturally distinct areas, such as Europe.

Program Description: ACADEMIC ACHIEVEMENT AWARDS OF TRIPS TO EUROPE FOR HIGH SCHOOL STUDENTS: based on achievement test results and teacher evaluations. Students would be encouraged to think of the European trip as an adventure in learning as well as an exciting vacation. At the end of the trip, students would be asked to write an essay describing the high points of their travels.

	Pilot Program	Operational Program
What:	8 weeks in Europe for 10 students and 2 teachers	Same trip for 30 students and 6 teachers
Where:	Students chosen from all high schools, on the basis of outstanding academic achievement.	Same
When:	Summer 1969	Summer 1970 if success is apparent
How:	Use academic achievement and staff evaluations as criteria for choosing students. Use supervisor evaluations to choose teacher-counselors.	Same
Schedule:		
Costs:	Existing: Expenses paid for teachers as an incentive	Same.
Personnel		
Facilities:		
Equipment:		
Other:	Rm. & Bd. @1500/child x 12 = 18k	Rm&Bd @ 1500/child x 36 = 54k
TOTAL:	Travel @ 1k/person x 12 = 12k \$30,000	Travel (same) x 36 = 36k \$90,000

24(94)

BIA EDUCATION PROGRAM DESCRIPTION

Problem:

Poor English language skills, both for students who need ESL and those who speak sub-standard English.

Rationale: Assuming that language learning is a function of exposure duration and intensity of interest, earlier and longer exposure of children to English language TV programs is likely to increase their facility with English.

Program Description:

Distribution of standard T.V. sets to households in a community; exposure to English will improve Indians' use of it. For comparison, try total remedial program at another school; or compare achievement changes of pupils with T.V. to those without (lower pilot cost).

	Pilot Program	Operational Program
What:	T.V.'s in all homes sending kids to one school; remedial program at another school.	Determine which is most cost-effective and expand it.
Where:	Two Hopi day schools (Moen-copi and Hotevilla?).	
When:	September, 1969	
How:	Necessary appropriation, recruitment and evaluation.	
Schedule:	Distribute T.V.'s in August. Achievement tests, September and June. Compare changes.	
Costs:	administration & repair of T.V.'s 9 months @500 - \$4500	No estimates now.
Personnel:	5 remed. Eng. teachers (ratio of 20/1) @\$8,000/\$40,000	
Facilities:		
Equipment:	100 T.V.'s @ \$100/set-\$10,000 remed. Eng. materials \$1,000	
Other:	travel: 10 mos. @\$200 -\$2,000	
TOTAL:	Testing of 200 @ \$5/student x 2 = \$2,000 \$59,500	

(54)

BIA EDUCATION PROGRAM DESCRIPTION

Problem: INADEQUATE INSTRUCTION, specifically due to a widespread Indian student tendency to be inhibited about being outstanding individually and hence fearful of classroom performance. Also, the instructional problems produced by cross-cultural communications between Indian students and non-Indian teachers.

Rationale: The typical Indian inhibitions to individually obtrusive performance can be overcome by classroom activities in teams, also offering the powers of group competition.

Program Description: TEAM LEARNING: division of classes into two-, three-, four-, and five-student teams, for cooperative peer learning, reduced embarrassment in academic competitions, and the use of a competitive team spirit for motivation. In Tucson, for example, the pupils assume some responsibility in the instructional process. Each class is divided into committees, each committee taking up a different academic assignment. Each committee has a pupil for a chairman who coordinates the work of the committee and sees to it that the assignments are completed. Also, in the Haskell Institute, English and history are taught successfully using the student committee approach.

	Pilot Program	Operational Program
What:	Team learning in the classrooms: 1 class in each of 4 elementary and 4 high schools (about 200 students)	Team Learning.
Where:	1 elementary and 1 high school in each of four areas: Alaska, Southwest, Plains, Mississippi	All schools
When:	Start 9/69	Start 9/70 if pilot is successful
How:	6/69-7/69 plan program 6/69-8/69 recruit volunteer teachers and train 9/69-6/70 operations 6/70-8/70 evaluation	--7/70-9/70 --8/70-9/70 --9/70 on
Schedule:		
Costs:	Program planning \$10,000 teacher training for 8: 5,000	program planning & redesign = 50k teacher training for 2000: in 4 areas @ 100k ea. = \$400k
Personnel:		
Facilities:	Existing	Existing
Equipment:	Existing	Existing
Other:	Evaluation: 15,000	Administration:
TOTAL:	\$30,000 77	\$450,000

26(73)

BIA EDUCATION PROGRAM DESCRIPTION

Problem: PARENT ISOLATION FROM THE SCHOOL

Rationale: Assuming that parental involvement in schools reinforces student learning, means to parent participation in the school would improve student achievement. It seems that the big hurdle in parent school contacts is getting the parents to the school facility. If there were services for the parents located at the school, a big part of the problem might be solved.

Program Description: HOME SERVICE CENTERS LOCATED AT SCHOOLS: would serve as a means of attracting parents to the school. Laundromat facilities, treadle sewing machines, and irons and ironing boards could be provided. Parents would go to the school to observe classes, talk with teachers, or visit with their children at recess while waiting for their laundry to dry, etc.

	Pilot Program	Operational Program
What: Home service centers located at the school.	Centers would be equipped with commercial washers, dryers, and treadle sewing machines for parent use.	same
Where:	Two schools easily accessible to parents. Would try first on Sioux and Navajo, perhaps Loneman and Grease-wood Schools	In every school easily accessible to parents. 30 schools or centers
When:	school year 69-70	Add 4 additional centers every year until every school that can use one has one.
How:	Buy equipment which could be located in existing school basements, garages, sheds, etc,	Same. Space could be allocated for centers in school expansion plans.
Schedule:	see when	see when
*Costs:	existing purchasing agent for agency-home service aide for each facility to supervise & assist @5000/yr per = 10,000	30 aides/year @ 5k ea. = 150k
Personnel		
Facilities:		
Equipment:	2 com-washers/school @300 2 com dryer/school @300/sch. x2=1200	60 wshrs. @2/sch@\$300 ea. = 18k 60 driers@2/sch@\$300 ea. = 18k
Other:	elec.-300/yr/sch = 600 reprs-300/yr/sch = 600	elec.-300/sch/yr. x30 = 9k repairs@300/sch/yr. x 30 = 9k
TOTAL:	\$13,600 78	\$204,000

*don't know what income from these things are but would be a factor in total costs which is not accounted for here.

BIA EDUCATION PROGRAM DESCRIPTION

Problem: STUDENT INVOLVEMENT IN THE LEARNING PROCESS

The so-called Indian's reluctance to excel more than his peers.

Rationale: The typical Indian inhibitions to individually obtrusive performance can be overcome by classroom activities in teams, also offering the powers of group competition.

Program Description: Classroom student teams: Class is divided into small, work-study groups. These can be self-selected so that if boys prefer to work only with boys, they can; if brighter students prefer to work together, they can (they track themselves). Students work through problems and perform or report on their work as a team. The teams can change in population or remain the same throughout a term, or they can remain constant for a study project in one area of study, such as social studies, and change composition for other areas (spelling, games, workbook assignments). A skillful teacher can use student teams for just about all classroom activities. By taking the burden off individual performance, teamwork could enhance student competition, thought to be a factor in student achievement. It would also involve the students more directly in carrying out their own learning.

	Pilot Program	Operational Program
What:	Teamwork to be tested in one set of grades 1-12 for each of the major tribal groups, as well as in one tribally mixed school.	To become operational in all grades among all the tribal groups that respond well to it.
Where:	One set of grades 1-12 for each of the major tribal groups plus one tribally mixed school (about 12 schools)	See above
When:	145 teachers. School year 69-70	To become operational for a grade level or tribe as soon as it is clear experiment works
How:	Train teachers to use student teamwork, periodic meetings of these teachers to discuss problems and successes.	Train additional 300 teachers/yr.
Schedule:	School year 69-70	Training program expanded as program extended to more schools
Costs:	SEE FOLLOWING PAGE FOR DETAILED BREAKDOWN.	
Personnel		
Facilities:		
Equipment:		
Other:		
TOTAL:		

CLASSROOM STUDENT TEAMS: TRAINING OF TEACHERS -- (PILOT)

Costs:

<u>Personnel:</u>	145 teachers to attend training session		
	Per Diem (food & lodging) @ approx. \$20 x 7		
	= \$140/person x 145 =	\$20,300	
	Travel cost @ approx. \$150/person =	21,750	
	6 man training team @ \$3,000/week x 6 =	18,000	
	10 consultants @ \$100/day x 5 =	5,000	
	Consultant travel @ \$200 ea. x 10 =	<u>2,000</u>	
			\$67,050
<u>Facilities:</u>	Operation of training center	<u>\$ 3,000</u>	\$ 3,000
<u>Equipment:</u>	Existing	\$-----	\$-----
<u>Other:</u>	Training Program Design =		
	2 man months @ 12k =	\$24,000	
	Material (films, etc.) =	<u>950</u>	
			<u>\$24,950</u>

TOTAL COSTS FOR PILOT PROJECT = \$95,000

** CLASSROOM STUDENT TEAMS: TRAINING OF TEACHERS -- (OPERATIONAL) **

Costs:

<u>Personnel:</u>	300 teachers to attend training session		
	Per Diem (food & lodging) @ approx. \$20 x 7 =		
	\$140/person x 300 =	\$42,000	
	Travel cost @ approx. \$150/person =	45,000	
	12 man training team @ \$3,000/person/week		
	x 12 =	36,000	
	15 consultants @ \$100 ea. x 5 =	7,500	
	Consultant travel @ \$200 ea. x 15 =	<u>3,000</u>	
			\$133,500
<u>Facilities:</u>	Operation of training center	<u>\$ 6,000</u>	\$ 6,000
<u>Equipment:</u>	Existing	\$-----	\$-----
<u>Other:</u>	Training program redesign		
	1 man month @ \$12,000 =	\$12,000	
	Material (films, etc.) =	<u>2,000</u>	
			<u>\$ 14,000</u>

TOTAL COSTS FOR OPERATIONAL PROGRAM = \$153,500

B(78)

BIA EDUCATION PROGRAM DESCRIPTION

Problem: Administration/Managerial--Ineffective allocation of resources at the school level, due to lack of school control over expenditures which would be best anticipated on the school level.

Rationale: The changing day-to-day needs of local schools, together with the extended communications to higher authorities, suggest the need for some local school control of the operating budget to assure timely and accurate response to local needs.

Program Description: Local school control of a substantial portion of the school operating budget. The school principal would be given a total budget by the area and agency offices, with specified educational performance criteria he would have to meet, but would be free to allocate and spend his budget with a year-end accounting and evaluation.

	Pilot Program	Operational Program
What:	Local school budget control.	Same.
Where:	Experiment with half the elementary and half the high schools in an area whose director is willing.	All schools.
When:	Start 6/69	9/70, if program is successful.
How:	recruit test area 4-5/69 plan with area director, 6-7/69 operate 7/69 - 7/70 evaluate 6/70-8/70	Coordinate budgeting with school principals.
Schedule:		
Costs:		
Personnel		
Facilities:		
Equipment:	insignificant	
Other:	planning/area = 10k evaluation = 10k	planning/area @ 10k = 100k
TOTAL:	\$20,000 81	\$100,000

7(131)

BIA EDUCATION PROGRAM DESCRIPTION

Problem: Economics: the economically un-self-sufficient population.
(Senior High School students)

Rationale: The economic development problems of Indian reservations bear some resemblance to those of Caribbean Islands. The latter may be a fruitful study topic for secondary social studies.

Program Description: This course would examine the ways in which the island republic of Anguilla has attempted to meet the problem of a lack of economic self-sufficiency. The solution of sending workers outside Anguilla to work, and the concomitant social and cultural problems, will be discussed. Students will be encouraged to relate the Anguillan problem to that of certain Indian populations. Role plays will be employed.

	Pilot Program	Operational Program
What:	Curriculum on Anguillan economics.	Same.
Where:	4 schools: 2 Plains 2 Southwest	100 high schools.
When:	School year 1969-70.	
How:	Compile sourcebook of data on population, economy, etc.	
Schedule:	Sourcebook, 3/69-6/69; role play, 6/69-7/69; teacher's guide, 7/69-8/69.	
Costs:	5 man-months @ 1.2k = 6k (Program Design) Overhead @ 10k = 10k	5 man-months @ 1.2k = 6k (Program Redesign) Overhead @ 10k = 10k
Personnel:		
Facilities:	Existing	Existing
Equipment:	Existing	Existing
Other:	Prod. of mat. = 2k Evaluation = 20k	Production of materials = 100k
TOTAL:	\$38,000	\$116,000

0(98) BIA EDUCATION PROGRAM DESCRIPTION

Problem: LACK OF COMMUNICATION BETWEEN TEACHERS AND STUDENTS WHICH LEADS TO IRRELEVANT AND INADEQUATE INSTRUCTION AND POOR PUPIL MOTIVATION

Rationale: One of the scarce resources in most schools is time for all involved simply to discuss informally their overall problems in working together. This lack could be filled by informal conferences on commonly significant topics.

Program Description: YEAREND CONFERENCE IN HIGH SCHOOLS FOR TEACHERS, DEPARTING SENIORS AND POSSIBLY INDIAN ADULTS. Focus would be on increasing sensitivity of the teachers to the ideas and feelings of the students. Activities would include t-group type confrontation and/or role reversals followed by discussion.

	Pilot Program	Operational Program
What:	a 2-day session involving both activities mentioned above	Same
Where:	Oglala Community School and Fort Wingate	All high schools 25 schools
When:	May 1969	May 1971, after expanded trial in may 1970
How:	Two 2-day conferences after school closes; pay the students; have one away from school, one at school	Same
Schedule:	program prep: Spring 1969 conference: May 1969	Same schedule annually
Costs:	1 wk-4 consultants @1200/mo = 4,800 Personnel on-sch-50 stdnts @ 20 = 1,000	2 consultants at each school for 1 wk @ 1200/mo 600/sch x 25 = 15K 15 stdnts/sch x \$20 = 300/sch x 25 = 75K
Facilities:	off-campus site for 50 @20/day = 2,000	off-campus costs 15x2x\$20 = 1200/ [schx25 = 30K]
Equipment:	std-travel - 1 bus 600 cons- air travel @ 2x400ea=800	travel (stdnt) 600/sch x 25 = 15K air travel (cons) @150ea=300/sch x 50
Other:	prog. plan. @5K/ea = 10K evaluation @ 5K/sch = 10K	prog. plan. @3,000/sch x 25 = 75K 15K
TOTAL:	\$24,600	\$157,500

BIA EDUCATION PROGRAM DESCRIPTION.

Problem: LACK OF INNOVATION IN SCHOOLS

Rationale: There is currently no legitimized and institutionalized process for generating improvements in school management or instruction or counseling. If this were made a regular obligation, more innovations might result.

Program Description: INNOVATION COUNCIL AT EACH BIA SCHOOL, which would be charged specifically with producing instructional and other innovations on a regular, institutionalized, and remunerated basis. Innovations would be evaluated for implementation by both local principals and BIA headquarters. Bonuses would reward successfully implemented innovations.

	Pilot Program	Operational Program
What:	Innovation Councils At 16 schools: 4 elementary and 4 high school, 4 boarding and 4 day 4 areas - 40 participants	Innovation Councils 40 BIA schools 200 participants 8 areas
Where:	Choctaw, Oklahoma, Plains, Southwest, Alaska (1-week session)	At all BIA schools
When:	Sept. 1969	After 6-month trial and evaluation period.
How:	Recruit 3-5 volunteers from teaching and dorm staff to serve on council. Training would be held during a summer workshop.	
Schedule:	9/69 - 3/70	Starting 3/70
Costs:	Program Design - 10k 4 Cons. @ 500 ea. = 2k	Program redesign - 15k 16 Cons. @ 500 ea. = 8k
Personnel		
Facilities:	Training facilities operation: 4 x 2k = 8k	Training facilities operation: 8 x 2k = 16k
Equipment:	Existing 44-travel @ \$100 ea. = 4.4k	Existing 222-travel @ \$100 ea. = 22.2k
Other:	44-rm. & bd. @ \$25 ea. = 1540 Bonus costs = \$4,000	222-rm&bd @ \$25 ea. = \$7,770 Bonus costs = \$30k
TOTAL:	\$29,940	\$98,970

(29) BIA EDUCATION PROGRAM DESCRIPTION

Problem: Student motivation.

Rationale: To enhance student involvement in the learning process. To develop communication skills and to foster student contact with non-Indian students and Indian students from different tribes.

Program Description: STUDENT PRODUCED TEXTBOOKS: There would be two aspects of this program: the payoff that comes from students involved in making a meaningful communication and the payoff that comes from what happens to the communication after it is produced, particularly how it is used to teach other Indian and non-Indian students. The books would be group productions based around study topics. Students plan what the book is to be about (what the point is), they work out the steps they must take to make that point, write the narrative and provide illustrations. They can even produce it themselves on mimeograph machines, or make dummy that can be produced by photo offset process or something in school shop. A book produced by a sixth grade social studies class on local agriculture could be used by future sixth grades in the same school, used to teach the third grade in the same school, exchanged with students in other tribes, sent to non-Indian schools to inform students of their Indian life, start to bridge culture gap.

	Pilot Program	Operational Program
What:	Student-produced textbooks 6th & 11th grade classes	Same - approximately 200 classes in grades 6-8 and approx. 100 classes in grades 9-12
Where:	6 schools, Navaho, Sioux, Eskimo, one elementary & one high school per each group, all grades (approx. 600 kids)	50 schools in BIA, all grades (6th - 12th grades) approx. 5,000 kids
When:	Beginning school year 69-70	School year 70-71
How:	Identify pilot schools and provide teachers with pack- aged guides suggesting how program can be implemented	Provide teachers with package guides and/or include in teacher training workshops
Schedule:	School year 69-70	70-71
Costs:	Teacher Guide design @ 4 man months @ 1200/mo. = 4800 Overhead @ 5.2k = 5,200 Production = 1,000	Teacher Guide redesign @ 25k Production = 30k
Personnel		
Facilities:	Existing	Existing
Equipment:		
Other:	Material @ 1k/sch. = 6k Production @ 500/sch. = 3k	Material @ \$500/class = \$150k Production @ 250/class = 75k
TOTAL:	\$20k	\$280k



(33) BIA EDUCATION PROGRAM DESCRIPTION

Problem: POOR MOTIVATION, POOR INSTRUCTION, LOW ACADEMIC STANDARDS, AND LANGUAGE BARRIER

Rationale: The teaching of elementary concepts in all disciplines is enhanced by this concrete and palpable representation in terms of another discipline. Mass media transference of concepts helps develop analytical and creative skills.

Program Description: CROSS-DISCIPLINARY ELEMENTARY MUSIC-MATH-LANGUAGE-SCIENCE COURSE, which would treat all these fields as different languages having different expressive capabilities and limitations. Elementary linguistics, communications theory, mathematical structure, and scientific explanations of musical sounds would be compared to both Indian and English language. Curriculum would be developed for higher elementary level.

	Pilot Program	Operational Program
What: music, math language, and science course	4 elementary schools 4th gr. course Sioux, Cherokee, Navajo, Eskimo - 3 teachers & 1 administrator per school - 16 participants	4th grade course - 200 schools - 3 teachers, 1 administrator per school - 800 participants (An integrated science-humanities course)
Where:	Plains, Southeast, Southwest Alaska (1 week session)	All schools - 1 week session - 4 areas Training in Alaska - Southwest - Plains and Central
When:	Feb. 1970 start after 1 year of development	9/71
How:	Develop curriculum in 1969 and train teachers in brief winter 1969 workshops	Training workshops would continue and be led by teachers experienced with the curriculum.
Schedule:	Development: 3/69-12/69 Teacher training: 12/69 Operation: 2/70-6/71	9/71 onward
Costs:	4 Cons. @ \$1200/mo. = 4.8k	16 Cons. @ 1 mo. @ \$1200/mo. = 19.2k
Personnel		
Facilities:	Existing - 4 schools	Facilities operation @ 3k/school = 12k
Equipment:	4 sets simple musical records, instruments; @ 1k/sch. = 4k	200 sets @ 1k/sch. = 200k
Other:	Curriculum development: 40,000	Curriculum redevelopment = 100,000
TOTAL:	Travel for cons. @ 300 ea. = 1.2k \$50,000 86	Travel = \$150 ea. x 220 = 33k Rm&Bd @ 7,700/ = \$271,900

24(2)

BIA EDUCATION PROGRAM DESCRIPTION

Problem: To overcome poor motivation/cultural and geographic isolation - by providing the smartest pupils with travel, academic excitement, and enjoyment.

Rationale: A sense of school esprit de corps and academic motivation could be developed by inter-school academic athletics.

Program Description: **ACADEMIC COMPETITIONS BETWEEN BIA SCHOOLS** (similar to TV's College Bowl) which would be run yearly on an elimination basis. Separate leagues could be established for Oklahoma, the Dakotas, and the Southwest. Teams of 5 would compete in answering questions on various topics which have been set beforehand in order to give time to gain substantive knowledge. Consultants would develop the game and train the existing staff in playing it.

	Pilot Program	Operational Program
What:	Form one 6-school league which will compete in academic competitions.	Form other leagues in other areas and have run-offs at the end of the season.
Where:	Aberdeen area.	Aberdeen, Oklahoma, and Southwest regions -- Also, in other areas, if practicable.
When:	Starting Fall, 1969.	Fall, 1970.
How:	Each school would play all schools in its league once - the winning team would get a trophy and a book for each team member.	3 league winners would participate in a play-off schedule. Trophies and books would be awarded to BIA champions.
Schedule:	Consultants develop rules in Fall, 1969; competition occurs March-May	On-site training of staff for supervising games.
Costs:	1 consultant: 3 man mos. @ \$1,200 = 3,600 Overhead = \$10,000	2 consultants @ \$1,200/month = \$2,400 Readings - 5k
Personnel:		
Facilities:	Use existing.	Use existing.
Equipment:	Minimal.	Minimal.
Other:	Travel @ 1k/school = 6,000	Travel @ 1k/school = \$30,000
TOTAL:	\$19,600 87	\$37,400

5(134) BIA EDUCATION PROGRAM DESCRIPTION K-3 Language Arts

Problem: Oral Fluency in English, as foundation for all Language Arts Skills

Rationale: Oral language skill facilitates writing and reading skills.

Program Description: K-3 Language Arts Curriculum. The curriculum will emphasize speaking and listening to cultivate oral fluency in English. Reading and writing will not be excluded but will receive varying degrees of attention depending on the degree of oral fluency achieved. The principal materials of the curriculum will be a multitude of oral-aural exercises and techniques. Audio tapes will be required. Tape, radio or records should be among the resources in the classroom so that students have an opportunity to listen to English while drawing, or engaging in other quiet activities.

Examples of exercises include: mimicing of different styles of speech (pitch, volume), taping messages, games requiring quick oral communication (telegrams), treasure hunts for word cards and other rewards with clues played on audio tape; description of objects, feelings in words, pictures, singing, describing objects to "blind" person, "whisper down the alley" games with class divided into teams to convey same message; play acting, "owning" words (students receive word cards from teacher), picture word games, finishing unfinished stories in teams, etc. Students might exchange "native" words with teacher, with other students. Used typewriters should be available as resource in classroom.

	Pilot Program	Operational Program
What:	K-3 Oral English	
Where:	6 schools--Southwest, Alaska, Plains	All schools appropriate
When:	Academic '69	Academic '70
How:	Develop extensive set of exercises, mostly in looseleaf ringbinder; some games, some tapes	
Schedule:	April-August '69	
Costs:	50 man-months @ \$3K	
Personnel	\$150,000	
Facilities:	Prototype production \$1,000	\$75 per grade x 4=\$300
Equipment:	Tape recorder, typewriter \$50 x 6 = \$300	
Other:		
TOTAL:	88 \$151,300	\$90,000

BIA EDUCATION PROGRAM DESCRIPTION 4-6 Language Arts Curriculum

Problem: Reading and Writing English

Rationale: Emphasis on quantity rather than quality of writing with result in higher quality in the end.

Program Description: The 4-6 Language Arts curriculum will focus on reading and writing skills. The principal methods of the curriculum will involve extensive participation of students in production-oriented writing exercises, reading about high-saliency topics, reading for purpose (e.g., inputs to a game), as well as the "hooked on books" approach.

Examples of class activities include: student production of class newspaper, story books for personal possession, student-created anthology representing different types of communication (humor, insult, diary, monologue, dialogue, etc.). Students will be encouraged to write dialogues between two famous people (Angry Horn and General U.S. Grant, for example); instructions for use of a gadget (canopener), letters to girlfriend, favorite sports character, etc. Photos of different types of people (young, unhappy child, Madison Avenue executive, famous tribal leader, etc.) will be used to elicit student experimentation with different writing styles to achieve particular ends. Class will be divided into teams representing decision-making bodies (e.g., Congressmen, or tribal council, consumers, etc. for exercises in oral and written persuasion). Typewriters should be available.

	Pilot Program	Operational Program
What:	4-6 Language Arts-- Reading and Writing programs	
Where:	6 BIA schools, geographically dispersed	All
When:	Academic '69	Academic '70
How:	Select high-saliency reading materials, and extensive set of exercises	
Schedule:	April-August '69	
Costs:	50 man-months \$150,000	
Personnel		
Facilities:	Prototype production \$2K	Production \$150 per grade x 3 = \$450
Equipment:	Used typewriters \$25 x 6 = \$150	x 300
Other:		
TOTAL:	89 \$152,150	\$135,000

7(65)

BIA EDUCATION PROGRAM DESCRIPTION

Problem: LACK OF KNOWLEDGE ABOUT ON AND OFF RESERVATION EMPLOYMENT OPPORTUNITIES.

Rationale: Motivation for academic achievement can be gained by clarifying the relevance of academic subjects to job requirements. Better career choices will result from more information on career options and characteristics.

Program Description: A series of five "World of Work" films and related pamphlets. Wherever possible, Indians would be shown working at various jobs to help provide positive role models. Films and pamphlets would be used in conjunction with expanded guidance programs and field trips. A central telephone clearing house would be instituted to provide information relative to vocational opportunities. The pilot films would be concerned with the following areas of work: (1) clerical; (2) engineering; (3) nursing, medical; (4) government services; and (5) construction.

	Pilot Program	Operational Program
What:	Five 20-minute films @\$20K. Vocational pamphlets related to film information. Telephone information service.	Fifteen films @ \$20K. Additional pamphlets. Expanded telephone information service to all schools.
Where:	Flandreau School. Haskell School. Turtle Mountain School.	All BIA High Schools and Vocational Schools.
When:	September 1969	September 1970
How:	Produce five pilot films. Produce pamphlets. Establish telephone information service.	Produce fifteen additional films. Produce additional pamphlets. Expand telephone service to all relevant BIA schools.
Schedule:	September 1969	September 1970
Costs:	(Integrate program with existing, but expanded, guidance program.) - 1 staff member at \$10K.	3 personnel at central telephone exchange: 30K.
Personnel		
Facilities:	Central telephone exchange. Facilities operation = 50k	Central telephone exchange. Same = 100k
Equipment:	Pamphlet production = 5k	Pamphlet production = 50k
Other:	Program evaluation: \$5K 5 20-min. films @ 20k ea. = 100k	15 films @ 20k ea. = 300k
TOTAL:	\$170k	\$480k



B(40)

BIA EDUCATION PROGRAM DESCRIPTION

Problem: Cultural isolation, geographic isolation, low motivation, lack of career orientation.

Rationale: Field trips to urban and industrial areas will reduce cultural isolation and motivate career interests.

Program Description: Many short-distance field trips. Students would take to the field less oriented to the sights than to people, what jobs they have, where they live, what they do for fun. Trips would emphasize economic or other activities which interface with the reservation, thus breaking down the feeling that the reservation and white man's world are separate and unrelated.

	Pilot Program	Operational Program
What:	8 1-day field trips per year for All students in a high school (est 1,000)	8 1-day trips per year for all 50,000 students
Where:	Any high school on a reservation within easy access to other socio-economic environments.	All schools - 50 students - 1 teacher - 2 parents per trip
When:	1 year trial, start 9/69	9/70 if trial is successful
How:	By chartering buses and recruiting parent aides for the day trip.	Same.
Schedule:		
Costs:	SEE FOLLOWING PAGE FOR DETAILED BREAKDOWN	
Personnel		
Facilities:		
Equipment:		
Other:		
TOTAL:	91	

EXTENSIVE SHORT-DISTANCE FIELD TRIPS -- (PILOT)

Costs:

<u>Personnel:</u>	Teachers - N/C	\$-----	
	320 parents @ \$10 ea. =	\$3,200	
	Bus Driver - N/C	<u>\$-----</u>	\$3,200
<u>Facilities:</u>	Existing	\$-----	\$-----
<u>Equipment:</u>	Existing	\$-----	\$-----
<u>Other:</u>	Bus fuel and maintenance @ \$75/trip	\$12,000	
	Admission costs (museums, etc.) @ 50¢ each per trip =	<u>240</u>	\$12,240
	TOTAL: PILOT =		<u><u>\$15,440</u></u>

**** EXTENSIVE SHORT-DISTANCE FIELD TRIPS -- (OPERATIONAL) ****

Costs:

<u>Personnel:</u>	Teachers - N/C (Existing)	\$-----	
	16,000 parents @ \$10/trip =	\$160,000	
	Bus Drivers - N/C (Existing)	<u>\$-----</u>	\$160,000
<u>Facilities:</u>	Existing	\$-----	\$-----
<u>Equipment:</u>	Existing	\$-----	\$-----
<u>Other:</u>	Bus fuel and maintenance & \$75/trip @ 8,000 trips =	\$600,000	
	Admissions (museums, etc.) @ 50¢ per student @ 8 x 50,000 =	<u>\$200,000</u>	\$800,000
	TOTAL: OPERATIONAL		<u><u>\$960,000</u></u>

39(31) BIA EDUCATION PROGRAM DESCRIPTION

Problem: ACADEMIC EVALUATIONS, so that pay, promotion, and motivation that are determined in part by achievement can be standardized Bureau-wide.

Rationale: Standardized testing provides a lucid basis for performance evaluation and deficiency correction.

Program Description: Use same tests in all schools at same level at same time. This accepts and ignores cultural biases that the tests manifest so that measurements of achievement in BIA schools can be compared along a common vector.

	Pilot Program	Operational Program
What:	All schools give same test to same grades (3 in gr. 1-6; each year afterward) at same time (fall and spring)	Same
Where:	Already exists for Aberdeen Area (could be modified) 1 area - approx. 8,000 kids	All schools (10 areas)
When:	FY 1970	FY 1970
How:	Analysis of best test to use by Area and D.C. people; implementation next Fall.	Same
Schedule:	Test in Fall and Spring	to determine change.
Costs:	1 Education Specialist - 12k Clerical staff = 5k	1 Education Specialist/Area = 10 x 12k = 120k Clerical staff = 10 x 5k = 50k
Personnel		
Facilities:	None	None
Equipment:	Testing service: 8,000 x \$2 ea. = 16k	50,000 kids @ \$2 \$100,000
Other:	Travel = 10k Material = 2k	Travel @ 10 areas x 10k ea. = 100k Material @ 2k ea. x 10 = 20k
TOTAL:	\$45k	(cost/pupil: \$2.20) \$390k

BIA EDUCATION PROGRAM DESCRIPTION

Problem: LACK OF INDIAN TEACHERS: Young Indian students should be taught by Indian teachers who are familiar with their problems and are better able to understand them. They would also serve as positive examples to the students and would be better able to communicate with students' parents.

Rationale: Indian teachers communicate more effectively with Indian students due to reduced cultural distance. Indian teachers offer motivating role models to Indian students.

Program Description: RECRUITMENT OF MORE INDIAN TEACHERS:

Contact colleges and universities and request permission to have Indian students majoring in education to do their student teaching in Bureau Schools. This would help to create an interest in and firsthand experience with Indian education and its problems. The Indian preference clause in hiring policies should be emphasized and a recruitment service for prospective teachers should be established.

	Pilot Program	Operational Program
What:	Bureau personnel would recruit Indian teachers at colleges and universities to do student teaching in home area Indian schools.	Independent study with periodic visits to school must be accomplished by student-teachers. This would not prevent students from doing other studies or courses.
Where: Apache, Nevada, (NAU), etc. attend this school	10 schools in Arizona and North and South Dakota (Navajo), Hopi, Papago, Apache, Gila River, etc.	All Bureau Schools - all colleges who will participate. (20:1 teacher-student ratio)
When:	Sept. 1969	1971 - following success of pilot
How:	Acquiring permission from colleges to have students do student teaching in home area schools	Field recruitment and better guidance counseling from Agency and Area Office
Schedule:	1969 Sept. to June 1971	1971 - continuous to keep up with enrollment increase
Costs:		
Personnel	10 student teachers & 10 schools @ 3000 ea. 30,000 Recruiter @ 1 ea. 10,000	Student teacher 100 @ 3000 ea. 300,000 Recruiters (6) @ 10K ea. 60,000
Facilities:	Existing school Housing in home area	50 rental housing in areas where student teachers home is not near sch. @ 250 ea. = 12,500
Equipment:	Existing	Existing
Other:	Transportation from college to school @ 600 each = 6,000	Transportation from college to school @ 600 each = 60,000
TOTAL:	(cost/pupil: \$240) (one year) \$46,000	(cost/pupil: \$200) (per year) \$432,500

41(72)

BIA EDUCATION PROGRAM DESCRIPTION

Problem: LACK OF PARENTAL ENCOURAGEMENT.
LACK OF PARENTAL AND COMMUNITY INTERACTION WITH SCHOOL.

Rationale: Indian parents might be motivated to take a stronger interest in schools if provided with a relatively private and unembarassing film form.

Program Description: Parent Orientation Film.
Production of a 16 mm. motion picture emphasizing the role of the parent in education and describing the BIA Education System. Prints of the film would be provided with narration in the three major Indian languages and would be shown at parent gatherings.

	Pilot Program	Operational Program
What:	None	Produce a 16 mm. parent orientation film
Where:		On location at BIA schools and in studio
When:		September 1969
How:		
Schedule:		
Costs:		\$35,000 inclusive
Personnel		
Facilities:		
Equipment:		
Other:		
TOTAL:		\$35,000 (cost/pupil:\$0.60)



2(70) BIA EDUCATION PROGRAM DESCRIPTION

Problem: INADEQUATE INSTRUCTION, due to cross-cultural communication difficulties that could be eased by a "trans-cultural" teaching aide in all classrooms.

LACK OF JOB OPPORTUNITIES ON THE RESERVATION, requiring a high school but not a college education, could be alleviated by recruiting local high school graduates for teaching aides.

Rationale: The use of teacher aides in kindergarten classrooms significantly improves children's readiness in reading and number skills according to a report from the Minneapolis Public Schools. Comparing three different staffing patterns -- one aide per classroom, five aides per classroom, and no aide in the classroom -- children had the greatest mean gains on tests of reading readiness, number readiness and total readiness when there was one aide per classroom, the next largest gains when there were five aides, and the lowest mean gain in classes having a teacher and no aide. These findings were based upon pre-test and post-test pairs using the Metropolitan Readiness Test, given at a five month interval to 234 children.

The report, "Teacher Aide Program," concludes "that teacher aides can be used effectively to help to develop reading readiness in kindergarten children. Children have gained more in reading readiness when aides were present in the classroom." The study was based upon nine matched kindergarten classes, three

Program Description: "NEW CAREERS" FOR INDIAN HIGH SCHOOL GRADUATES AS TEACHING AIDE PARAPROFESSIONALS, operating at elementary and high school levels.

	Pilot Program	Operational Program
What: Indian paraprofessional teaching aides	1/2 classrooms, @ 3 elem. 1/1 classrooms, 3 h. s.'s 2/1 classrooms (4 aides in each of 6 schools = 24 total)	All BIA schools 10 Aides in each of 200 schools = 2,000 total
Where:	1 elementary & 1 high school each in Plain, Southwest, Alaska	All BIA schools
When:	begin 9/69	Commencing 9/70 if pilot successful
How:	3/69-5/69--program planning 5/69-6/69--aide recruitment and selection 7/69-8/69--aide training with teachers in workshop	--6/70-9/70 --6/70-8/70 --7/70-9/70
Schedule:	9/69-6/70 operation 6/70-8/70 evaluation	9/70 on
Costs:	1 teacher "coach" in each of 6 schools @ \$1000/yr. @ 1/5 time: (extra) \$6,000 24 aides @ \$5000/yr. = \$120,000	1 coach in 200 schools @ 1000/yr @ 1/5 time: (extra) 200,00 2000 aides @ 5000/yr.: 10,000,00
Personnel:	Existing	Existing
Facilities:	Existing	Existing
Equipment:	Existing	
Other:	3 training wkshps @ 5k/sch = \$30k Evaluation: 15,000	training wkshps in 100 areas @ 200 session @ 50k = 500k Adm. @ 1k/sch = 200k
TOTAL:	\$171,000	\$10,900,100 (per-pupil: \$21.2K)

each of the three different staffing patterns, in schools within the city's poverty target areas. The use of five aides per classroom was an effort to replicate the Headstart model of one adult for approximately five children. The report suggests that when five aides were used, the teacher had to spend a considerable portion of her time as a trainer of the aides and therefore could spend less time with the children. It would be interesting to ascertain whether the aides, once trained, could make an even greater contribution to pupil learning with this pattern. Also, whether with a larger sample this impressive gain -- a 50% greater increase in total readiness when there was an aide than without an aide -- would be maintained.

The classes with one aide had an average total readiness gain of 15 points, from a pre-test score of 49 to a post-test of 64, compared with an average total readiness gain of 10 points for those classes with no aide.

3(96)

BIA EDUCATION PROGRAM DESCRIPTION

Problem: POOR INSTRUCTION, LACK OF MOTIVATION

Rationale: Student instruction of students is unusually effective due to reduced cultural and age difference, role modeling, and better informal communication. Also, the older student tutors gain self-confidence and substantive knowledge through teaching.

Program Description: HOMEWORK HELPER PROGRAM, similar to successful one in New York City, in which high school students tutor failing elementary children for modest pay

	Pilot Program	Operational Program
What:	high school homework helpers	all high school-elementary school combinations
Where:	3 high school-elementary school combination	40 high school-elementary school combinations
When:	Sept. 1969	Sept. 1970
How:		
Schedule:	Sept. 1969 - June 1970	Sept. 1970 - continuous
Costs:		
Personnel	100 helpers @ \$1/hr. x 300 hrs/yr = \$30,000	2000 helpers @ \$1/hr x 300 hrs/yr = 600,000
Facilities:	Training - facilities operation = .5K	Training @ 4 centers - facilities operation @ 5K ea. = 20K
Equipment:	Existing	Existing
Other:	Administrative @ 5K ea. = 15K Training (travel, etc.) = 20,000 Evaluation = 10K	Adm. @ 5K ea. x 40 = 200K Training @ 5 areas @ 50K/area = (travel, rm & bd, etc.) = 250K
TOTAL:	\$80,000	\$1,070,000

4(84)

BIA EDUCATION PROGRAM DESCRIPTION

Problem:

Low motivation, lack of career orientation.

Rationale: Role models of similar ethnic backgrounds seen in person are more effective motivators than those of different backgrounds.

Program Description:

Touring Indian "success models". Students who have rarely seen an Indian who has succeeded off the reservation would have an opportunity to see them, talk to them, hear what they do and how they came to do it.

	Pilot Program	Operational Program
What:	20 successful Indians visit 5 schools in a relatively small area	Every high school would be visited by 20 "success models" per year, every grade school by 10.
Where:	Navajo or other large reservation w 5 schools	all schools (2-
When:	Trial-1969-70	start 9/70, if success is evident.
How:	Recruit "models" pay travel, expenses, consulting	Same.
Schedule:		
Costs:		
Personnel	100 man.days @ \$50-\$5000	2500 man days @ - 125,000
Facilities:	travel - 2,000 perdiem - 2,000	travel 50,000 perdiem 50,000
Equipment:	admin cost 1,000	admin 25,000
Other:		
TOTAL:	(cost/pupil: \$7) \$10,000	(cost/pupil: \$4) \$250,000

(103) BIA EDUCATION PROGRAM DESCRIPTION

Problem: Parent Involvement in the Schools

Rationale: Pleasurable activities involving both students and parents in exercises of educational issues should motivate increased parent involvement.

Program Description: EDUCATIONAL BOARD GAME to be played by Indian students and their parents. The game would serve as a vehicle for students to communicate to their parents their likes and dislikes about school and for both parents and students to communicate their educational objectives to each other. Game would also illustrate to both parties possible consequences of parents becoming more actively involved in the schools and teach some strategies for achieving greater involvement. Game would be developed by outside consultants; production could be done at Haskell Institute.

	Pilot Program	Operational Program
What:		Educational Board Game to be played by parents and students.
Where:		All Indian communities.
When:		For use Spring 1971.
How:		
Schedule:		Development: 9/69-9/70 Production: 10/70-2/71 Distribution: Spring - 71
Costs:		Design & Development (inc. / graphics 15k
Personnel		
Facilities:		
Equipment:		
Other:		Production costs for 500 3k
TOTAL:	100	18k

6(113)

BIA EDUCATION PROGRAM DESCRIPTION

Problem: Disintegration of Schools with the Indian Community; Lack of Educational Incentives and Stimulation.

Rationale: Community involvement in schools can be stimulated by making the school an adult entertainment center.

Program Description: A FILM SERIES: with specially selected films shown at least twice a week and possibly nightly, should be instituted for school children and all interested members of the community. No admission would be charged, and the films would be chosen to include documentaries as well as general entertainment features, as well as educational subjects. Such films may be rented at little or no cost (for example, the Twentieth Century series is available gratis).

	Pilot Program	Operational Program
What:	Feature films, documentaries, and educational films will be rented, shown without charge to all interested students and community members.	Same.
Where:	6 schools: 2 Alaska 2 Navajo 2 Sioux	All BIA schools, upon evaluation. (200 schools)
When:	September, 1969.	September, 1970.
How:	Rent films, (buy projectors where necessary); rotate films among schools.	Same.
Schedule:	Sept., 1969-Sept., 1970.	Sept., 1970-Sept., 1972, upon evaluation.
Costs:		
Personnel	Existing.	Same.
Facilities:	Existing.	Same.
Equipment:	Est. 700/school = 4.2k	Est. 700/school x 200 = 140k
Other:	Film rental/year @ \$200/school = 1.2k	Film rental/year @ \$200/school = 40k
TOTAL:	\$5,400 101	\$180,000

(112) BIA EDUCATION PROGRAM DESCRIPTION

Problem: Indian Student's Lack of Awareness of Broader American Society; Educational Achievement Lag.

Rationale: Publicity and involvement with the academic community would in the long run improve the BIA image, increase public awareness of Indian problems and hopefully provide future teachers for BIA schools. Re: Harvard-Radcliff Summer Ed. Program.

Program Description: AN EDUCATIONAL EXCHANGE PROGRAM: would bring non-Indian college students to reservations for a summer to serve as tutors and as counselors. These schools could remain open into the evening to offer increased use of the facilities and these special instructors for tutoring, recreation, non-competitive or minimally competitive, ungraded instruction and similar activities. Attendance would not be mandatory, and adult education courses would be offered as well. The college students' places at home would be filled by Indian high school students and recent high school graduates. The host families would receive a subsidy, as would employers; the college students would receive a small stipend. Such a program requires recruitment campaigns at various campuses around the country.

	Pilot Program	Operational Program
What:	6 Indian & 6 non-Indian schools: (approx. 12 students): an exchange program under which non-Indian students & Indians would exchange places for a summer.	Same.
Where:	4 areas: 2 Plains 2 Southwest	20 areas, (6 students/area) upon evaluation: 10 reservations 10 urban
When:	June, 1970-Sept., 1970	June, 1971-Sept., 1971, upon evaluation.
How:	Recruit Indians and non-Indian students; pay stipends to hosts, students, Indians' employers.	Same.
Schedule:	Development 6/69-11/69; Recruitment 12/69-5/70; Program 6/70-9/70.	
Costs:		
Personnel	1 Coordinator @ 12k = 12k Trav. & Adm. @ 20k = 20k	5 Coordinators @ 12k = 60k Trav. & Adm. @ 20k x 5 = 100k
Facilities:	Rental @ aver. of \$200/area - \$800	Rental @ aver. of \$200/area = 4k
Equipment:	Existing	Existing
Other:	Living exp. for stud. @ \$100/mo/ stud. x 12 x 3 mos. = 3.6k	Living exp. for stud. @ \$100/mo/ stud. x 180 x 3 mos. = 54k
TOTAL:	Trav. @ \$200 ca. = 2.4k Scholarship @ \$500 ea. = 6k Eval. = 10k \$54,800 102	Trav. @ \$200 ca. x 180 = 36k Scholarship @ \$500 x 180 = 90k \$344,000

48(109)

BIA EDUCATION PROGRAM DESCRIPTION

Problem: Language Barriers; Inhibitions Toward Competitive Learning.

Rationale: Reading and vocabulary skills are learned with far less difficulty when the student is offered audio-visual association in an entertaining form.

Program Description: PROCUREMENT AND PROGRAMMING OF A SPECIAL READING AND LANGUAGE TEACHING MACHINE, which has already been invented and is now available. This machine consists of a miniature tape recorder, designed to receive and play back information stored on plastic rectangular cards to which a piece of magnetic recording tape has been attached. On each card is printed a picture or representative drawing of an object which the child is familiar with, and whose name he must learn. When the student inserts one of these cards into the machine, the magnetic tape on the side opposite from the picture, which is always in view, is played through the recording device; the tape plays back the word-name of the picture on the front.

(CONTINUED ON BACK OF SHEET)

	Pilot Program	Operational Program
What:	Provide children with device permitting them to see and hear words simultaneously.	Same.
Where:	4 elementary schools: 2 Navajo, 1 Papago, 1 Eskimo.	All areas where Indian children are having language difficulties: 20 schools.
When:	September, 1969.	September, 1971, upon evaluation.
How:	Purchase existing machines; extend their capability with interlocking cards.	Same.
Schedule:		
Costs:		
Personnel	Existing.	Existing.
Facilities:		
Equipment:	5 machines/sch x 4 @ 200 ea = 4k	5 machines/school x 20 @ 200 ea = 20k
Other:	Mat. & Maint. @ 1k/sch = 4k Curr. Dev. @ 25k	Mat. & Maint. @ 1k/sch = 20k Curr. Redesign @ 75k
TOTAL:	Evaluation = 15k \$48,000 103	\$115,000

Program Description: continued

be incorporated to increase its educational versatility and value. For example:

- 1) Similar sets of information cards could be designed to aid in the teaching of subjects besides reading (geography, history, mathematics, explaining of simple machinery, etc.)
- 2) Sets of cards could be provided with interlocking edges. Each card would contain either a single key word, or a short phrase. They would be designed so that only grammatical constructions would interlock properly and fit together to form a complete sentence. When a proper sentence is thus constructed, the entire series of cards may be fed by the student through the machine, which will play back his work for him. Successfully fitting the "puzzle" and hearing it played back through the recorder would serve to reinforce the student's use of proper grammatical structure and word order.
- 3) The cards could also be designed to allow the student to make up his own set. Using a special erasible pen, he might draw his own picture on the front of the card and then record his voice saying the name on the back. The blank cards would be marked with the elementary parts of speech (e. g., noun/subject, noun/object, verb, adjective, adverb, etc.). By assigning words to their proper parts of speech and then constructing a sentence from the components he has fashioned himself, the more advanced student will gain a fuller understanding of his own language and its structure since he is allowed constant opportunities to create new sentences from similar basic constructions.

This plan would permit a high degree of entertaining, constructive and creative non-competitive learning, particularly suited to Indians of the South-western tribes.

9 (132) BIA EDUCATION PROGRAM DESCRIPTION

Problem: Sociology: education of a cultural and linguistic minority.
(Senior High School students)

Rationale: Motivation is maximized with maximum perceived relevance content.

Program Description: High school students will examine objectively the process of Indian education in the United States. The problems of the cultural and linguistic gap, and of misunderstanding and hostility between teachers, administrators, and pupils will be discussed. Role-play games will allow teachers and pupils to examine the disparity between teacher and student expectations and desires. Particular attention will be given to the tension between the Anglo educational system, in which competition between students is encouraged, and the strong inhibition on excelling fellow Indians felt by members of many tribes. This course would be a seminar for small numbers of students to permit maximum expression and analysis of individual views.

	Pilot Program	Operational Program
What:	Materials for seminar on Indian education.	Same.
Where:	2 schools: 1 Plains 1 Southwest	50 High Schools, upon evaluation.
When:	School year, 1969-70.	Sept., 1970, upon evaluation.
How:	Development of games, teacher training materials.	
Schedule:	3/69-6/69, games design; 6/69-9/69, teacher guides, training materials.	
Costs:	6 man-months @ 1.2k = 7.2k (Games Development) Overhead = 20k	6 man-months @ 1.2k = 7.2k (Games Revision) Overhead = 30k
Personnel:		
Facilities:	Existing	Existing
Equipment:	Existing	Existing
Other:	Prod. of materials @ 1k/ school = 2k	Production of materials @ 1k/ school = 50k
TOTAL:	Evaluation = 30k 104 \$59,200	 \$87,200

0(81)

BIA EDUCATION PROGRAM DESCRIPTION

Problem: POOR MOTIVATION, LOW ACADEMIC STANDARDS, POOR INSTRUCTION, ACADEMIC FAILURE, CULTURAL ISOLATION

Rationale: Motivation is maximized through the use of intrinsically rewarding symbolic media accessible to student participation.

Program Description: SOCIAL STUDIES TAUGHT THROUGH GREAT ART AND FOLK SONGS

Folk songs of social protest and paintings and drawings would be used as the inspirational basis for a history of social issues in the U.S. and Europe. This could provide the emotional basis to motivate intellectual concern among Indian students. Records, sound films, slides, art books, and occasional live circuit singers would be used in a coordinated way with the social studies topics with which the students deal.

	Pilot Program	Operational Program
What:	Folk songs, Social Studies prog. Eight schools: 1 elementary and 1 high school in each of 4 areas	All schools
Where:	2 in plains 2 in Oklahoma 2 in Southwest 2 in Alaska	All schools 150 schools
When:	1 year trial starting 9/69	9/70
How:	develop elementary and h. s. curriculum, procure records, art books, films, recruit circuit singers,	Same
Schedule:	train teachers in workshop summer '69 Start program development 3/69, teacher training 7/69, operation 9/69-7/70	9/70 on
Costs:	1 Circuit singer 15,000 travel 5,000 teacher training @ 1k/sch=4k	10 @ 15k ea = 150,000 10 x 5k ea. = 50,000 150 sch x 1k = 150,000
Facilities:	Existing	
Equipment:	8 sets of art books @ 250/sch = 2k 8 record players @ 150/sch = 1.2k 8 record libraries @ 500/sch = 4k	150 x \$250 = 37,500 150 x \$150 = 22,500 150 x \$500 = 75,000
Other:	Curr. Dev. = 25,000	Curr. Dev. = 100,000
TOTAL:	105 \$55,200	\$585,000 (cost/pupil \$33)

(128)

BIA EDUCATION PROGRAM DESCRIPTION

Problem: Political Science and History: land use; eminent domain and Indian rights (Junior High School students)

Rationale: Students can gain a better understanding of politics, law and history if the course material is relevant to their own culture and its specific problems. Students will be better equipped to deal with present-day problems of their culture if they have some sense of the heritage of these problems.

Program Description: Students will examine the laws governing the rights of tribes, and the validity of treaties contracted between the government and tribes. The legal status of lawsuits instituted by tribes against the U.S. Government for the recovery of treaty lands will be discussed, as well as the use today, under laws of eminent domain, or land reserved previously for tribal use. The origin of property rights in English common law will be compared to Indian concepts of property from tribal tradition. An attempt will be made to show how these different legal views of property have their sources in different social and economic patterns.

	Pilot Program	Operational Program
What:	Curriculum on tribal grants' legal status.	Same.
Where:	4 schools: 2 Plains 2 Southwest	150 schools
When:	School year 1969-1970	
How:	Compile source book.	
Schedule:	Compilation of sourcebook, 3/69-6/69; teacher's guide 6/69-7/69	
Costs:	10 man-months @ 1.2k = 12k (Program development) Overhead @ 10k = 10k	10 man-months @ 1.2k = 12k (program redesign) Overhead @ 10k = 10k
Personnel:		
Facilities:	Existing	Existing
Equipment:	Existing	Existing
Other:	Prod. of mat. @ 1k/sch = 4k Evaluation @ 20k = 20k	Production of materials @ 1k/sch = 150k
TOTAL:	\$46,000 106	\$172,000

2(56)

BIA EDUCATION PROGRAM DESCRIPTION

Problem: Administrative/Managerial: Inadequate development of financial and human resources. Need for improved public relations.

Rationale: A public relations program aimed at a select audience interested in educational problems of cultural minorities will attract more qualified personnel than present public relations and recruitment.

Program Description: IMPLEMENT AN IMAGE-IMPROVING PUBLIC RELATIONS PROGRAM: to change the image of BIA education to that of a dynamic, challenging, adventurous, intellectually and emotionally rewarding activity. This could be achieved through institutional advertising and sponsorship of contests and scholarships.

	Pilot Program	Operational Program
What:	Public relations program: Selective concentration on reaching and educating one national audience and one local area.	Same.
Where:	National, plus one local plains area.	National and multi-local.
When:	Start 6/69.	
How:	4/69-5/69 planning, writing, and media selection. 6/69-8/69 active campaign 9/69-10/69 evaluation.	
Schedule:		
Costs:		
Personnel	Planning and writing staff: 10 persons for 6 mos. @ \$1200/mo. = \$72,000	10 persons @ 3 mos. @ \$1200/mo. for redesign = \$36k
Facilities:	none	
Equipment:	none	
Other:	Evaluation = 25,000 Publishing costs = \$38,000 (@ 35k nat. & 3k local)	Publ. costs @ 35k nat. & 3k local = \$110,000
TOTAL:	\$135,000	\$146,000

3(25) BIA EDUCATION PROGRAM DESCRIPTION

Problem: LANGUAGE BARRIER

Rationale: Isolation of the teacher in the classroom prevents "adequate" cross-fertilization of techniques which can be used successfully in teaching ESL. Isolation of schools reinforces this tendency. A coordinated evaluation and development effort can serve to break down this isolation.

Program Description: Evaluation of present ESL programs and expansion of best methods: The results would be used to further innovation in this area through recommendations and teacher workshops.

	Pilot Program	Operational Program
What: Evaluation of ESL Programs	5 evaluators work 6 months--determine objectives, visit schools, measure success by isolating components	Implementation of recommendations; training for 4 weeks for 500 teachers and 300 teacher aides
Where:	Large sample from all types of schools on relevant reservations (400 of 40,000 studied in depth).	All schools needing ESL instruction.
When:	Spring 1969 to January 1970	1971
How:	In-depth analysis of classroom activities and materials and pupil characteristics compared to achievement changes	Teacher workshops New materials
Schedule:		
Costs:		
Personnel	5 evaluators \$60,000	5 coordinators @ 2k ea. = \$10k 20 consultants @ 2k ea. = \$40k full 4 weeks training
Facilities:	None	Facilities operation = \$10k
Equipment:	Computer, Overhead and Final Report \$70,000	
Other:	Travel \$ 5,000	Design of training = \$10k Travel @ \$200 ea. x 225 = \$165k Room & Board = \$165,800 Material = \$10k
TOTAL:	\$135,000 (cost/pupil: \$337) 108	Total = \$400,800

BIA EDUCATION PROGRAM DESCRIPTION

Problem: Lack of motivation, low achievement, high dropout rate in high school.

Rationale: Inability to adjust to the new social and academic requirements of high school (failure to become "plugged in" to what's happening) is a major cause of the dropout problem. A program is needed to ease the transition by educating the student as to new social and academic norms.

Program Description: UPWARD BOUND TO HIGH SCHOOL. Students completing elementary school who would experience a considerable change of environment on entering high school (small school to large, day to boarding, home to far away, one tribe to tribally mixed) would attend a 3-week program before attending high school. The program would include some entry-level substantive teaching, but would concentrate on motivation for learning and a preparation for the environmental change.

	Pilot Program	Operational Program
What:	3 3-week programs for 50 children - students would be a cross-section of the major geographic areas.	3 week programs for 3,000 students-all those who want it, potential dropouts would be encouraged. 100 students/school
Where:	2 large, one small High School serving children from a variety of situations. Navajo - Alaska - Sioux	All High Schools
When:	3 weeks in late July, early August -- to provide 3 weeks at home before school starts.	July 1970, if performance favorably affected
How:	Develop program Invite students on basis of records, provide transportation.	Same
Schedule:	Development - (Spring 1969) - Recruitment 5/69 Program 7-8/69	by teachers and consultants
Costs:	3 cons. @ 2.5k (inc. trav) = 7.5k	30 cons. @ 2.5k ea. = 75k
Personnel	Personnel already available (teach. on vol. basis)	Same
Facilities:	Facilities operation @ 3 schools @ 5k each = 15k	Operation of 30 schools @ 5k ea. = 150k
Equipment:	Existing	Existing
Other:	Prog. Dev. 15.0k Trav. @ \$50 ea. x 150 = 7.5k	Prog. Dev. Changes = 10k Trav. @ \$50 ea. x 3,000 = 150k
TOTAL:	Food & Lodging @ \$50 = 7.5k (cost/pupil: \$900) 52.5k	Food & Lodging @ \$50 x 3,000 = 150k (cost/pupil: \$266) 535k

3(104)

BIA EDUCATION PROGRAM DESCRIPTION

Problem: Cultural Isolation
 Poor Language Skills

Rationale: Indian students have an intense interest in much of white American culture. This interest can be effectively capitalized upon by using cultural artifacts as curriculum materials, since learning and skills would be transferable to other materials.

Program Description: SOCIOLOGY AND LANGUAGE ARTS COURSE using only teenage media as curriculum materials -- pop records, teenage magazines, TV shows, movies, advertising, etc. Materials would be used to study values, concerns, tastes and habits of non-Indian students (about whom Indian students are curious). Students would be saturated with English language materials that are more to their interest than standardized text books and lectures, enhancing their reading and comprehension skills.

	Pilot Program	Operational Program
What:	Sociology/Language Arts Curriculum	All high schools
Where:	5 high schools 1 in Alaska 1 in Plains 1 in Oklahoma 2 in Southwest	All high schools 30
When:	1 year trial starting 9/69	9/70
How:	Develop curriculum materials and teachers guide - procure records, magazines, movies etc.	Same
Schedule:	Program Development 3/69-8/69 Operation 9/69-7/70	9/70 on
Costs:		
Personnel	Existing	Existing
Facilities:	Existing	Existing
Equipment:	5 record players - 1,000	6,000
	5 record libraries - 1,000	6,000
	5 mag. subscriptions x 25 C = 1,250	6,000
Other:	film rentals - 250 ea = 1,250	7,500
	cur. development - 50k	150,000
TOTAL:	evaluation - 25k 110 \$79,250	175k

(133) BIA EDUCATION PROGRAM DESCRIPTION

Problem: Deciding whether or not to assimilate into mainstream culture

Rationale: The better understanding a person has of his life-situation and its historical and social determinants, the freer he will be to define and choose among options within that situation.

Program Description: High School Social Studies Course. A study of nations within nations: Students will begin by studying basic concepts of nationality and then explore examples of nations existing within nations--how does such a situation come to exist, how do both the majority and minority nations maintain their respective identities while coexisting, how does each select which skills, tools, values of the other it is willing to absorb and/or use, how each decides which values, roles, behavior it will give up for purposes of survival. A case study approach will be used; examples of study units are: the Kurds in Iraq; the French in Canada, the Indians in the U.S.; the Montagnards in Vietnam; the Jews in pre-Israeli Palestine; Arabs in Israel, 19th century colonial power in Africa, etc.

	Pilot Program	Operational Program
What:	study of nations within nations --high school level course three high schools--10th or 11th gr. (about 650 students)	Same All high schools--10th or 11th grade (about 3,000 students)
Where:	Flandreau Chilocco Phoenix Indian high school	All high schools
When:	for use 7/71	9/71 on
How:	develop and produce curriculum materials	Same
Schedule:	6/69-3/70 develop materials; 4/70-7/70 produce; for use 9/70	9/71 on
Costs:	materials development about \$50,000	
Personnel		
Facilities:		
Equipment:	650 texts @ \$5= \$3,250	3,000 texts @ \$5= \$15,000
Other:		
TOTAL:	111 \$53,250	\$15,000

(60)

BIA EDUCATION PROGRAM DESCRIPTION

Problem: TO IMPROVE SELECTION AND EDUCATIONAL LEADERSHIP OF PRINCIPALS:

Many principals become so involved in paper work that they fail to provide inspiring and instructive leadership to their teaching and dormitory staffs, and lose contact with both teachers and students. The resulting lack of sensitive and dynamic supervision yields low academic standards, lack of innovation, low teacher and student morale, and high teacher turnover and student dropout.

Rationale: A system which provides rewards or reinforcement based on acceptable measures of performance will operate to improve performance.

Program Description: INCENTIVES GIVEN FOR IMPROVED PRINCIPAL PERFORMANCE AND SELECTION PROCEDURES: Principals would be appointed on a provisional 2-year basis, during which time their performance would be evaluated by the school's teachers, students, and BIA headquarters for educational cost-effectiveness gains. These acting principals would then be demoted, retained as acting principals, or promoted to an administrative assistant to each principal of a school with a staff of over 20, or any group of smaller schools. Principal candidates would also have to pass a qualifying oral and written examination. A bonus would be given to principals achieving unusual student achievement gains, thus providing an added incentive.

	Pilot Program	Operational Program
What:	(Assume 10 new principals) Staff & students would evaluate all newly-appointed principals in 1969, plus HQ evaluation on the basis of 1-yr. performance. Supply an adm. aide to help with the evaluation process.	Evaluation on basis of two-year performance
Where:	In all schools getting new principals.	In all BIA schools.
When:	Begin with fall 1969 term.	Following the evaluated success of pilot programs, begin in 1970.
How:	Select new acting principals on the basis of a competitive exam.	Same.
Schedule:	exams in summer 1969, selection in summer 1969 1-yr. test 9/69-9/70	start in Sept. 1970
Costs:	10 admin. assist. @ 10k = 100k achievement bonus of \$2000 for 5 principals: 10,000k evaluation staff @ 1k/school = 10k	100 adm. asst. @ 10 K: 1,000,000 \$2000 bonuses for 50: 100,000 evaluation staff: @ 1k/sch x 100 = 100,000
Personnel		
Facilities:		
Equipment:	none	
Other:	none	
TOTAL:	\$120,000 112 (cost/pupil: \$19)	\$1,200,000 (cost/pupil: \$25)

BIA EDUCATION PROGRAM DESCRIPTION

Problem: HIGH COLLEGE DROPOUT RATE - due to poor study habits, lack of budgeting experience by students, lack of funds, poor social adjustment, lack of proper guidance to select goal relevant courses, inadequate instruction in high school, and both language and cultural barriers.

Rationale: Special training which improves academic achievement and simulates social aspects of college life will help prepare Indian students for the college transition and adjustment, thus reducing the college dropout rate.

Program Description: COLLEGE PREPARATORY TRAINING: Prepare high school sophomores for entrance into college. Training would be conducted at colleges located near the reservation, but in a city. Courses would be geared to improving academic achievement in high school and to decreasing dropouts due to the above reasons: students would receive incentives of \$5 per week. The selection of students would be based on academic ability with a potential for completing college work. A follow-up program would also be included.

	Pilot Program	-Operational Program
(180 students) What: Teaching student's method of solving problems which will be encountered while in college.	Students should be able to report on experience to class during regular school year. About 15 tribal groups to take part-Actual	College teaching methods and living conditions if used. College instructors to be used will be paid (1080 students)
Where:	6 locations-Arizona, New Mexico, Alaska, Oklahoma, Montana, So. Dakota (eastern schools should be considered)	18 schools-half of which should be near reservation and others in cities located far away from reservation
When:	June 1969	June 1972
How:	Contracting with colleges Selection of H.S. who will be participating-both off-on boarding school and public school	Same
Schedule:	June 1969 through August '72 (3 years)	Project should be run for three years with follow-up work included.
Costs: 30 students/school Personnel	10 wks x 6 half-time teachers x 6 schools' x 3000/wk; =108,000	(1080 students) 10 wks x 6 half-time teachers x 18 sch. x 300/wk= 374,000
Facilities:	6 dorms @ 10,000 ea=60,000 classrms @ 5K/sch. = 30,000 food @ 500/student= 90,000	18 dorms @ 10,000 ea=180,000 Classrms @ 5K ea. = 90,000 food @ 500/student= 54,000
Equipment:	Equip. rental @ 5K/sch=30,000 Adm. @ 25K/area= 150,000	Equip. rental @ 5K/sch=90,000 Adm. @ 25K/area= 450,000
Other:	Student trans. @ 75 ea=13,500 Student incentives @ 50 ea= 9,000	Student trans. @ 75 ea=81,000 Student incentives @ 50 ea=54,000
TOTAL:	113 \$500,000/year	\$1,373,000/year

BIA EDUCATION PROGRAM DESCRIPTION

Problem: CULTURAL ISOLATION,

in the sense of unfamiliarity with common technologies pervading American civilization.

Rationale: Real rather than book knowledge of technology will provide an improved practical and immediate understanding of that technology. It will also have indirect benefits in terms of broadening the student's social world and providing him with job-related skills.

Program Description: RADIO HAM SHACKS IN ALL HIGH SCHOOLS

Ham shacks would be open to all students. They would be encouraged to become proficient in electronic technology and repair, as well as forming social contacts by radio with other BIA ham operations. The operations would be supervised loosely by an interested teacher, preferably an electronically knowledgeable science teacher.

	Pilot Program	Operational Program
Radio shack What: equipped with 1 KW ham transceiver & supervised by 1 member.	Radio ham shacks could be started at six larger boarding high schools.	All high schools could be equipped with ham radio shacks.
Where:	2 in plains 3 in southwest 1 in Alaska	All high schools
When:	Equip in summer 1969, and initiate operation Sept. 1969	Start Sept. 1970 if evaluation of pilot is positive
How:	Recruit faculty supervisor, procure equipment, and arrange for space and student demonstration	Same.
Schedule:	Sept. 1969- Sept. 1970	
Costs:		
Personnel	1/2 time teacher x 5k = 30,000	50 1/2 time supervisors x 5k = 250,000
Facilities:	use existing space	some modest construction where needed 100,000
Equipment:	6 1 KW transceivers & parts & tools @ 3k/school = 18k	50 1 KW transceivers & parts & tools @ 3k/school = 150,000
Other:		
TOTAL:	\$51,000	\$500,000

BIA EDUCATION PROGRAM DESCRIPTION

Problem: STUDENT UNFAMILIARITY WITH WHITE MAN'S GADGETS

Rationale: Real rather than book knowledge of technology provides a better understanding of that technology and the social world which uses it.

Program Description: MECHANICAL ZOO: A room located in several selected schools would be supplied with machines, gadgets, etc. with which students are unfamiliar (telephone, tape recorder, typewriter, toaster, lawnmower, etc.). Small machines could be purchased cheaply through government surplus. Other machines or models could be donated by industries. Students could play with the gadgets and study them. The zoo could also be worked into science curriculums. Different zoos would have different zoo populations and students could visit zoos at other schools near their homes. Zoos would be rotated every school year, so that students would constantly be exposed to different machines and gadgets. The zoo could serve both as a physics lab and as a cultural decompression chamber; that is, a place where students could become technologically more sophisticated in a relaxed, playful, unafraid way.

	Pilot Program	Operational Program
What:	Mechanical zoo	Mechanical zoo
Where:	Three elementary schools on larger reservations (i.e., Sioux, Navaho, Eskimo)	One zoo to serve every elementary school population within hundred mile radii (30 zoos) Large boarding schools
When:	School year 69-70	School year 74-75
How:	Buy cheap government surplus, contact industries (Bell Telephone, car and airplane manufacturers,) for donations	Same
Schedule:	Stock 3 zoos first year	Keep adding zoos each year until you have enough
Costs:		
Personnel	Custodians can also serve as part-time zoo keepers	Same
Facilities:	Operation of facilities @ 1k/yr per school = 3k	Same = 30k
Equipment:	Small add. rm @ 3k/sch = 9k Govt. surplus govt. equip. @ 1k/sch = 3k	Small add. rm @ 3k/sch. = 90k Govt. surplus govt. equip. @ 1k/sch = 30k
Other:	Equip Repairs @ \$500/sch = 1.5k	Equip. repairs @ \$500/sch = 15k
TOTAL:	\$16,500	\$165,000

BIA EDUCATION PROGRAM DESCRIPTION

Problem: Lack of Integration of School and Community; Student Language Difficulties

Rationale: Media such as newspapers provide an important means of integrating (or defining) a community. Student participation in newspaper producing will improve language skills.

Program Description: PRINTING PRESSES IN SELECTED VOCATIONAL AND HIGH SCHOOLS: would permit students to compose, edit, and print a newspaper to serve both the community and the school. Part of the newspaper would be written by the students, while part would be written by tribal leaders and printed by the students. Small schools would receive compositor's sticks, type, and hand rolling presses. Larger schools would be equipped with larger printing presses and would print newspapers for smaller schools from copy sent to them. Newspapers would be distributed to the community without charge.

	Pilot Program	Operational Program
What:	Equip schools with print shops; establish school-community newspapers.	Same.
Where:	2 large schools (high schools) 2 small schools	10 large schools. 50 small schools.
When:	September, 1969.	September, 1971, upon evaluation.
How:	Purchase machine and hand presses, type.	Same.
Schedule:		
Costs:	4 teachers @ 10k @ 1/4 time = 10k	60 teachers @ 10k @ 1/4 time = 150k
Personnel		
Facilities:	large schools @ 10k ea. = 20k small schools @ 5k ea. = 10k	large sch. @ 10k ea. x 10 = 100k small sch. @ 5k ea. x 50 = 250k
Equipment:	large sch. \$2k ea. = 4k small sch. @ 1k ea. = 2k	large sch. @ 2k ea. x 10 = 20k small sch. @ 1k ea. x 50 = 50k
Other:	mat. @ 3k/sch. = 12k evaluation @ 10k	mat. @ aver. 3k/sch = 180k
TOTAL:	\$68,000	\$750,000



62(139) BIA EDUCATION PROGRAM DESCRIPTION 4-6 Social Studies

Problem: Dealing with social and cultural change, caused by impact of dominant culture on minority culture. Personal conflicts and choices. Express emotions.

Rationale: As a person better understands historical and social forces and their effects on life of the individual, he will be better able to understand and resolve conflicts resulting from similar forces.

Program Description: At the intermediate level social studies course, students will focus on the impact of social change on self, family, community culture. These changes may be the result of technological advance, altering the economic structure of a society and hence requiring alterations in roles, style of life, etc. within family and local community; or, may result from impact of a conquering people on conquered, etc. Focus in on impact of "external", large-scale change on individuals and small groups, and alternatives of these to "go with the tide" or adhere to traditional patterns. Case studies drawn from different cultures over historical time will be key vehicle for presentation. Some examples include European traders' impact on African tribes (16-17 c) and on blacks purchased; impact of industrialization on Japanese family; Roman occupation on Jews in Middle East; mass communications on village life in underdeveloped countries (television in Samoa), etc. In all example, children will be actors in the conflict to whom students will give advice. Cases will include alternative endings depending on what choice students advise, so that psychic and material costs to alternative decisions can be explored. Games, too, will permit this exploration. Comparison to Indian situations will be made.

	Pilot Program	Operational Program
What:	4-6 Social Studies Impact of social and cultural change on individuals.	
Where:	4 BIA schools geographically dispersed.	all BIA schools
When:	Jan. '70	Academic '70
How:	Develop role-plays, games and alternative scenarios or consequence of decisions, Guide	
Schedule:	April '69 to Jan. '70	
Costs:		
Personnel	100 mm @ \$3,000	
Facilities:		Production: \$150 per grade per class or \$450 for kit
Equipment:	Prototypes \$100 per class x 3 classes, jr schools @ 200	
Other:		
TOTAL:	117 \$301,200	\$135,000

BIA EDUCATION PROGRAM DESCRIPTION

Problem: Development of Employment Relevant Skills

Rationale: On-the-job experience provides an ipso facto relevant experience which school vocational training cannot as easily provide. The experience also gives the student a basis for evaluating and choosing among various career alternatives.

Program Description: HIGH SCHOOL WORK/STUDY PROGRAM: for high schools, boarding and day, on and off the reservation, particularly for students in vocational, commercial, or business programs. Students spend part of the day in school doing course work and part of the day working in local businesses and industries. Academic students could be employed by a school in the area as teacher assistants, researchers etc. The students would receive academic credit, as well as a salary for the work part of their program.

	Pilot Program	Operational Program
What:	Work study program for seniors of one BIA high school - 200 students - 36 weeks @ 10 hrs./week @ \$1.50/hour	Work study programs for all high schools students in all BIA high schools - 5,100 students
Where:	Chilocco	All BIA high schools, grades 11 and 12.
When:	Beginning 9/69.	Becomes operational 1970-71, adding 5 programs/year
How:	Hire an administrator for the pilot program, 3/69, He would locate participating business & work with teachers & students coordinating the school program.	Hire 5 administrators 9/69, who would do pre-program legwork during 69-70 school year for programs beginning 70-71.
Schedule:		
Costs:		
Personnel	1 Adm. for 18 mos. @ 12k/yr. = 18k *student salaries 1 yr=108K	10 Adm. @ 12K/yr= 120k Student salaries for 5100=2,754,00 5,100 x 36 wks. @ 10hrs/wk x \$1.50
Facilities:	Existing	Existing
Equipment:	Existing	Existing
Other:	Transportation @ 18k/yr.	Transportation = about 255k
TOTAL:	144k	\$3,229,000

* 200 students for 36 weeks @ 1.50/hr. x 10 hr. /wk. = 108,000



Problem: Elementary level: new behavior patterns expected from unfamiliar authority figures of different culture; expression of emotions.

Rationale: Fables and myths provide a good mechanism by which to introduce simple concepts of behavior.

Program Description: Elementary social studies will focus on a study of human behavior patterns, varying with age, situation and culture, the hierarchy of needs that motivate different behaviors, behavior dictated by roles, emotion associated with behavior, predicting behavior.

The three year primary course will emphasize self, parent-child relations, peer groups and community. At the kindergarten and first-grade level, the behavior and interactions of anthropomorphic animals will be studied through the use of myth and fables. (Particular attention will be paid to Indian myths.) Myths will be selected for present a diversity of behaviors and will be drawn from several cultures. Behaviors described will be appropriate to age level.

In each unit of study, picture stories, films, role playing, games and unfinished stories will be used. Students will give advice and predict behavior of "animals" and humans, based on knowledge of previous behavior of the characters on projecting their own feelings at a decision point, on the nature and role definitions within the group. Study of families of different cultures will be included. Pressures on individuals functioning in different cultures and in different groups (family vs. peer group) to conform to conflicting behavioral demands will be included.

	Pilot Program	Operational Program
What:	K-3 Elementary: study of behavior--multi-group, cross-cultural	
Where:	4 BIA schools geographically dispersed	all BIA schools
When:	Academic '69	Academic '70
How:	Collect myths, write unfinished stories, design role-plays, collect photos, Guide	
Schedule:	April-August '69	
Costs:	5 people per grade x 100mm @ \$3,000	\$100 per class per grade=\$400 per pupil
Personnel		
Facilities:		
Equipment:	\$2000 for prototype	* 300
Other:		
TOTAL:	119 \$302,000	\$120,000

(118)

BIA EDUCATION PROGRAM DESCRIPTION

Problem: Low Teacher Training and Morale; Lack of Incentive for Improvement

Rationale: In-service training of teachers will improve both morale and effectiveness.

Program Description: ESTABLISH IN-SERVICE TRAINING FOR TEACHERS, especially in rural areas, by correspondence course. Immediate salary increases offered for successful completion. Teachers resentful at having been assigned positions in remote BIA schools may be made to feel that they are part of the vanguard of educational innovation, rather than isolated from the development of the profession.

	Pilot Program	Operational Program
What:	Correspondence course offered to provide in-service training.	Same.
Where:	All areas - approx. 200 teachers, to start.	For all teachers, if the program proves feasible (2,500)
When:	9/69-6/70.	9/70-6/71, if feasible.
How:	Develop correspondence course curriculum and recruit teachers to participate.	Make any necessary revisions in curriculum and increase recruitment efforts.
Schedule:	Development 3/69-9/69 Recruitment 8/69-9/69 Program 9/69-6/70	
Costs:		
Personnel	Central Administration @ 25k	Central Administration @ 100k
Facilities:	One central location @ 50k	Same = 75k
Equipment:		
Other:	Curr. dev. = 100k Prod. of mat. = 50k	Curr. Revision = 50k Prod. of mat. = 75k
TOTAL:	Evaluation = 50k \$275,000 120	\$300,000

6(116)

BIA EDUCATION PROGRAM DESCRIPTION

Problem: Achievement Lag; Lack of Educational Stimulation

Rationale: Achievement lag cannot easily be reduced within the classroom. Rather, the lag is usually compounded. Special intensive programs are thus needed to intervene.

Program Description: ESTABLISH SPECIAL SCHOOLS FOR INTENSIVE STUDY OF CERTAIN SUBJECTS, such as English, math, social science, physical and biological sciences, etc. Individual intensive programs might run for varying periods of time depending on student interest and availability of materials, qualified instructors, etc. Students could attend voluntarily, as at a summer session; or after regular school hours, with preference (and perhaps some additional incentive) for those showing greatest need for remedial work.

	Pilot Program	Operational Program
<u>What:</u> Special classes for 6 mos. during school year	Establish special schools for intensive treatment of certain subjects. After school program. Student Incentives.	Same.
<u>Where:</u> 20 students/school	6 schools - OCS, Wrangell, Flandreau, Chilocco, Chemawa, and Stewart.	50 schools (20 students/school)
<u>When:</u>	6/70-9/70	6/71-9/71
<u>How:</u>	Develop curricula, build facilities, recruit teachers and pupils.	Refine curricula; build facilities; recruit teachers and pupils.
<u>Schedule:</u>	3/69-3/70 curr. dev. 1/70-5/70 building, recruitment	
<u>Costs:</u>	12 tchrs. @ 10k @ 1/4 time = 30k Curriculum development @ 50k	100 tchrs. @ 10k @ 1/4 time = 250k
Personnel		
<u>Facilities:</u>	Existing.	Same.
<u>Equipment:</u>	Existing.	Same.
<u>Other:</u>	Stud. Incentives @ 100 ca x 120 = 12k	Stud. Incentives @ 100 x 1,000 = 1,000k
<u>TOTAL:</u>	Mat. @ 3k/sch = 18k Evaluation @ 25k = \$235,000	Material @ 5k/school = 150k \$500,000

7(95)

BIA EDUCATION PROGRAM DESCRIPTION

Problem:

Inhibited student teacher interaction.

Rationale:

If student teacher interaction in Indian classrooms is currently a negative factor in student achievement, perhaps it would be easier and more effective to get rid of that interaction altogether than to enhance interaction to the extent that it becomes a positive influence on student achievement.

Program Description:

Computerized instruction: is student teacher interaction in Indian classrooms is currently a negative factor in student achievement, perhaps it would be easier and more effective to get rid of that interaction altogether than to enhance interaction to the extent that it becomes a positive influence on student achievement. Proposed is pilot program only for completely computerized instruction in one major substantive area (Math, Social Studies, etc.) for at least one classroom population of 10th grade students. Computer can be located in school.

Pilot Program only

	PLANNING PROGRAM	OPERATIONAL PROGRAM
What:	One completely computerized course in major substantive area for about 25 students (standard size class) / Semester.	
Where:	Phoenix Indian School (near time sharing computer)	
When:	School year 1970-71.	
How:		
Schedule:	69-Sept. 70 - dev. mstr. materials Sept. 70-71 - course implemented	
Costs:		No Estimates Now
Personnel	Proctor at 10K /year 1/2 year = 5 K. /year	
Facilities:	existing classroom Rent terminals at 150/mo.	
Equipment:	\$1,500/year Instructional materials for one course	
Other:	(Inc. Dev.) @ 150K. Computer 70K./year	
TOTAL:	Evaluation = 10K Total = \$236,500 122	

3(15)

BIA EDUCATION PROGRAM DESCRIPTION

Problem: Low achievement stemming from low motivation due to little pressure from the home and cultural incentives to perform well.

Rationale: When desired rewards are given to those students who perform best according to a set of rational criteria, the tendency is for student performance on these criteria to increase.

Program Description: College system at the high school level. Admission to the best high schools would become competitive, giving those students who enter the feeling that they have already been successful to some extent. This would encourage continued academic success, while preventing the less scholastically minded students from exerting a negative pressure.

	Pilot Program	Operational Program
What:	All Indian high school students in one area may apply to a superior academic high school. The best students would be admitted.	All Indian high school students may apply to their area's special high school.
Where:	Choose one high school with a college orientation and a good reputation where this experimental program can be run.	One outstanding academic or vocational high school in each area.
When:	2-year trial, start 9/69	Upon evaluation of placement success in pilot program.
How:	By changing the admission policy to admit outstanding students to a superior high school.	By changing the admission policies and by increasing the budget enough to provide these schools with outstanding facilities.
Schedule:	Request applications 3/69, select by 7/69.	Request applications by March and make selections by July.
Costs:		
Personnel		} 1,000,000
Facilities:		
Equipment:		
Other:		
TOTAL:	0 123	1,000,000 (cost/pupil: \$166)

9(3) BIA EDUCATION PROGRAM DESCRIPTION

Problem: POOR MOTIVATION; INADEQUATE INSTRUCTION; CULTURAL INHIBITIONS

Rationale: Curriculum which draws on Indian concepts and theories, and relates them to other concepts and theories will be more successful with Indian students than curriculum which attempts to "layer" on new ideas without regard to tribal theories.

Program Description: CURRICULUM DEVELOPMENT

Develop specific curriculum materials and methods for science and social studies. All new courses must use Indian-specific material as a base for teaching nationally relevant concepts: Indian-specific materials are to be developed using Indian students as research assistants:

	Science	Social Studies	Comments
Indian-specific	Traditional numbers, medicine, astronomy	"Legends", political structure, social org., values, language struc.	Teach as basis first
Nationally-relevant concepts	New math, PSCS, geology	Oral history; research design, implementation, more electives dealing with disciplines, games.	Tie to above & make stimulat
Pilot Program			
What:	Develop 12-year courses in all subject area; include both materials & methods; test trial texts & manuals for local emphasis in selected schools Gr. 1-6, 7-9, 9-12 in 3 areas	All schools (each tribal specific school has pertinent manual to adapt Indian-general text.	
Where:	Navajo, Sioux, Eskimo areas	All schools	
When:	Develop courses in 1969-1970; start pilot in fall, 1970	Pilot runs at least 4 years, after 2 or 3 implement in all schools, if successful	
How:	Hire institutions with expertise in Indian ed. to develop materials using BIA experienced staff	Workshops for training in use of new materials	
Schedule:	Start as soon as possible	1973 or 1974	
Costs:	Systems analysis of existing methods & materials	Sub-total	2,900,000
Personnel	100,000	teacher training (pilot) 250	75,000
Facilities:	Social studies texts gr. 1-6, 1-12 900,000 gr. 7-12 1,500,000	Evaluation (pilot)	25,000
Equipment:	Manuals in other fields on specific Ind. materials on 10 tribes using students as RA's	PILOT	3,000,000
Other:	400,000	Operational	2,900,000
TOTAL:	Sub-total 2,900,000 (cost/pupil: \$1.3K) 124	Teacher training	700,000
			3,600,000 (cost/pupil: \$54)

BIA EDUCATION PROGRAM DESCRIPTION

Problem: Lack of Indian leadership. Tendency is for well-educated Indians to stay off the reservation while those less prepared become leaders.

Rationale: A special program stressing leadership, abilities and skills will encourage Indians with exceptional qualifications and/or interest to train to take roles of leadership in their own communities.

Program Description: INDIAN ELITE SCHOOL. Potential leaders would be given added encouragement and direction. Students finishing their freshman year of college would attend a summer program where they would study such subjects as planning, economic development, and local government. They would be assigned to projects during the year relating their college studies to home problems. The following summer students would present their work-study projects and ideas.

	Pilot Program	Operational Program
What:	One summer workshop program for 30 Indian students.	Enough 30-man programs to have 5 students from every reservation (est. 125 students) attend the summer workshop.
Where:	At a university, preferably in New England.	At several universities with students going to a different one each summer.
When:	6/69-8/69	Evaluate success of summer and project 1/70 - expand 6/70
How:	Contract with a university which is underutilized during the summer and can provide the necessary facilities. BIA would hire the staff.	Same.
Schedule:	6/69-8/69	Evaluate success of summer and project 1/70 - expand 6/70
Costs:		
Personnel	1 administrator \$5,000 2 counselors 1/2 yr. \$8,000 3 profs., 1 mo. ea. \$6,000	4 administrators 20,000 8 counselors, 1/2 year 32,000 12 profs, 1 mo. ea. = 24,000
Facilities:	15,000	90,000
Equipment:	rent \$10,000	rent \$60,000
Other:	travel @ \$200 ea. = \$6,000 material = \$10,000	travel @ \$200 ea. = 24k
TOTAL:	60k/year 125	250k/year

2(18)

3

4(19) BIA EDUCATION PROGRAM DESCRIPTION

Problem:

Poor Motivation, Cultural Isolation & Job Opportunities

Rationale:

The transition from school to work as well as the transition from an Indian to the dominant culture are special problems. A program is needed which smooths these transitions while allowing the Indian student as much freedom as possible.

Program Description:

High school work-study program where pupils live on their own. Student enters world of work 1/2 time and with subsidy that makes a full salary at the same rate from BIA, supports himself. While living off-campus he goes to the BIA school 1/2 time and uses it for study, guidance and some social contacts. This is a further dominant - culture involvement (while maintaining some security) than is usually thought of for work-study programs.

	Pilot Program	Operational Program
What:	12 students (6 boys and 6 girls) live off campus, sharing apartments in pairs. Each has 1/2 time job and 1/2 time classes at the BIA school	expand to 20 per school 200 students
Where:	Sherman Institute or Phoenix Indian	same 2 plus Stewart, Intermountain, Albuquerque, Chilocco, 2 more in Oklahoma; & others where permanent jobs are feasible (figure 10 schools)
When:	Oct., 1969 (students have one mo. in school)	Oct., 1971-
How:	BIA helps find jobs & apartments - provides good leads which students follow up.	same
Schedule:	BIA staff plans location & job orientation during summer 1969	same
Costs:		
Personnel	1 BIA Admin. @ \$1000/mo. \$12,000 1 BIA Guidance person @ \$1000/mo. (job & personal) \$12,000	10 adm @ 12K ea = 120K 10 Guid. Coun. @ 12K ea = 120K
Facilities:	Existing	Existing
Equipment:	Adm (travel, etc.) 5K	Adm 5K/sch = 100K
Other:	subsidy (double student income) 150/mo. 16,200	\$150/mo x 200 stdnts x 9 mos. = \$270,000
TOTAL:	Evaluation 9,800 \$55,000 126	610K

BIA EDUCATION PROGRAM DESCRIPTION

Problem: Language barrier, cultural isolation, inadequate English language instruction, cultural inhibitions, lack of parental involvement

Rationale: A number of problems of Indian education can be tackled at once by the use of an extracurricular activity which responds to these problems while at the same time offering experiences which are both fun and rewarding for the participant.

Program Description: INTENSIVE SCHOOL DRAMATICS PROGRAM, involving production of weekly plays to audiences of students, parents, teachers and administrators. Each play would be prepared by one of four player teams including actors, directors, stage designers, etc. These four groups would each take some 5-10 hours/week and four weeks of preparation, so that staggered weekly performances would be possible.

	Pilot Program	Operational Program
What:	Intensive school dramatics program: small and large high schools in 3 areas (12 schools)	All high and elementary schools above 4th grade (10 areas)
Where:	Plains, S.W., and Alaskan areas	All high and elementary schools above 4th grade 200 schools - 2 from each school = 400
When:	Start 9/69	9/70 if pilot succeeds
How:	3-6/69, planning 7-8/69, teacher training workshops for dramatics advisor (2 weeks) 9/69-6/70, operation	Same
Schedule:	7-8/70, evaluation	
Costs:	5 cons. = \$5k Design of Program = \$15k Evaluation = \$10k	50 cons. @ 1k ea. = \$50k Program Redesign = \$30k Evaluation + \$23.5k
Personnel:		
Facilities:	Existing Wkshp. Facilities Op. = \$9k	Same Wkshp. Facilities Op. = \$50k
Equipment:	12 stage sets, costumes, curtains @ 500: 60,000	200 @ 5000: 1,000,000
Other:	2wk. tchr. training wkshp: 48 partic. (trav., fd., lodging, etc)	450 x \$100 travel x \$70 rm. & bd. = 76.5k
TOTAL:	\$109k 127	\$1,230,000

BIA EDUCATION PROGRAM DESCRIPTION

Problem: POOR MOTIVATION, INADEQUATE INSTRUCTION IN SCIENCES, INCLUDING BIOLOGICAL AND SOCIAL SCIENCES

Rationale: Direct experience and observation of subject matter will provide a more intense learning experience than that which can be provided by use of books.

Program Description: ELEMENTARY SCHOOL ZOOS: Containing local fauna as well as animals from other habitats that can be kept economically and safely. The children would care for the animals while studying their biology, social organizations, physiology, psychology, and ecology. Curriculum units using the zoos would be developed by teachers in summer workshops along with consulting assistance.

	Pilot Program	Operational Program
What:	Small zoo in elementary schools: 2 zoos in medium size elementary schools, tended by the children under adult supervision.	A zoo in every elementary and junior high school. The size would depend on the size of the school.
Where:	One in plains area One in southwest	In all BIA elementary and junior high schools.
When:	Experimental, 1-year trial, starting September, 1969.	After evaluation of pilot program, starting September, 1969.
How:	Collection and/or purchase of local and non-local fauna, construction of simple zoo building.	Same.
Schedule:	planning 4/69-6/69; construction and requisition of animals 6-9/69; opening 9/69.	After successful pilot program, starting September, 1970.
Costs:		
Personnel	1/4 time of one custodian x 2 schools = 3,000	1,500/school x 100 schools = 150,000
Facilities:	2 small simple zoo buildings @ 2.5k ea. = 5,000	2,500/school x 100 = 250,000
Equipment:	cages, heating, food, etc. @ 1,000 ea. = 2,000	1,000/school x 100 = 100,000
Other:	unusual animals @ 2,500 each zoo = 5,000	2,500/school x 100 = 250,000
TOTAL:	associated curriculum development for 2 zoos = 40,000 (cost/pupil: \$35) \$55,000	curr. development = 100,000 (cost/pupil: \$26) \$850,000

BIA EDUCATION PROGRAM DESCRIPTION

4(59)

Problem: Lack of educational Research and Development that is intimately familiar with BIA school problems.

Rationale: A research program which involves those who deal with day-to-day BIA school problems will have two payoffs. First, it will improve the quality of research by providing reality and utility filtering. Second, it will generate interest in change among the BIA personnel involved.

Program Description: R&D Sabbaticals for Innovative Teachers and Administrators

selected on the basis of applications and evaluation by supervisors and HQ staff. The applicants would be required to describe the proposed research plans in detail. If the proposal is accepted, the teacher would then be able to carry out his investigation at the university of his choice. BIA would pay the teacher's salary while on leave.

	Pilot Program	Operational Program
What:	R&D Sabbaticals: 1 person from each of 5 schools for 1 year R&D sabbatical.	R&D Sabbaticals awarded to all approved applicants.
Where:	At the university chosen by the teacher.	Same.
When:	Immediately	9/70
How:	2/69 announcement 3-6/69 recruitment and selection 7/69-6/70 operation 7-8/70 evaluation	
Schedule:		
Costs:		
Personnel	5 @ \$10,000/year \$50,000	50 @ 10k/year = 500,000
Facilities:		
Equipment:		
Other:	Tuition and per diem costs @\$5,000 ea = 25,000	Tuition & per diem @ 5k each x 50 = 250,000
TOTAL:	Evaluation = 15,000 129 \$90,000	750,000

5(74)

BIA EDUCATION PROGRAM DESCRIPTION

Problem: HIGH INDIAN STUDENT DROPOUT RATE FROM COLLEGE DURING FIRST YEAR: Due to a strong parent and student emphasis on job acquisition and contributing to the financial support of the family.

Rationale: When Indian students have had non-academic experience, they will be better able to evaluate their available options of college and work.

Program Description: YEAR OF WORK BEFORE DECIDING TO GO TO COLLEGE: This program would focus on recruiting Indian high school seniors who are ambivalent about attending college, but who probably have the ability to succeed. Participants would be found a job. Through work experience students would hopefully realize the importance of a college education and commit themselves to serious work in college.

	Pilot Program	Operational Program
What: Jobs would be meaningful	Guidance & counseling would be offered to these students periodically. The jobs would be in cities where the student would experience a new cultural & social environment.	Same.
Where:	Students would be sent to cities in small groups. Southwest & Midwest - 20 students per area.	Indian High School graduates with college ability (~500)
When:	July 1969	July 1971
How:	by working with existing school guidance counselors to select students. Selection based on student goals and attitudes.	Same.
Schedule:	July 1969 - June 1971	July 1971 - June 1973 (upon evaluation)
Costs:	2 placement workers @ 10,000ea. 25 placement workers @ 10,000ea. 250,000	Travel @ 15,000ea = 375,000
Personnel	travel cost @ 15,000ea: 30,000	
Facilities:	Existing	Existing
Equipment:	Existing	Existing
Other:	Student travel @ 75 ea = 3,000 Adm. @ 10,000/pers. 20,000	Student travel @ 75 ea = 37,000 Adm. @ 10,000 ea = 250,000
TOTAL:	130 \$63,000	\$835,000 (cost/pupil: \$1.6K)

BIA EDUCATION PROGRAM DESCRIPTION

76(88)

Problem: INADEQUATE INSTRUCTION, POOR MOTIVATION, ACADEMIC FAILURE

Rationale: Students can be effectively used as an educational resource when they can be taught to teach other students. This activity is likely to be most successful when the material is presented in a manner that is fun and not formally academic.

Program Description: HOME INSTRUCTION BY SIBLINGS MAKING USE OF GAMES:

Both pre-school and later instruction in all subjects administered at home or in dorms by older to younger siblings or dorm-mates in the form of educational games distributed in the schools and perhaps initially demonstrated there. By using educational games, older siblings could instruct younger siblings.

	Pilot Program	Operational Program
What:	Home instruction of younger by older using educational games. In 8 schools, boarding and day, elementary and high school, small and large.	All schools 230 schools
Where:	Most remote areas	All schools
When:	9/69 to 6/70	9/70 following successful pilot
How:	3/69-7/69: develop games 8/69: teacher training workshop 9/69-6/70: operation and evaluation	
Schedule:		
Costs:		
Personnel	Teacher training @ 5k/school x 8 = \$40k	Teacher training @ 5 areas @ 500 teachers/area, 75k/area = \$375k
Facilities:	Existing	Facilities operation @ wkshp areas @ 10k ea, x 5 = \$50k
Equipment:	Educational games production 20,000	50,000
Other:	Educational games development 50,000	100,000
TOTAL:	Evaluation = 20,000 \$130,000	\$575,000

(93) BIA EDUCATION PROGRAM DESCRIPTION

Problem:

Poor social adjustment in Cities, inability to complete educational goals due to economic pressures and poor concept of urban living.

Rationale: A service is needed for Indians who have changed to an urban life-style. This service should be ongoing and present at the locations where such adjustments are taking place.

Program Description:

Orientation Centers to provide adequate information and training in Urban living to Indians seeking to establish residence in order to acquire advanced education or jobs. Extensive guidance. Home visitations are needed. Maintain job availability list and cooperate with other Federal agencies by counselors.

	Pilot Program	Operational Program
What:	To inform Indians what to do in case of emergencies. What is involved in renting a house, transportation, etc.	Locating housing, telling them of available medical services, recreation, what to do when faced with financial problems.
Where: Will benefit approx 300 families	Two existing Indian centers in Chicago and San Francisco.	All areas where large Indian groups go to obtain education or jobs.
When:	June 1969 to May 1970.	June 1970 upon evaluation of pilot.
How:	Establish or identify problems and work with participants on how to solve them.	This should be implemented at High School level so that they are aware of hazards of urban living.
Schedule:	June 1969 -- May 1970 -- 1 year	May 1970 -- continuous Will benefit approx. 1,500 families per year.
Costs: Personnel	4 Counselors @ \$12,000.00ea. \$48,000	20 Counselors @ \$12,000 each \$240,000
Facilities:	Existing	Existing
Equipment:	None	None
Other:	Travel & Admin. \$40,000	Travel & Admin. \$200,00
TOTAL:	@\$10,000 per counselor \$88,000	@\$10,000 per counselor \$440,000

8(117)

BIA EDUCATION PROGRAM DESCRIPTION

Problem: Inadequate Teaching Personnel; High Indian College Dropout Rate

Rationale: Formalities of teacher recruitment usually fail to give the recruitee any first-hand experience on which to base his expectations. Incremental experience in teaching would reward those most qualified and interested, while sifting out those whose goals or abilities are not consonant with the tasks of teaching.

Program Description: Students (especially Indians) at Colleges and Universities located near BIA schools should be enrolled in a teacher training program. They would serve as part-time teachers, counselors and tutors while pursuing their undergraduate studies at the university. They would be offered a stipend which would be increased at the end of each term during which they participate in the program. Part of this financial incentive might be in the form of scholarships, to encourage them to stay in school; academic credit could also be offered by the college as further enticement. After graduation, participants would be offered immediate employment in the BIA school system as teachers at a higher-than-normal starting salary. Since transportation to and from camp's residence to rural schools could pose difficulties for undergraduates, each student teacher could be allowed travel expenses.

	Pilot Program	Operational Program
What: 6 students from each university.	Student-teacher program to encourage students to remain in college, while supplying much needed services to BIA schools.	Same.
Where:	NAU - U. of N.M. - U. of Alaska, U. of Wyoming, Montana St. Univ., Univ. of Kansas	At 30 universities located within 100 miles of a BIA school.
When:	September, 1969.	September 1970, upon successful evaluation of program.
How:	Recruit students to serve as part-time teachers, counselors and tutors in BIA schools.	Same.
Schedule:	Recruit 4/69-8/69 Train 8/69-9/69 Program 9/69-6/70	
Costs:	6 Coordinators @ 10k = 60k Adm. @ 2k ea. = 12k	30 Coordinators @ 10k ea. = 300k Adm. @ 2k ea. = 60k
Personnel		
Facilities:	Existing.	Same.
Equipment:	None.	Same.
Other:	Stud. stip. @ \$500 ea. x 36 = 18k Trav. allow. @ 500 ea. x 36 = 18k	Stud. stip. @ 500 ea. x 180 = 90k Trav. allow. @ 500 ea. x 180 = 90k
TOTAL:	Evaluation = 24k \$130,000-133	 \$540,000

(129)

BIA EDUCATION PROGRAM DESCRIPTION

Problem: Sociology and Political Science: the national minority.
(Elementary School students)

Rationale: A curriculum which deals with problems of a national minority analogous to the Indian minority will help Indian students to understand the social and historical forces which operate in their own situations. This understanding will provide the students with improved abilities to operate in their special situations.

Program Description: Students will examine the problems of biculturalism in Wales, where the vast majority of the population speaks English with some fluency. The tension between conflicting drives for the maintenance of cultural and national identity on the one hand, and for participation in the political and economic mainstream of Great Britain, will be discussed. Students will be urged to draw parallels between the Welsh and Indian problems of biculturalism. Role plays would be used to illustrate the conflicts between nationalists and assimilationists, and their relations to the broader community. Simplified compilations of original sources would play a secondary role to simulations and discussions.

	Pilot Program	Operational Program
What:	Curriculum on Welsh biculturalism, games, teacher's guides.	Same.
Where:	4 schools: 2 Plains 1 Southwest 1 Eskimo	100 schools upon evaluation
When:	Academic year 1969-70.	Sept., 1970, upon evaluation.
How:	Compile sources; design games; write guide, training materials for teacher	
Schedule:	3/69-6/69, compile source-book; 6/69-7/69 design game; 7/69-9/69, write teacher's guide	
Costs:	6 man-months @ 1.2k = 7.2k Overhead @ 10k = 10k	6 man-months @ 1.2k = 7.2k (Redesign) Overhead @ 10k = 10k
Personnel		
Facilities:	Existing	Existing
Equipment:	Existing	Existing
Other:	Prod. of mat. @ 1k/sch = 4k Evaluation @ 20k = 20k	Prod. of materials @ 1k/sch = 100k
TOTAL:	\$41,200 134	\$117,200

(130)

BIA EDUCATION PROGRAM DESCRIPTION

Problem: Sociology, history, and Political Science: approaches to the problem of a national minority.

(Junior High School students)

Rationale: Understanding of the national minority problems introduced in previous curricula can be used as a building block towards a more sophisticated understanding of historical and social differences and how they affect societal outcomes.

Program Description: Students will examine the history of the Armenian population in Russia and Turkey in the 20th century. Whereas in Turkey, particularly in the massacres of 1918, the Armenian population has been completely suppressed, the Soviet Union has invested heavily in the economic and social development of Soviet Armenia. A high degree of autonomy has been given to Soviet Armenia, which differs in religion, culture, and language from other Soviet populations. (It is notable that, while the Armenian population in the U.S.S.R. is not dissatisfied, only 0.6% of the population belongs to the Communist Party, a figure far lower than that for every other Soviet Republic.) Students will be permitted, while probably not directly encouraged, to relate problems of the Armenian population to those of their own.

	Pilot Program	Operational Program
What:	Curriculum on Armenians in Turkey, and U.S.S.R.	Same.
Where:	4 schools: 2 Plains 2 Southwest	50 schools, upon evaluation.
When:	School year, 1970-71.	Sept., 1971, upon evaluation.
How:	Develop curriculum, source-book, teacher's guides.	
Schedule:	3/69-6/69 sourcebook; 6/69-10/69, text; 10/69-12/69, teacher's guide.	
Costs:	9 man-months @ 1.2k = 10.8k Overhead @ 20k = 20k	9 man-months @ 1.2k = 10.8k (Curr. Redesign) Overhead @ 20k = 20k
Personnel		
Facilities:	Existing	Existing
Equipment:	Existing	Existing
Other:	Prod. of mat. = 4k Evaluation = 20k	Production of materials = 4k
TOTAL:	\$54,800 135	\$80,800

B1(1)

BIA EDUCATION PROGRAM DESCRIPTION

Problem: LACK OF INNOVATION IN THE SCHOOLS, resulting in less than maximally cost-effective instruction, loss of the more imaginative teachers, poor public image with consequent funding and recruitment problems and further deterioration of schools, etc., in a vicious circle.

Rationale: Experience with other school programs has indicated that private contractors--given rational criteria of performance and a set of goals to maximize--can run schools more effectively than tradition-and-politics-bound school systems.

Program Description: CONTRACT SCHOOLS

A still undetermined number of BIA boarding and day schools would be given to private contractors, such as education companies and universities, to operate on an incentive fee basis. Job Corps experience shows that private companies generally manage boarding schools better than universities, but also sink into conventionality unless specifically stimulated towards output achievement and innovation. Strict and progressively higher student achievement standards would be included in the contract terms, giving contractors the incentive for improving education cost-effectiveness. Contractors would report to both a local Indian school board and the BIA.

Schools selected will accommodate enrollment (see below) without over crowding facilities.

	Pilot Program	Operational Program
What: Contract boarding and day schools	4 contract schools, 1 small and 1 medium-size boarding and 1 small and 1 medium day, matched with 4 non-contract schools for comparison. 1/2 elem., 1/2 h. s.	If the cost-effectiveness comparison favors the contract schools, a progressively increased number of such schools to serve as transition to local public or publically controlled private schools.
Where: 2 rural 2 urban	2 on-reservation: Navaho & Pine Ridge; 2 off-reservation: Alaska & Oklahoma.	Depending on the relative success of on-reservation and off-reservation, day and boarding schools.
When: 3/69 - 9/72+	2 1/2 year contracts reviewed every six months, starting 3/69.	starting from the end of the first experimental year, in 9/69
How: Competitive bids by selected qualified contractors.	select contractors with teacher training, curriculum development, and cross-cultural field experience on basis of most promising educational cost-effectiveness gains and past performance.	
Schedule:	2 small schools contracted for in 3/69; 2 medium schools in 9/69.	Bid competition in spring, 1970, selection & start of operations, fall, 1970.

Costs:	SEE FOLLOWING PAGE FOR DETAILED BREAKDOWN	
Personnel		
Facilities:		
Equipment:		
Other:		
TOTAL:		



CONTRACT SCHOOLS -- (PILOT)

Costs per year:

<u>Personnel:</u>			
<u>Small Boarding School (150 enrollment)</u>			
15:1 student/teacher ratio @ \$10K per teacher			
(10 teachers) =		\$100k	
5 Teacher Aides @ 4k ea =		20k	
3 Guidance Counselors @ 10k ea =		30k	
9 Dormitory Personnel @ average salary of			
5k ea =		45k	
Administrator @ 12k		12k	
		<hr/>	\$207k
<u>Small Day School (150 enrollment)</u>			
15:1 student/teacher ratio @ \$10k/teacher			
(10 teachers) =		\$100k	
5 Teacher Aides @ 4k ea =		20k	
Administrator @ 12k =		12k	
Guidance Counselor @ 10k =		10k	
		<hr/>	\$142k
<u>Medium Boarding School (500 enrollment)</u>			
15:1 student/teacher ratio @ \$10k/teacher			
(33 teachers) =		\$330k	
16 Teacher Aides @ 4k ea =		64k	
10 Guidance Counselors @ 10k ea =		100k	
30 Dormitory Personnel @ average salary of			
5k ea =		150k	
2 Administrators @ 12k ea =		24k	
		<hr/>	\$608k
<u>Medium Day School (500 enrollment)</u>			
15:1 student/teacher ratio @ \$10k/teacher			
(33 teachers) =		\$330k	
16 Teacher Aides @ 4k ea =		64k	
Administrator @ 12k =		12k	
3 Guidance Counselors @ 10k ea =		30k	
		<hr/>	\$436k
SUB-TOTAL =			\$1,393,00

Facilities: Existing = must be able to obtain schools for pilot projects which will eliminate crowded conditions.

Maintenance of schools:		
Small Boarding School =	\$ 75k	
Small Day School =	50k	
Medium Boarding School =	150k	
Medium Day School =	<u>100k</u>	
	SUB-TOTAL =	\$375k

Equipment: This would be in addition to available equipment at the schools and its maintenance:

Small Boarding School =	\$ 25k	
Small Day School =	15k	
Medium Boarding School =	100k	
Medium Day School =	<u>75k</u>	
	SUB-TOTAL =	\$215k

Other Costs: Transportation, field trips, supplies, teacher training, etc.:

Small Boarding School =	\$ 50k	
Small Day School =	25k	
Medium Boarding School =	100k	
Medium Day School =	<u>75k</u>	
	SUB-TOTAL =	\$250k

TOTAL COSTS PILOT PROJECT = \$2,233,00

Incentive Fee Contingent on Student Achievement Gains: Est. = \$167k

82(20) BIA EDUCATION PROGRAM DESCRIPTION

Problem: Poor motivation, inadequate instruction, cultural inhibitions, language barrier, and academic failure -- will all probably be improved by increasing pupil involvement.

Rationale: Students can be effectively used as an educational resource if they are given proper guidance, responsibility and incentives for acting as tutors.

Program Description: Consultants and BIA education specialists would train master tutors from the reservations (must have high school diploma). The master tutors would then train pupils to be tutors. The programs would be visited frequently at first by consultants and education specialists. Children would be paid 50¢ per hour in elementary school and \$1 per hour in high school + 10% of achievement bonus earned by teachers they help.

	Pilot Program	Operational Program
What:	10 master tutors in as many schools (1/2 elementary and 1/2 secondary); each would train 5 tutors from upper grades (15 in 2 schools)	Master tutors in all schools with adequate enrollment and enough grades.
Where:	All major tribal groups.	All elementary schools having at least gr. 1-6; all high schools
When:	Summer, 1969--train tutors to work in Fall.	Summer, 1970.
How:	2-week workshops in Plains, SW, and Alaska for Master Tutors and involved school personnel.	Same, with more locations for workshops.
Schedule:	Spring, 1969 - training for education specialists (training of ed. specialists may also be done at summer training sessions) Summer, 1969 - training for M. T. (fall implementation)	Same as 1969, but include dissemination of information on pilot program during 1969.
Costs:		
Personnel	6 BIA ed. specialists & 6k ea. = \$36,000 3 consultants @ 3 mos. @ 3k each = \$12,000 10 Master Tutors @ 5k ea. = \$50,000 70 students @ 300 ea. = \$21,000 Training @ .1 area = 15k	10 BIA education specialists @ 6k = \$60,000 10 consultants @ 3 mos. each @ 3k = \$90,000 150 Master Tutors @ 5k each = \$750,000 1500 students @ 300 each = \$450,000 Training @ 3 areas x 15k ea. = 45k
Facilities:	(existing)	(existing)
Equipment:	Minimal - some books @ .200/school x 10 = \$2,000	Minimal - some books @ 200/sch. x 150 = \$30,000
Other:	Overhead 71,500	Overhead 840,000
TOTAL:	\$207,500	\$2,265,000

3(45) **BIA EDUCATION PROGRAM DESCRIPTION**

Problem: LOW ACADEMIC STANDARDS/INADEQUATE INSTRUCTION -

poor teacher motivation and creativity rather than insufficient quantity of teachers.

Rationale: Teachers can be better recruited by those who have first-hand knowledge of school needs. These people are also in a better position to "sell" BIA schools as a special challenge. Training programs will serve to sensitize the recruitee to special problems of Indian education, just as Peace Corps training attunes the volunteer to his special situation.

Program Description: Best principals and students would participate in recruitment at first-rate universities for non-education majors. The emphasis would be on finding people with a high level of general knowledge, evidence of initiative, warmth and empathy, and high achievement in one academic discipline (emphasis on those relating to cross-cultural problems). A 2-4 week pre-service training and in-service summer workshop would be held and the prospective principal would interview teachers at the training sessions. Teachers would make a two-year commitment, get 30 days vacation per year, advancement based on achievement, a bonus after 2 years depending on achievements and evaluation by students, supervisor, and outsiders.

	Pilot Program	Operational Program
What:	Principal & student participation in recruitment of teaching staff: 50 teachers in about 20 elementary schools and 5-10 high schools	All replacements and new teachers added to the system (750+ for 1971)
Where:	In major geographical areas serving major tribes; also at all grade levels	In all schools
When:	Fall, 1969 (FY 1970)	Fall, 1971 (FY 1972)
How:	Recruit principals and students to interview; detail selection criteria; fix interview schedules	Same
Schedule:	Immediate (early 1969); interviews in March & April	Start in 1970. Recruit early in 1971 (January-February)
Costs:		
Personnel (for varying lengths of time)	12 BIA staff \$19,000 14 students 5,000 8 consultants 24,000 10 training consultants 2,400 bonuses @ \$2000 100,000	44 BIA staff \$82,000 38 students 16,200 21 consultants 70,000 30 training consultants 67,500 bonuses @ \$2000 1,500,000
Facilities:		
Equipment:	Overhead 47,400	Overhead 169,000
Other:	Travel 39,500	Travel 213,500
TOTAL:	237,300 (cost/pupil: \$200) 140	2,619,000 (cost/pupil: \$132)

BIA EDUCATION PROGRAM DESCRIPTION

Problem: TO OVERCOME CULTURAL ISOLATION

Rationale: Film and TV can be instructional both in terms of substantive content and as cultural artifacts whose format, structure and implicit values need not be accepted totally. Analysis of media can help free the individual from the preconceptions and values generated by the media.

Program Description: FILM AND TV ANALYSIS COURSE

Assuming that films and TV shows are likely to be well attended by students, and that they are the richest "culture bearers" regularly available to remote reservation schools, the only thing lacking in their use to reduce cultural isolation is critical, analytical viewing. Analytical viewing of popular entertainment, documentary, and public interest films and TV live shows or tapes, would be taught in a formal, intensive course. The course would include content analysis, explicit anthropologically-oriented inventories, and sociological analysis of interpersonal relations presented. Students would be required to respond in the form of analyses, parodies, satires, and critiques in both script and videotaped and filmed form.

	Pilot Program	Operational Program
What:	Film & TV Analysis Course in 1 elementary and 1 high school for each of four remote areas (8 schools)	All elementary schools above fifth grade, and all high schools. 120 schools
Where:	Remotely located schools in Alaska, Navaho, Crow, and Sioux reservations.	All elementary schools above fifth grade, and all high schools
When:	Start 9/69	Following pilot evaluation, 9/70
How:	4/69-7/69 curriculum dev. 8/69 teacher training workshop	Same - 2 teachers from each school
Schedule:	9/69-6/70 pilot operations 6/70-8/70 evaluation	
Costs:	8 teachers @ 10,000 @ 1/10 time: = 8,000 teacher training workshop: in 4 sch. @ 10k ea. = 40k	240 teachers @ 10,000 @ 1/10 time = 240,000 teacher training workshop: 1 area-inc. per diem & bd. = 200k
Facilities:	Existing	Existing
Equipment:	Film & TV sets already available, projectors, 8 VTRs	Same \$2k/sch. x 120 = 240k
Other:	@ 2000 = 16,000 \$500 annual film rental budget	Same: \$500/sch x 120 = 60k
TOTAL:	x 8 schools: 4,000 \$68k	\$740k

02(10)
BIA EDUCATION PROGRAM DESCRIPTION

Problem: PARENT INVOLVEMENT IN EDUCATION

Rationale: Local control of Indian schools must be a step-wise process which incrementally increases community abilities, responsibility and authority.

Program Description: LOCAL CONTROL OF INDIAN SCHOOLS THROUGH PARENT SCHOOL BOARDS: Under this program, each local community school would be operated by a school board consisting of local parents. The board would hire school staff and set general administrative policies (example: Rough Rock) The first phase of the program would be the creation of parent advisory boards for each school. The advisory board would train for full school board status by working with local BIA education staff and school administrators on such matters as curriculum development, teacher hiring and evaluation, generation of new programs, etc. When the advisory board felt it was ready to assume full responsibility for the school they would petition the BIA for a contract to run the school.

	Pilot Program	Operational Program
What:	Phase I-would assist in decision-making re: new programs, curr. development, hiring, etc. only in an advisory capacity. Phase II-full operation of the school board.	Same
Where:	Four areas - two small schools (enrollment 50 less) and two large schools - Alaska, Sioux, Navajo, Hopi	All Bureau Schools except - Off Res.
When:	Sept. 1969	Sept. 1971
How:	Publicity geared to gain community acceptance - establish Advisory Board at local school contact with central office for full status.	Same.
Schedule:	Sept. 1969 June 1971	1971. upon evaluation of pilot
Costs:		
Personnel	4 school boards @ 5 members ea.; 20 members @ 20 per mtg. @ 20 mtgs. per year=8,000	200 schools @ 5 members ea. @ 20 mtgs. /yr. x 20/mtg. 400,000
Facilities:	Existing	Existing
Equipment:	Existing	Existing
Other:	Training materials & consultants. 8k/area = 20k	Training -5,000/area x 200 sch. = 1,000,000
TOTAL:	one year 28,000 (cost/pupil: \$35) 142	one year 1,400,000 (cost/pupil: \$25)

(76)

BIA EDUCATION PROGRAM DESCRIPTION

Problem: LOAN PROGRAM (see Scholarship Program)

Rationale: Financial barriers to college enrollment can be decreased by implementation of a loan program.

Program Description: In addition to the scholarship program, funds for prospective college students could also be awarded through a loan program. Grants would be monitored by tribal councils and would carry either low or no interest rates.

	Pilot Program	Operational Program
What:	Grants would be sufficient to cover 20 loans to tribal council; no specification on criteria for selection or interest rates	Grants would be sufficient for loans to 10% of HS grads for 6 years. Additional grants could be awarded only if % attending college exceeds 10.
Where:	One large tribe	All tribes
When:	1969-1970	1970-1971, if successful
How:	A revolving fund would be set up in the tribal council in charge of granting loans and collecting payments.	Same
Schedule:		
Costs:		
Personnel		
Facilities:		
Equipment:		
Other:	one grant of 60,000	grants averaging total of 1,800,000 for six years
TOTAL:	(cost/pupil \$3K) 60,000	(cost/pupil: \$2.5K) 1,800,000

7(79)

BIA EDUCATION PROGRAM DESCRIPTION

Problem:
Lack of R & D.

Rationale:
One of the factors which stifles innovation in BIA schools is a lack of funds for research and development of alternatives.

Program Description:

Quadrupled Contract R & D Budget (to \$4 million)

for R & D on: teacher selection, motivation and training;
student motivation in cross-cultural contexts;
optimizing economic development relevance of education;
optimal school administration for maximizing student achievement;
cross cultural curriculum development;
and others.

	Pilot Program	Operational Program
What: Contract R&D	Not Available	Contract Educational R&D
Where:	NA	U.S. and abroad
When:	NA	Immediately.
How:	NA	2/69-3/69 development of work statements from R&D requirements 4/69 requests for proposals from open bidder lists 5/69-6/69 selection of contractors by BIA HQ and consultants 7/69 contract awards and R&D ops
Schedule:		
Costs:		50 \$20,000 contracts: \$1,000,000 (1/2 MY)
Personnel		20 \$50,000 contracts: \$1,000,000 (1 MY)
Facilities:		10 \$100,000 contracts: \$1,000,000 (2-3 MY)
Equipment:		3 \$300,000 Contracts: \$ 900,000 Evaluation supt. 100,000
Other:		
TOTAL:	NA	\$4,000,000

(86)

BIA EDUCATION PROGRAM DESCRIPTION

Problem: POOR HOME LIFE

Rationale: Boarding schools presently offer a false and unstimulating social environment. Foster homes would provide the Indian student with a more adequate environment and an experimental basis for easier assimilation into the mainstream culture, should he make that decision.

Program Description: FOSTER HOMES NEAR CENTRAL SCHOOLS - Children would live with foster families and attend a nearby school daily for one term with an option to stay longer if desired. Foster families would be recruited in advance of the school year and would have to meet standards set by the BIA. Foster families would be reimbursed at a rate of \$100 per month for each child in their care. A family would be allowed to care for a maximum of 2 Indian children.

	Pilot Program	Operational Program
What:	Provide foster homes near 2 schools for 2 groups of 25 children.	(1) 6 or 7 high schools (2) 5 or 6 new elementary boarding schools approx. 650 students
Where:	Phoenix Indian and Sherman Institute	+ Intermountain, Albuquerque, feasible Oklahoma schools, and Flandreau (?)
When:	Fall, 1969 for two years	Fall, 1971
How:	Recruit foster homes early in 1969, Place a mix of students for one term, beginning Fall, 1969.	Same
Schedule:		
Costs:	2 coordinators @ \$10,000 = \$20,000	13 coordinators @ 10k = 130k
Personnel		
Facilities:	Homes - Existing	Same
Equipment:	Subsidies to foster families @ 100/mo. for 10 mos. x 50 = \$50k	Subsidies 60,000 @ 100/mo. for 10 mos. x 650 = \$650k
Other:	Adm. & Travel @ 15k x 2 = 30k	Adm. & Travel & 15k x 13 = 195k
TOTAL:	\$100,000 145	\$975,000

9(102)

BIA EDUCATION PROGRAM DESCRIPTION

- Problem:**
1. Inhibited Student Teacher Interaction
 2. Inhibited Social Interaction Between BIA Staff and the Indian Community

Rationale: Indian-non-Indian interaction cannot be significantly changed until a better understanding of the social dynamics is achieved.

Program Description: IN DEPTH STUDY OF INDIAN SOCIAL DYNAMICS: prerequisite for intelligent and relevant design of training programs focusing on enhancing interaction between BIA staff and the Indian community. This is a particularly critical issue for BIA teachers. If the teacher is to be a skillful leader, stimulator, and controller of interaction with students in the classroom, he must have information about how Indian students operate in and try to manipulate social interaction for learning and other ends. That Indian students have different patterns of interaction than non-Indian students and that teachers don't know them or how to work with them was clear from the bewilderment, confusion, and frustration we witnessed in the classrooms and which was reported to us by both students and school staff.

	Pilot Program	Operational Program
What:		In Depth Study of Indian Social Dynamics
Where:		All major Indian tribes
When:		immediately
How:		Develop work statement; publish RFP; evaluation of proposal (BIA & Consultants); award of contract
Schedule:		
Costs:		
Personnel		
Facilities:		
Equipment:		
Other:		
TOTAL:	146	4 Man Year Contract = \$200,000

22)

BIA EDUCATION PROGRAM DESCRIPTION

Problem: High Indian and Eskimo College Dropout Rate

Rationale: A program relevant to the special problems of Indians at colleges (cross-cultural assimilation, language barrier, achievement lag, etc.) can help to reduce the college dropout rate.

Program Description: ESTABLISH SPECIAL CENTERS AT COLLEGES ATTENDED BY SIGNIFICANT NUMBERS OF INDIAN AND ESKIMO STUDENTS: The centers would offer special training in areas of particular interest to the student as well as tutorial and remedial programs. They would concentrate on improving individual reading and studying skills by using required texts from each student's other academic subjects as readers. Advice and information such as reference guidance and bibliographies could be offered to students with difficult assignments in outside courses. In addition, a half-hour or hour session might be devoted each week to individual guidance and tutoring, possibly utilizing other students and upperclassmen as tutors. Such centers might also include special career guidance and job placement personnel and a lead file could be maintained for seniors containing information concerning post-graduation employment and educational opportunities.
RE: TITLE III - Ft. Lewis College, Durango, Colorado.

	Pilot Program	Operational Program
What:	Establish special centers for assistance, tutoring for Indian and Eskimo college students.	Centers at all schools with large Indian or Eskimo populations.
Where:	3 colleges: N.A.U., U. of N.M., U. of Alaska	15 colleges or universities.
When:	Sept. 1970.	Sept., 1972, upon evaluation.
How:	Build facilities, recruit tutors, experts.	Same.
Schedule:	4/69-4/70-development 4/70-9/70-building, recruit. 9/70-6/71-program	
Costs:		
Personnel	3 Guid. Coun. @ 12k = 36k 6 Spec. Tutors @ 1/4 time @ 10k = 12k	15 Guid. Coun. @ 12k = 180k 30 Spec. Tutors @ 1/4 time @ 10k = 75k
Facilities:	Operation @ 5k/sch = 15k	Operation @ 5k/sch = 150k
Equipment:	Rental @ 1k/sch = 3k	Rental @ 1k/sch = 30k
Other:	6 upperclassmen tutor incentives @ \$500 ea. = 3k	30 upperclassmen tutors incentive @ \$500 ea. = 15k
TOTAL:	Evaluation = 11k \$80,000 147	\$450,000

(14)

BIA EDUCATION PROGRAM DESCRIPTION

Problem: Low percentage of Indian high school graduates to go on to college. High first-year failure rate in college, generally due to low level of academic achievement in Indian high schools.

Rationale: The achievement lag of Indian students by the time they graduate from high school is on the average so high as to severely hamper the student's ability to do college work.

Program Description: COLLEGE PREPARATORY SCHOOLS ON POST-HIGH SCHOOL LEVEL. Such institutions would bring up achievement level in basics such as English and math. Students would be encouraged to take Advanced Placement Exams in order to by-pass low-motivation, high competition freshman courses. The preparatory schools would have a college atmosphere, thus preparing the students for university life.

	Pilot Program	Operational Program
What: College prep schools	One school serving fifty students; one-year program.	Six schools serving 600
Where:	Southwest, probably Phoenix, associated with ASU	1 Southwest } associated 1 Northeast } with 1 California } universities
When:	Two-year trial; start 9/69	if successful, 9/71
How:	Contract with university to provide everything needed for program operation.	consider endowing or setting up separate schools with university connection.
Schedule:	let contract 5/69----- select students (competitive) 7/69-----	→5/71 →7/70
Costs:		6 administrators @ 15k ea. = 90k 36 teachers @ 12k ea. = 432k 24 counselors @ 12k ea. = 288k
Personnel	1 administrator @ 15k = 15k 2 counselors @ 12k = 24k 3 teachers @ 12k = 36k	
Facilities:		
Equipment:		
Other:	Tuition, books, rm&bd, etc. 50 x \$1,200 ea. = 60k	Tuition, books, rm&bd, etc. 600 x \$1,200 ea. = 720k
TOTAL:	135k	\$ 1,530,000

2(27)

BIA EDUCATION PROGRAM DESCRIPTION

- Problem:**
1. Language Barrier
 2. Inhibited Student-Teacher Interaction

Rationale: ESL can be taught most effectively by individuals who are fluent in the native language.

Program Description: Each school where language is a problem would have at least one senior language teacher who speaks the pupil's language. Indians should be given first priority for positions, but other capable teachers could be taught the language.

	Pilot Program	Operational Program
What: 1 Senior Language teacher in each school who speaks pupils' language.	Try 10 teachers in Navajo from schools where Navajo students are enrolled.	Train one teacher at each school in the SW (and in larger schools in Alaska). Later expand to all schools with language problem. approx. 400 teachers
Where:	Navajo Reservation	Navajo, Papago, Apache, Pueblos(?), Alaska, Sioux(?) approx. 5 areas
When:	Summer and Fall, 1969	Summer and Fall, 1971 (to give time for pilot group to gain facility in Navajo)
How:	6-week summer workshop involving Navajo tutors; continued contact with tutor during school year	Same
Schedule:	6-week summer workshop, 1969. Evaluation of Navajo fluency in Spring, 1970	Same
Costs:		
Personnel	5 students @ \$500 = \$2,500 2 tchr/eval. @ 2k = \$4,000 10 tutors @ \$750 = 7,500	10 tchr/eval. @ 2k ea. = \$20,000 100 tutors @ \$750 ea. = 175,000 50 students @ \$500 = 25,000
Facilities:	Facilities operation = \$10k	Facilities operation @ 15k ea. = 75k
Equipment:	Minimal Travel @ \$100 ea. = \$3k	Minimal Travel @ \$100 ea. = \$56k
Other:	Rm. & Bd. for 30 training part. @ \$5/day ea. = \$6,300	Rm. & Bd. for 560 participants @ \$5/day ea. = \$117,600
TOTAL:	\$33,300	\$468,600

3(28) BIA EDUCATION PROGRAM DESCRIPTION

Problem: ACADEMIC FAILURE: LANGUAGE BARRIER AND POOR MOTIVATION

Rationale: Learning which takes place in one situation will transfer to other situations. Thus, it is possible to incorporate a valid learning experience with activity which is also interesting and fun for the students.

Program Description: STUDENT PRODUCED EDUCATIONAL FILMS: The program would begin in the sixth grade. The object would be to familiarize students with use of the super 8mm. camera, editor, tripod, viewer, and projectors. An example of an early assignment would be to have the student make a film about a friend which describes what he or she is doing (playing, washing, working, etc.). Students would prepare a narration to be delivered in class as an accompaniment to the film. The production of these films should aid verbal communication skills and the formation of production teams would give students an opportunity to work in groups.

	Pilot Program	Operational Program
What:	Train sixth grade teachers and students in use of super 8mm. camera equipment. 6 teachers	Same. Effective all BIA schools- grades 6-12.
Where:	Greasewood Loneman Santa Rosa Boarding approx. 90 students	All BIA schools - grades 6-12
When:	September 1969-June 1970	Starting September 1970
How:	Teacher training summer workshop. Films would then be made during the school year.	Upon Evaluation No estimate yet
Schedule:		
Costs:		
Personnel:	2-week summer teacher workshop @ \$20k (travel, lodging, material, etc.)	
Facilities:	1 room/school for storage and supplies @ 5k ea. = 15k	
Equipment:	1 camera/2 students, viewers tripods, splicers, projectors @ approx. \$200/stud. #90=18k	
Other:	Evaluation = 5k	
TOTAL:	\$58k 150	

(34)

BIA EDUCATION PROGRAM DESCRIPTION

Problem: SHORTAGE OF JOB OPPORTUNITIES: Contributing factors are lack of marketable skills developed in high school, cultural isolation from contemporary technology, low motivation for advanced technical training, and poor scientific education in high school.

Rationale: First hand experience with technology will provide the individual with job-relevant skills as well as side benefits gained through use of the technology.

Program Description: FLIGHT TRAINING FOR HIGH SCHOOL STUDENTS: to mobilize interest in and an understanding of contemporary technology, provide the basis for an employable skill, and to interest youth in manipulation of technology, in general. Some students would be expected to obtain their commercial pilot, aircraft and engine mechanics, or aircraft controller's license thus establishing a background for a well-paying occupation. The program could also be used for field trips, and to relieve weekend boredom at boarding schools.

	Pilot Program	Operational Program
What:	Flight training for interested high school students: 2 small programs in boarding high schools.	Flight training at all large high schools, with exchange tours and field trips
Where:	Oklahoma area - 1 Southwest - 1	20 large boarding and day high schools
When:	start Sept. 1969	after successful evaluation, Sept. 1970
How:	recruit licensed flying instructor/teacher, purchase cheap used light planes	Recruit additional flying instructors and purchase planes, as needed.
Schedule:	start training course on voluntary basis Sept. 1969	
Costs:		
Personnel	2 instructors @ 15k each = 30,000	20 instructors @ 15 k each = 300,000
Facilities:	simple hangar, grass strips @ 10k/school = 20,000	simple hangar, grass strips @ 10k/school = 200,000
Equipment:	2 light aircraft, spare parts @ 10k each = 20,000	2 light aircraft, spare parts @ 10k/school = 200,000
Other:	mannuals, repairs & inspection insurance @ 5k ea = 10,000	mannuals, repairs & inspection insurance @ 5k ea. = 200,000
TOTAL:	fuel @ 5k ea. = 10,000 (cost/pupil: \$47) \$90,000	fuel @ 5k/school = 200,000 (cost/pupil: \$83) \$1,100,000

5(39)

BIA EDUCATION PROGRAM DESCRIPTION

Problem: To Eliminate Cultural Isolation and Geographic Isolation

Rationale: Direct experience of alternative cultures allows the student to observe and understand these cultures in a very immediate, and therefore practical way which has relevance to the student's long-range decisions about his life-style.

Program Description:

Long summer field trips. Students would be motivated as well as educated, by trips to cities as much as several hundred miles away. Private boarding schools could provide a relatively inexpensive place to stay and an opportunity to experience a totally different cultural atmosphere. However, Indian students would be watching a similar educational process to their own.

	Pilot Program	Operational Program
What:	2 2-week field trips, one for 30 elementary children, & one for 30 high school students.	About 400 2-week trips for 30 children per summer. Enough trips would be arranged so that every child would go on 2 during his school career.
Where:	1 Navajo to Los Angeles 1 Pine Ridge to Chicago	About 2 from every reservation per summer, not always to the same city
When:	late June/early July, 1969	1970, if pilot is successful until 1982
How:	Select children randomly Use parents & college students from host city as Arrange room & board at school	in host city } same
Schedule:		
Costs:	2 tchrs from home school - no extra cost 4 parents - \$400 4 college students - \$400	400 tchrs 800 parents 80,000 800 students 80,000
Facilities:	room & board @ 2k/sch. = 4k (assume reduced rate-contribution)	room & board @ 2k/school = \$80k
Equipment:	charter bus (2) 2,000	busses 400 400,000
Other:		
TOTAL:	\$6,800. 152	\$1,360,000 (cost/pupil: \$80)

8(47)

BIA EDUCATION PROGRAM DESCRIPTION

Problem: INADEQUATE INSTRUCTION

Rationale: Reinforcement theory holds that when desired behaviors are reinforced, the incidence of these behaviors tends to increase.

Program Description: PAY TEACHERS IN RELATION TO STUDENT ACHIEVEMENT: In a 9-month school year, an academic advancement of 9 months is expected. For each extra month, which a child advances, the teacher would receive \$20. This could only apply to subjects in which standardized tests are given. Other teachers could receive a proportional reward on the assumption that, if they do their job well, academic achievement in all subjects is improved.

	Pilot Program	Operational Program
What:	Pay teachers on the basis of academic achievement change in aggregate advancement for whole class; each achvmt unit (by mos.) in excess of expected stud. advance earns bonus of \$20	All schools
Where:	Cherokee Central	All schools
When:	Fall 1969	Fall, 1970, after successful pilot
How:	Test in Sept. and again in May; academic advancement determines the basis for the bonus.	Same
Schedule:	Sept. 1969 Test I May, 1970 Test II Aug. 1970 pay bonus	
Costs:	1 ed. spec. \$10k	50 ed. spec. @ 10k ea. = 500k
Personnel		
Facilities:	Existing	Existing
Equipment:	None	None
Other:	2 tests @ 10,000	tests @ 5k x 250 = 1,250,000 (testing once/yr)
TOTAL:	bonuses for 50 tchrs. @ \$200 ave. = 10,000 \$30k	Bonus for 2500 teachers @ 200 a (cost/pupil: \$10) 500,000 2,250,000

77(75)

BIA EDUCATION PROGRAM DESCRIPTION

Problem:

Low rate of Indian HS graduates attending or completing college.

Rationale: The financial barrier to attending college can be reduced by providing funds for qualified students.

Program Description: COLLEGE SCHOLARSHIP PROGRAM:

Indian students who have the ability to attend college should not be prevented by the prevailing low economic status on the reservation. A scholarship program would eliminate this problem. Stipends would amount to slightly more than room, board and fees to avoid the necessity of working during the school year. Some form of summer work would generally be needed to provide spending money. To assure that some of the talent stays on the reservation, grants would be administered by tribal councils and fed on joint committees.

	Pilot Program	Operational Program
What:	20 scholarships would be available to HS graduates & would be awarded on the basis of scholastic ability and financial lack.	Grants would be available for approximately 10% of graduating HS students, covering a 4-year college program.
Where:	One large reservation	All reservations
When:	Available for 1969-70	1970-71, if trial succeeds
How:	Grants would be made to the tribal council on the basis of # HS grads, adjusted to % entering college w grants the previous year.	Same.
Schedule:	grants in spring, 1969	grants starting spring, 1970
Costs:		
Personnel		
Facilities:		
Equipment:	20 scholarships @ about 3,000 = 60,000	800 scholarships per year @ 3k ea = 2,400,000 (eventually)
Other:		
TOTAL:	60,000 (cost/pupil: \$3.0K) 154	2,400,000 (cost/pupil: \$3.0K)

(77)

BIA EDUCATION PROGRAM DESCRIPTION

Problem: Administrative/Managerial Inadequate Development of Resources

Rationale: Resource development can be financed in part by making the products saleable to other organizations.

Program Description: Income-producing educational projects, such as planning, construction, surveys, curricula, textbooks, etc. which could be sold to other governmental agencies or private organizations.

	Pilot Program	Operational Program
What:	A teacher workshop could be arranged during the summer, where creative and income-producing projects could be discussed and methods for their implementation devised.	Same.
Where:	2 high schools 1 in plains 1 in SW	all high schools 5 schools
When:	Workshop - summer, 1969 Program to start 9/69	after pilot completed, 9/70
How:	Specialists could be hired to help students initiate projects and then to act as advisors	
Schedule:	plan programs 4/69-6/69 teacher/adm. training 7/69 operations - 9/69-9/70 evaluation 6/70-9/70	
Costs:		
Personnel	2 1/2 time coordinators @ \$10,000 \$10,000	50 1/2 time coordinators @ 10k ea = 250,000
Facilities:	none	
Equipment:	depending on projects @ 5k ea = est. 10,000	Same: 50 x 5k ea. = 250,000
Other:	materials @ 10k ea. = 20,000 evaluation = 10,000	Same: 10k ea. x 50 = 500,000
TOTAL:	155 \$50,000	\$1,000,000

99(85)

BIA EDUCATION PROGRAM DESCRIPTION

Problem: STUDENT AND COMMUNITY CULTURAL ISOLATION AND BOREDOM

Rationale: The "Living Theater" concept of travelling and changing theater can be advantageously utilized to provide some degree of integration to diverse and remote Indian communities.

Program Description: TRAVELING SHOWS (Medicine Shows):

Small theatre groups, musical groups, puppet shows, etc., touring Indian communities and schools in trailer trucks which could serve both as living quarters and stage for the group. These could be completely subsidized and free to audiences, or a small admission could be charged which would help pay for some of the expenses (although probably not enough to make it profitable). The touring groups should represent as many different aspects of American society as possible including the Indian community

	Pilot Program	Operational Program
What:	One traveling truck carrying around 5 shows over the year/per truck	More trucks, more shows, about 6 trucks, total. 5 shows/truck = 30 shows
Where:	All reservations in Southwest	All Indian communities in USA-Alaska during summer
When:	Beginning school year 1969-1970	Continuing until cultural isolation no longer is a problem for Indian communities
How:	Buy and outfit truck, locate small versatile entertainment groups	Same
Schedule:		
Costs:	5 groups (5/grp)@10k@6wks = 50k 2k/grp(5/grp)for food = 10k	30 shows x 10k = 300k 2k/grp for food = 60k
Personnel		
Facilities:	Tractor & semi-trailer - 10K	10k x 6 = 60k
Equipment:	(power source in truck generator) outfit trucks 5K	5k x 6 = 60k
Other:	10K/yr contingencies 30K/yr gas.	10k x 6 = 60k 30k x 6 = 180k
TOTAL:	- \$115,000	\$690,000

00(124)

BIA EDUCATION PROGRAM DESCRIPTION

Problem: Sociology and Political Science: The Conquered National Minority
(Senior High School students)

Rationale: Indian students can best come to understand their own unique social and historical circumstances by studying similar situations of other peoples. The understanding gained will help the Indian student to define and choose among options which relate to his circumstances.

Program Description: Students will examine, in part by role-plays, the sociological and political difficulties encountered since June, 1967, in the Arab territories conquered by Israel. Students will consider the conflicting drives within the Arab community, such as those for economic isolation from the Israeli population and authorities, for participation in the prosperous Israeli economy, for cooperation with the Israelis to achieve immediate benefits for the Arab population, for non-cooperation with the Israelis in order to maintain national identity, for violent and for non-violent resistance, etc. Students will also examine conflicts within the Israeli population as to whether the Arabs should be isolated in order to protect the rest of the Israeli population, or encouraged to assimilate themselves, in order to minimize their resistance to Israeli authority. The question of the political status and future of the captured territory will be discussed. Students will be encouraged to draw parallels with the 19th century situation in the United States.

	Pilot Program	Operational Program
What:	Curriculum on Arab-Israeli relations in captured territories.	Same.
Where:	4 schools: 2 Plains 2 Southwest	100 schools.
When:	School year 1969-70.	Sept., 1970: upon evaluation of pilot programs
How:	Compile sourcebook, design games, write teacher's guide.	
Schedule:	3/69-6/69 sourcebook; 6/69-7/69 game; 7/69-9/69 teacher's guides	
Costs:	6 man-months @ 1.2k/mo. = 7.2k (curr. development) Overhead @ 20k = 20k	6 man-months @ 1.2k ca. = 7.2k (Redesign of project) Overhead @ 20k = 20k
Personnel		
Facilities:	Existing	Same
Equipment:	Existing	Same
Other:	Prod. of materials = 2k Evaluation = 20k	Production of materials = 100k
TOTAL:	\$49,200 157	\$127,200

BIA EDUCATION PROGRAM DESCRIPTION

Problem: Sociology and Political Science: Interaction of Governmental and Tribal Authorities (Senior High School students)

Rationale: Understanding of a political situation with close parallels to that of American Indians will give the Indian an increased ability to operate in his own situation.

Program Description: Students will examine the interaction, both constructive and obstructive, between governmental officials and tribal leaders in an African republic. (While three years ago, Nigeria would have been ideal for such a study, Ghana or Botswana might be a better subject of study at this time.) Role plays would be employed, and would lead students to draw parallels between the African and American Indian difficulties in this regard. Original sources will be used as much as possible. A comparison of the concept and form of the "tribe" in African and North America will be made from the particular aspects of social organization and relations with regional and national authorities.

	Pilot Program	Operational Program
What:	Curriculum on tribal-governmental, interaction in African republic, comparison of African and North American concepts of the tribe.	Same.
Where:	4 schools: 2 Plains 2 Southwest	100 schools.
When:	School year 1970-1971	Sept., 1971, upon evaluation of pilot programs.
How:	Compile source materials, brief explanatory test, design games, write teacher's guides.	
Schedule:	Sourcebook 3/69-8/69 Game 8/69-9/69 Tchr's Guide 9/69-11/69	
Costs:	10 man-months @ 1.2k = 12k (curr. development) Overhead @ 15k = 15k	10 man-months @ 1.2k = 12k (curr. redesign) Overhead @ 10k = 10k
Personnel		
Facilities:	Existing	Same
Equipment:	Existing	Same
Other:	Produce written materials @ 1k/school = 4k	Produce written materials @ 1k/school = 100k
TOTAL:	Evaluation = 20k \$51,000	\$122,000



2 (126) BIA EDUCATION PROGRAM DESCRIPTION

Problem: Economics: Analysis and rectification of environmental disadvantages. (Elementary or Junior High School students)

Rationale: Indians are faced with particular environmental problems which can be better understood by study of analogous situations.

Program Description: Students will examine the economics of the desert in Jordan and in Israel, with emphasis on the development of the Negev. Students will examine the reasons for the region's development, the resources employed, and its overall cost-effectiveness. They will be encouraged to relate the Israeli effort to the potential resources of desert land on Indian reservations. Students might irrigate in a greenhouse a small plot of land to illustrate the possibilities of agricultural development. They might discuss ways of effecting this change, the resources needed, and the likelihood of its achievement. The course would be taught using a maximum of actual experience and visual materials. A rough comparison of the yields per equal investment of agricultural and industrial development will be made.

	Pilot Program	Operational Program
What:	Curriculum on economic potential and development of desert land.	Same.
Where:	4 Southwest elementary schools	100 Southwest elementary schools, upon evaluation
When:	Academic year 1969-70	Academic year 1970, upon evaluation.
How:	Compile visual materials and brief explanatory text; guide for teachers	
Schedule: WF	3/69-7/69, compile mat. & write text; 7/69-8/69, teacher's guide	
Costs:	5 man-months @ 1.2k = 6k (curriculum development) Overhead @ 10k = 10k	5 man-months @ 1.2k = 6k (curriculum development) Overhead @ 10k = 10k
Personnel		
Facilities:	Existing	Existing
Equipment:	Bldg. mat. @ 1k/sch = 4k (lumber, seeds, sand, etc.)	Bldg. mat. @ 1k/sch = 100k (lumber, seeds, sand, etc.)
Other:	Prod. of written mat. @ 500/sch = 2k Evaluation = 2k	Prod. of written mat. @ 500k/sch = 50k
TOTAL:	\$42,000 159	\$171,000

3(127) BIA EDUCATION PROGRAM DESCRIPTION

Problem: Sociology, Economics, and Political Science: attempts at separation of different ethnic groups within a population.
(Junior High School students)

Rationale: Indians will be able to more effectively deal with the problems of discrimination and ostracization which face them if they understand situations which have parallels to their own.

Program Description: Students will examine the way in which the Republic of South Africa is attempting to maintain apartheid by means of the establishment of bantustans as separate black communities within the country. The implications of the bantustans' structural lack of economic self-sufficiency will be discussed. Students will be permitted to draw parallels between the bantustans and reservations for American Indians, and to discuss the effects, positive and/or negative, of the approaches employed in the two countries. Role plays would be used, with students taking the parts of South African governmental officials, white employers, and Bantus. Primary sources will be employed, mimeographed for distribution to students.

	Pilot Program	Operational Program
What:	Production of curriculum on bantustans.	Same.
Where:	4 schools: 2 Plains, 2 Southwest	100 schools
When:	Academic year 1969-70.	Sept., 1970, upon evaluation.
How:	Compile sources, design games; write guide, training materials for teacher.	
Schedule:	3/69-6/69 compile source-book; 6/69-7/69 design game; 7/69-9/69 write tchr's guide	
Costs:	6 man-months @ 1.2k = 7.2k (curr. development). Overhead @ 10k = 10k	6 man-months @ 1.2k = 7.2k (Redesign) Overhead & 10k = 10k
Personnel		
Facilities:	Existing	Existing
Equipment:	Existing	Existing
Other:	Evaluation @ 20k = 20k Prod. of mat. @ 1k/sch = 4k	Production of materials @ 1k/school = 100k
TOTAL:	\$41,200 160	\$117,200

4(137)

BIA EDUCATION PROGRAM DESCRIPTION Senior High School Language Arts

Problem: Media and Communications course: Relevance, the Technology of Communications.

Rationale: Media and communications of the mainstream culture represent a formidable and different force with which Indians will increasingly have to deal. As reservations become more assimilated into the mainstream of American technological media and when Indians choose to leave reservations, there will be a better ability to maintain integrity of Indian identity through understanding of media forces.

Program Description: This curriculum will focus on modern communications media to cultivate critical skills in viewing film, television documentaries, advertising, etc. The course is an attempt to make language arts teaching relevant to 20th century communications.

Students will analyze documentaries, television commercials, drama, journalism, etc. not only internal to the piece but in terms of their impact on society and the systems out of which they derive. For example, mass communications have a leveling effect on classes in society (e.g., introduction of radio). Potential effects of computerization on society will be considered. Reading of science fiction will be included here.

	Pilot Program	Operational Program
What:	Technology of Communications	
Where:	3 BIA schools	All
When:	Academic '70	Academic '71
How:	Develop units for analysis of effects, mass media and criticism of sample forms. Develop instructions for production.	
Schedule:	August '69-August '70	
Costs:		
Personnel	\$600,000 200 man-months	
Facilities:	Films, cameras, projectors \$6,000	\$2,000 for kit x 300
Equipment:		
Other:		
TOTAL:	\$606,000	\$600,000

05(14)

BIA EDUCATION PROGRAM DESCRIPTION Page 2. Social Studies curriculum 7-9

Rationale: A study of decision-making can best be effected by use of a multi-discipline social science approach which deals with a variety of types of decisions.

Program Description: The 3-year junior high school course will deal with problems that are assumed to have been resolved. Studies will be built around decisions made by both fictional and real individuals or groups of people in the past or present. The decision-makers will be selected on the basis of complexity of the problem he is dealing with (a man's decision to accept a loan from a friend is a different scale of problem than Nasser's decision to accept aid from Russia to build the Aswan dam), complexity of consequences (Elizabeth Taylor's decision to divorce Eddie Fisher weaves a web of consequences on a lesser level of complexity than Henry VIII's decision to divorce Catherine of Aragon), sophistication of skill needed to analyze and understand the problem (from gut feeling to systems analysis), and exposure to a variety of social science disciplines (psychology, economics, political science, sociology, etc.).

Many of the decisions to be studied will be from the student's own experience or the history of his people. When studying decisions more remote from the student's own experience or background, students will be urged to make comparisons between the situation or the person under study and their own experience. Some kinds of decisions that might be examined are:

(over)

	Pilot Program	Operational Program
What: Social Studies Curriculum		
Where:	3 junior high schools, Stewart OCS, Phoenix Indian	All junior high schools
When:	7th grade ready school year 70-71 8th and 9th grade ready school yr. 71-72	7th grade 9/71 on 8th and 9th grade 9/72 on
How:	develop and produce curriculum materials	
Schedule:	7th gr. dev't 5/69-5/70 produce 6/70-9/70 8th & 9th gr. dev't 5/70-5/71 produce 6/71-7/71	7th gr. 9/71 on 8th & 9th gr. 9/72 on
Costs:	curriculum materials dev't for 3 yrs. @ 750K	
Personnel:		
Facilities:		
Equipment:	materials production for about 1800 kids \$8,000	materials production for 78K about 10K kids
Other:		
TOTAL:	\$758,000 162	\$2,800

Thoreau's decision to live at Walden Pond
Krushchev's decision to denounce Stalin
the Jews' decision to establish a nation state in Israel
the astronaut's decision to take apart the computer in "2001"
U.S. government's decision to round up the Indians and put them on reservations.

In each study unit students will begin by looking at the decision-making entity (individual or group) itself: What is the nature of the bind the person or group is in? What brought them to the point of feeling that they had to decide something? They will then examine the points of view of some of the people around the decision-maker to get a different perspective of the central problem. Students will then examine the whole context of the decision-maker: what is the state of personal, social, political, scientific, etc., affairs that made it possible for this particular problem to develop and be resolved at this particular point in time?

26(10)

BIA EDUCATION PROGRAM DESCRIPTION

Problem: ACADEMIC FAILURE, due to less than optimal use of available educational resources, or alternatively, excessive cost for the level of academic achievement attained due to educational inefficiencies. Until the relative cost-effectiveness of alternative programs can be determined, effective resource allocation decisions will not be made often or reliably. Further, many of these decisions can be made most expeditiously at local school levels. However, no standardized program evaluation system or procedure now exists for use at the school level.

Rationale: Cost-effectiveness evaluation will enable better planning and more effective allocation of resources.

Program Description: COST-EFFECTIVENESS EVALUATION SYSTEM FOR BIA SCHOOLS: A procedure which could be implemented at even small schools for evaluating the relative cost-effectiveness of alternative instructional, service and material procurement programs at the school level. This would permit school principals, superintendents and higher authorities to make more efficient planning and budgeting decisions.

	Pilot Program	Operational Program
What:	Cost-effectiveness evaluation system for BIA schools.	Same
Where:	Cost-effectiveness evaluation system applied at one large & 1 small boarding, large & small day schools. (4 schools -- 2 in Plains & Oklahoma, 2 in Southwest)	At all BIA schools
When:	Implement 9/69	9/70 if pilot is successful
How:	Develop cost-effectiveness system, instruct principals in workshop or by tour, implement, evaluate	Same
Schedule:	Development: 3/69-8/69 Instruct users: 8/69-9/69 Implement: 9/69-6/70	9/70 on
Costs:	Evaluate: 5/70-6/70	
Personnel	1/4 time staff @ 12,000 x 4 schools = 12,000	1/4 time staff x 250 schools = @ 12,000 = 750,000
Facilities:	None	None
Equipment:	None	None
Other:	Research, design & production Development cost: 50,000 training workshop 2,000	Corrections and refinements 30,000
TOTAL:	64,000	Training workshops 100,000 880,000

07(24)

BIA EDUCATION PROGRAM DESCRIPTION

Problem: POOR MOTIVATION, particularly toward physical and social sciences.

Rationale: Individuals can learn a great deal from their immediate environments, as well as from the substantive material which is presented within that environment.

Program Description: INSTRUCTIVE STRUCTURES: INSTRUCTIONALLY

ACTIVE SCHOOL BUILDINGS, in which the structure would itself demonstrate principles of physics through open exposure (as in insulated wiring and piping), measuring instruments (strain gages in beams, thermometers, audio sensors, etc.), and dynamic flow charting (on walls, illustrating scientific processes).

	Pilot Program	Operational Program
What: Instructive School Building	Build one of the needed new small schools as an instructive structure - 200 students	Add 4 - 200 students Upon evaluation - 800 students
Where:	where construction costs are lowest (Southwest)	Other areas
When:	Start 9/70	1972
How:	1-planning 3/69-5/69 2-architectural design 5/69-9/69 3-construction 9/69-6/70 4-teacher training 6/70-8/70	----- 3/72-5/72 -----5/72-9/72 ----- 9/72-6/73 ----- 6/73-8/73
Schedule:	5-operation 9/70-6/71 6-evaluation 6/71-9/71	----- 9/73-6/74 ----- 6/74-9/74
Costs:	Planning and design 50,000	Planning & Redesign = 25k
Personnel		
Facilities:	added cost for school for 200: 100,000	added cost for school for 800 stud. 400k
Equipment:	needed for school - 50,000	needed for school - 200k
Other: Adm & Teacher training	50,000	Adm. & teacher training - 200k
	Evaluation 10,000	Evaluation 40k
TOTAL:	210,000	865k

08(26) BIA EDUCATION PROGRAM DESCRIPTION

Problem: LANGUAGE BARRIER

which is due in part to limited contact with non-Indians or other ethnic groups; little English spoken in homes by family and peers and limited experience with books, newspapers, television, etc.

Rationale: Increased contact with and need for English combined with an opportunity to receive training in English will increase Indians' proficiency in the language.

Program Description: MASTER LINGUIST TUTOR

Each Headstart center (depending on remoteness) or area has a MLT to work with children in developing their English-speaking skills. MLT will also hold periodic meetings with teachers to train them to use new techniques to teach English to students and parents.

	Pilot Program	Operational Program
What:	Specifically for areas where kids have the most difficulty speaking and understanding English. Establish MLT to take care of no more than two centers if feasible.	Most Headstart centers have Indian teachers or aides whereby utilization of this asset would increase success possibilities
Where: (144 students)	Navajo, Alaska and Papago-2 schools per area	All Headstart centers located in areas where children are faced with English language speaking difficulties
When:	Sept. 1969	Sept. 1971
How:	Contract with OEO under whose direction Headstart Programs are administered	Approximately 13,840 students will benefit
Schedule:	Sept. 1969-June 1971 2-year trial period	Sept. 1971 - on yearly basis
Costs:	3 MLT's @ 12K ea. =36,000 Existing teachers will be utilized	80 MLT's @ 12K ea=960,000
Personnel		
Facilities:	Office space rental @ 2K/area= 6,000	80 office space rentals @ 2K/area= 160,000
Equipment:	Lang. Deve. Mach @ 1K/area= 3,000	80 x 1K/ area= 240,000
Other:	Trans. & adm @ 10K ea=30,000 Curriculum dev. = 25,000	80 x 10K ea area= 800,000
TOTAL:	per year 100,000	per year 2,160,000

BIA EDUCATION PROGRAM DESCRIPTION

Problem: SHORTAGE OF JOB OPPORTUNITIES, lack of marketable skills, rural poverty with poor housing, roads, and water resources development.

Rationale: Vocational courses which include actual experience will provide more relevant skills than mere shop courses.

Program Description: HEAVY CONSTRUCTION COURSES WITH EQUIPMENT AND PROJECTS AT HIGH SCHOOLS: to provide immediate and locally relevant (i. e., on reservations) employable skills which are also in demand elsewhere. Courses would consist of actual construction projects for the school and community and would be planned and operated by the students under an instructor's supervision. Weekend work/study projects would be done on a volunteer basis. Income from projects would be shared by school and students.

	Pilot Program	Operational Program
What:	High school courses in heavy construction: courses and projects would be held at 3 boarding high schools.	Same.
Where:	1 in plains 1 in southwest 1 in Alaska	At all high schools.
When:	Start immediately.	Start after positive evaluation of pilot programs
How:	Recruit instructor, procure equipment, recruit volunteer students, confer with community on desired projects	Recruit additional instructors and volunteers, as needed.
Schedule:	immediate (early 1969) start review program summer 1970	1970
Costs:		
Personnel	3 full-time instructors @ 15k each = 45k	30 instructors @ 15k each = 550k
Facilities:	crude shelter & wkshp & 25k each = 75k	some added shop facilities & 25k each = 750k
Equipment: (scraper, cat, etc)	3 sets used heavy construction equipment @ 150k ea. = 450k	30 sets @ 150k ea. = 4,500,000
Other:	building materials @ 25k ea. = 75k	building materials @ 25k each = 750k
TOTAL:	\$645k	(cost/pupil: \$345) \$6,550,000

110(46)

BIA EDUCATION PROGRAM DESCRIPTION

Problem: INADEQUATE INSTRUCTION,

in both quality and quantity, in remote area schools where much time must be spent riding schoolbuses due to the dispersed population.

CULTURAL ISOLATION is another resulting problem.

Rationale: Time wasted on school buses can be spent effectively on instruction.

Program Description: ON-BUS, ON-Line EDUCATION

to increase the educational exposure to world and national culture of Indian students and their parents. Films and TV would be shown on schoolbuses used by both students and parents from 20 minutes to two hours daily. Telephone lines and TV relays would be installed by students at remote homes to provide continuous home education to students and parents. Phone systems and ETV would be designed to provide a user-responsive home learning resource. Rural libraries would be accessible to telephone calls, from field phone systems installed by students and ETV programs would be coordinated with local school programs.

	Pilot Program	Operational Program
What: On-bus ETV and educational films plus home ETV and educational telephone (dial recording)	Local programs in remote, dispersed population areas, TV and films on schoolbuses (2) and phones & ETV in small communities (2) and both in 2 schools	All remote and dispersed rural areas netted electronically to school ETV and phone libraries
Where:	Plains, Southwest, and Alaska (2 each)=6 total	Total BIA school coverage
When:	Initial installation in Spring 1969	Following evaluation of pilot program in 1970
How:	Installation in schoolbuses, HS student volunteers trained in schools to install remote ETV and field phone links to phone library.	Same.
Schedule:	Bus projectors and ETV by Sept. 1969, remote community ETV and field phone by Dec. 1969.	Start in 1970, complete system-wide installation in 1972
Costs:	3 ETV TX staffs of 2: 75,000 3 phone libr. staffs of 2: 75,000	20 ETV TX staffs of 2: 500,000 50 phone libr. staffs of 2: 1,250,000
Personnel		
Facilities:	3 ETV broadcast TX @ 50,000 3 phone libr. @ 25K: 75,000	20 TX: 1,000,000 50 phone libraries: 1,250,000
Equipment:	6 x av. 10 buses @ 500/bus: 30,000 6 x 100 remote comm. TV Rx: 70,000	1000 buses @ 500: 500,000 100 x 100 remote TV x 100: 1,000,000
Other:	6 x 100-station field phones: 50,000 R & D system integration: 200,000	100 x 100 field phones: 500,000
TOTAL:	\$525,000 (cost/pupil: \$2K/pupil)	\$6,200,000 (cost/pupil: \$620)

11(58)

BIA EDUCATION PROGRAM DESCRIPTION

Problem: LACK OF INDIAN PROFESSIONAL TEACHERS.

Rationale: One of the barriers preventing Indians from becoming leaders is financial.

Program Description: PAYMENT OF REDUCED SALARY AND SCHOLARSHIP GRANT FOR COLLEGE ENROLLMENT ON FULL-TIME BASIS BY PARAPROFESSIONAL AIDES WHO HAVE ONE YEAR'S ACTUAL EXPERIENCE.
 Teacher Aides are unable to pursue higher education, except during summer workshops due to loss of salary which is essential for keeping immediate family economically stable:
 Upon completion teacher must work with Bureau at least five years.

	Pilot Program	Operational Program
What:	Attend a trimester college of high academic standards. Completion of 4-yr. course in 2 1/2 years.	Same
Where:	College should be located near participants' reservation 20 aides from 10 reservations	Same - all reservations
When:	June 1969	June 1972
How:	Selection of participants should be based on supervisor evaluation	Increase participating aides to 40 after pilot evaluation. Annual increase of 40 thereafter.
Schedule:	June 1969 - May 1972	June 1972 - continuous
Costs:	Scholarship @ \$2K each \$40,000 Salary @ \$3300/aide \$66,000	Scholarships @ \$2K each \$80,000 Salary @ \$3300/aide \$132,000
Personnel:		
Facilities:		
Equipment:		
Other:		
TOTAL:	\$106,000	first year \$212,000

2(63)

BIA EDUCATION PROGRAM DESCRIPTION

Problem: INADEQUATE TEACHING AND LACK OF CLASSROOM OBSERVATION AND EVALUATION

Rationale: One reason teachers find it difficult to improve their techniques is that they have inadequate feedback on their performance. The tasks of running a classroom are so immediate and consuming that self-evaluation is extremely difficult.

Program Description: Video tape classroom monitoring system and inter-class and inter-school critiques: An Education Specialist would prepare a program of the best and worst points from each class for presentation and discussion at monthly faculty-administrative meetings. Tape programs would also be exchanged among schools on a rotating basis, with critique forms provided for feedback purposes.

	Pilot Program	Operational Program
What:	Initiate program in 3 schools. 1 set of video tape equipment would be supplied to each school. (If there are more than 50 classrooms, 2 sets of equipment would be supplied.)	Same. Expand program to all BIA
Where:	Greasewood Loneman Santa Rosa Boarding	150 BIA schools.
When:	September 1969	September 1970
How:	Video tapes would be made of several class sessions, in each class. An Ed. Spec. would be in charge of editing the films & critique sessions.	Same.
Schedule:		
Costs:		
Personnel	1 Ed. spec. /school @ \$10K = \$30k	Same/Ed. Spec. /sch @ 10k = \$1,500,000
Facilities:	1 room/school for storage and editing @ 10k ea. = 30k	1 rm/sch. for storage & editing @ 10k ea. = \$1,500,000
Equipment:	\$5k/school = 15k	5k/school x 150 = \$750,000
Other:	Supplies, processing, etc. @ 10k/school = 30k	Supplies, processing, etc. @ 10k/sch. = \$1,500,000
TOTAL:	\$105k	(cost/pupil: \$61) \$5,250,000

3(67)

BIA EDUCATION PROGRAM DESCRIPTION

Problem: Under-developed work ethic in Indian students as they progress

Rationale: dearth of vocational **ROLE MODELS** and accessible **ECONOMIC OPPORTUNITIES** results in poor student motivation to achieve, dropping-out, and economic despair. A school which includes opportunity and rewards for work will help alleviate this problem.

Program Description: **CONTRACT SCHOOL:** which would build both an incentive & work ethic into the curriculum and school organization. Pay students to attend; reward them financially for achievement, concentrate on their demonstrated skills and interests, encourage outside school contact with industry, sell their services, and try to operate at a profit.

	Pilot Program	Operational Program
What: A BIA school located in or near a city or town.	A single factory school	Consolidate entire BIA system where economic opportunities either exist or are most likely. Possibly worth looking into "educational park" for at least "demonstration" value
Where:	Albuquerque Indian School Approx. 300 students	
When:		
How:	Operated as if it were a "cooperative university" on an alternating work-study basis (older students use	Determine after evaluation.
Schedule:	younger students as assistants)	
Costs:		
Personnel	Salaries paid in proportion to value of work; little kids get candy. Existing.	
Facilities:	Operations @ 500k	
Equipment:	Existing	
Other:	Per. Training @ 50k	
TOTAL:	Curriculum Dev. = 100k Stud. Incen. @ 1500/mo x 9 = 13.5k Evaluation = 11.5k	\$675,000

(83)

BIA EDUCATION PROGRAM DESCRIPTION

Problem: Lack of leadership. Lack of understanding of political interface between the reservation and the outside world.

Rationale: Indians need practical training in political methods relevant to their particular situations.

Program Description:

Course in relevant political sciences. A course explaining political science from the ground up and from a practical point of view--how to organize to get things done in a small community, how to handle problems requiring professional administration, how to deal with the bureaucracy, how to have power on a national level. This would give students and parents a useful framework for political activities on and off the reservation.

	Pilot Program	Operational Program
What:	2 10-hr units-community action -dealing w bureaucracy taught in 2 high schools and 2 adult groups	6 10-hr units
Where:	one mixing adults & children one Midwest reservation one Alaskan tribe	In all high schools and existing adult education programs
When:	trial fall 1969	start fall 1970
How:	develop units-contract contractor tests them on site	contract for development of units development of racker materials, one workshop in use
Schedule:	development spring/summer 1969 teaching fall 1969	development 1/70-9/70 workshop 7/70 implementation 9/70
Costs:		<u>first year only</u>
Personnel	30 man days 4500	
Facilities:	travel, per diem admin 3000	workshop (50 items) 1 week 75,000
Equipment:		teachers materials 25,000
Other:	evaluation = \$20,500 2 units @ 25,000 - 50,000	4 units 100,000
TOTAL:	78,000	(cost/pupil: \$15) 200,000

5(92)

BIA EDUCATION PROGRAM DESCRIPTION

Problem: Lack of ability on part of Indians to solve their own problems.

Rationale: Students will be able to better understand and deal with problems of Indian education if they receive formal training and experience in this area.

One semester course in educational research for 11th graders. Students introduced to basic research techniques and tools. During course they design, conduct and report on educational study. If study is conducted on non-Indian education, Indian students gain cultural exposure through their field work and research, and exposure to different kinds of learning interaction which might motivate them to re-examine the way they act in the learning process. (It's possible that one of the reasons Indian students don't behave some of the ways we want them to is that they don't know it's possible for students to behave in these ways.) If study is carried out on Indian students, students gain insight into the consequences (positive and negative effects) of Indian students role in the learning process which might motivate them to change their behavior, design new programs for Indian students, etc. Aside from gaining insight into learning processes, students would enhance conceptual, organizational, language and skills and develop new ones such as ability to handle statistics, systems analysis, etc. Program package would include teacher, teaching materials, and budget for field work.

	Pilot Program	Operational Program
What:	One semester course in Educational Research for 11th grades.	Same.
Where:	Tribally mixed Boarding High School.	All High Schools. (50?)
When:	School year 1970-71.	Pilot runs 1 year.
How:	Develop materials. Train and hire teacher.	Workshop for training materials.
Schedule:	School year 1970 Develop materials - teach 2 semesters school year 1970-71.	School year 1971-72.
Costs:		
Personnel	Teacher 1 year at 10K = 10K	Teacher training - (50) teachers @10K ea - 500K
Facilities:	Existing.	Existing.
Equipment:	Training and Curriculum material @10K	Training & Curriculum materials @10K/school = 500K
Other:	Curriculum devel. 30K	Field Research Budgets @10K/school = 500K
TOTAL:	Field Research Budget = 10K Evaluation = 10K Total: 70K	PTAC about --- \$1,500,000

116(100)

BIA EDUCATION PROGRAM DESCRIPTION

Problem: Lack of Parent Involvement

Bungled School Administrator Attempts to Achieve More Active Parent Involvement

Rationale: Planning models can be usefully applied by the administrator to evaluate the relevance of various actions and involvement by various groups.

Program Description: PARENT INVOLVEMENT PLANNING MODEL AND USERS GUIDE:

for use by local school administrators. During our field work we were impressed by the genuine desire on the part of many administrators to involve parents more actively in school planning and programming and the often consequent frustration of their attempts to do so because of misunderstanding or lack of consideration of the local social structure, political situation, etc. The planning model and accompanying user's guide would assist the administrator in identifying all the relevant planning factors, and the variables clustered around each of these factors. They would also help the administrator establish criteria for evaluating the effectiveness of any parent involvement program.

	Pilot Program	Operational Program
What:		Parent Involvement Planning Model
Where:		All Schools
When:		Being design immediately for use school year 1970-1971
How:		Design model - Field test - Prepare users manual - Publish - Distribute
Schedule:		6/69-12/69 Model Design 1/70-6/70 Field Test & Prepare Users Manual
Costs:		7/70-8/70 Publish - Begin use 9/7
Personnel		Model Design - 50k
Facilities:		Field Test & Prepare Users Guide 25k
Equipment:		Publication \$6/copy 250 schools 1.5k
Other:		
TOTAL:	174	76.5k

17(108)

BIA EDUCATION PROGRAM DESCRIPTION

Problem: Lack of Interest on the Part of Indian Students for Natural and Biological Sciences; Lack of Personal Involvement with School.

Rationale: Direct experience with plant life cultivation and use will encourage interest in the subject which cannot be generated through study of textbooks.

Program Description: TO ASSIST IN TEACHING BIOLOGY AND NATURAL SCIENCE the students could construct their own greenhouse of beams and plastic sheeting. Part of the space inside could be used to cultivate unfamiliar species of plants and trees, while flowers and vegetables would be raised in another part. Vegetables might be eaten in the school cafeteria and flowers used to decorate classrooms and the students' homes. Interested students would be encouraged to build their own gardens and supplied with information and seeds from the school's greenhouse.

	Pilot Program	Operational Program
What:	Provide students with materials and direction for building greenhouses, planting seeds.	Same.
Where:	4 schools (2 high and 2 junior high) Southwest and Plains.	25 schools, upon evaluation.
When:	September, 1969.	September, 1970, upon evaluation.
How:	Purchase beams, plastic sheeting, plants, seeds.	Same.
Schedule:		
Costs:		
Personnel	Existing.	Existing
Facilities:	Construction @ 10k ea = 40k	Same = 250k
Equipment:	Biological equip. @ 10k/sch = 40k	Same = 250k
Other:	Maintenance (heating, etc.) @ 5k/school = 20k	Same = 125k
TOTAL:	\$100,000 .175	\$625,000

18(123)

BIA EDUCATION PROGRAM DESCRIPTION

Problem: Sociology: dealing with the problem of adult illiteracy
(Junior High School students)

Rationale: Understanding of illiteracy problems in another culture will increase the ability of Indians to deal with their own similar problems.

Program Description: This course would examine the ways in which Venezuela has attempted to deal with the problem of adult illiteracy in the last ten years. Students will examine the incentives necessary to persuade older persons to begin learning to read and write. Students will be encouraged to relate the problem of illiteracy in Venezuela to that of illiteracy among Indians. Students will formulate and discuss solutions to adult illiteracy among English-speaking Indians. (Role plays might be employed.) The language acculturation problems of North and South American Indian tribes could be compared in an attempt to draw some general conclusions about this process.

	Pilot Program	Operational Program
What:	Curriculum of Venezuelan literacy programs for Indian tribes in South America	Same.
Where:	4 schools: 2 Plains, 1 Southwest, 1 Eskimo school	100 schools
When:	School year 1969-1970	1970, upon evaluation of pilot program
How:	Compile sourcebook, translation of primary sources, compilation of statistics; teacher's guide	
Schedule:	3/69-6/69 sourcebook compilation; 6/69-8/69 teacher's guide	
Costs:		
Personnel	5 man-months @ 1.2k ea = 6k (establish sourcebook & teacher's Overhead = 10k /guide)	5 man-months @ 1.2k ea. = 6k (Redesign books, etc.) Overhead = 10k
Facilities:	Existing	Same
Equipment:	Existing	Same
Other:	Evaluation = 20k Prod. of materials = 4k	Production of materials = 100k
TOTAL:	\$40k 176	\$116k

7(136)

BIA EDUCATION PROGRAM DESCRIPTION Junior High Language Arts

Problem: Adolescent needs for expression, independence, and introspection.

Rationale: These needs can be met while language skills are developed.

Program Description: Assuming the objectives of the K-6 Language Arts curriculum have been achieved, and students are orally fluent in English, and have acquired reading and writing skills, the junior high school language arts curriculum will focus on literary forms and their origin. Students will write in various creative forms; peer evaluation will be emphasized. Selection of appropriate forms to express an emotion, create group loyalty to an endeavor, record an event for posterity, etc. will be included in the exercises. Forms will include fable, haiku, myth, ballad, monologues, dialogues, descriptive prose, etc. Current magazines and paperbacks will be included.

	Pilot Program	Operational Program
What:	Literary form and style	
Where:	6 BIA schools	All
When:	Academic '69	Academic '70
How:	Select diverse reading list; develop exercises in creative writing, and provide background to context	
Schedule:	of literary pieces. April-August '69	
Costs:	\$300,000	
Personnel		
Facilities:	Prototypes and books: \$6K	\$1,000 package
Equipment:		x 300
Other:		
TOTAL:	\$306,000 177	\$300,000

0(4)

BIA EDUCATION PROGRAM DESCRIPTION

Problem: ACADEMIC FAILURE, LANGUAGE BARRIER, INADEQUATE INSTRUCTION, CULTURAL ISOLATION

Rationale: A recent study by the National Institute of Mental Health (Dr. Earl S. Schaefer) showed that disadvantaged infants, between 15 and 36 months old, achieved an average I.Q. of 106 after 21 months of daily weekday tutoring in talking, playing, and reading to the children. The untutored control group averaged an I.Q. of 89. Dr. Betty Caldwell at Syracuse Medical School has had similar findings.

Program Description: TUTORING OF INFANTS: The BIA program would employ a mix of local high school students and adults to serve as tutors. By implementing this program, it is assumed that English language skills, in particular, would improve. Since 15 to 36 months of age is the period of most rapid language development, children should be most receptive to verbal stimulation at this time.

	Pilot Program	Operational Program
What: Tutoring of Infants	Tutor: Infant Ratios of 2:1, 1:1, 1:2 for daily one hour, daily 1/2 hour, and bi-daily 1/2 hour sessions - 100 infants and 100 tutors	Assuming 1:1 ratio turns out to be the most cost-effective, 5000 tutors and 5000 infants will be tutored annually.
Where:	20 schools, 5 different tutors in each In areas where families are not too widely dispersed.	At all BIA elementary schools (150.) Approx. 33 tutors/school
When:	Start operation Sept. 1969	Sept. 1970
How:	Outreach from 3 pilot schools to homes in community with infant children-volunteer basis encouraged by bringing of baby-food and clothes	Staffing eventually dispersed to community English-speaking adults, as well as high school students and adult housewives in BIA
Schedule:	3/69-8/69 planning and program design; 9/69-8/70 operation; 6/69-8/70 evaluation	9/70
Costs:		
Personnel	100 tutors x 8 mos. x 40 hrs./mo. x \$2/hr. = \$80/mo./tutor = \$64,000	5000 tutors = \$3,200,000 (same pay)
Facilities:	Existing	Existing
Equipment:	Children's books (500 x \$2 each) = 1,000	100,000
Other:	Outreach transportation costs - \$1,050/sch = \$25,000	5,000/sch. = \$750,000
TOTAL:	Evaluation 10,000	100,000
	178 \$100,000	4,150,000

21(17)

BIA EDUCATION PROGRAM DESCRIPTION

Problem: INADEQUATE HOME LIFE

of many Indian boarding school students, due to the remoteness and dispersion of their homes requiring them to attend boarding school, or to sacrifice school for home life.

Rationale: An emotionally supportive and intellectually enriching home life can be supplied even in a boarding school setting by a system of family cottages, each of which is lived-in and directed by a teacher or counselor and his family.

Program Description: FAMILY COTTAGE BOARDING

is directed toward providing a reasonable facsimile of home life in BIA boarding schools, by having students live in small groups with a teacher or counselor and his family. In those cases where few Indian married teachers are available for such a program. Married non-teaching Indian couples might be recruited.

	Pilot Program	Operational Program
What: family cottage boarding at boarding schools	fifteen students plus teacher and family per cottage	Same.
Where:	on a partial basis (5 cottages each) at 4 boarding schools: 1 plains, 1 Okla. / 1 SW, 1 Alaska, 2 ele., 2 h. s.	All boarding schools $\frac{30,000}{15} = 2000$ cottages
When:	Start in summer of 1969 or earlier if facilities can be found	if program proves cost-effective on evaluation in 1971
How:	rent or build cottages, recruit teacher/counselor families and students	
Schedule:	two year trial starting Sept. 1969	start Sept. 1971
Costs:		
Personnel	20 cottages x 1/4 extra teaching staff @ 2,500 = 50k 20 x .5k/ custodian cooks = 100k	2000 cottages, 500 extra teachers (full-time) @ \$2k = 5,000,000 2000 custodian/cooks: 10,000,000
Facilities:	20 cottages @ 5,000 rent = 100k	2,000 @ 5k rent = 10,000,000
Equipment:	20x\$5,000 furnishings = 100k	2,000 x 5k/furnishings = 10,000,000
Other:	Evaluation = 25k	
TOTAL:	375,000 (cost/pupil: \$1.16K)	35,000,000 (cost per pupil: \$1.16K)



3(49)

BIA EDUCATION PROGRAM DESCRIPTION

Problem: INADEQUATE INSTRUCTION AND TEACHER MOTIVATION

Rationale: Upgrading of teaching skills and raising of intellectual content level can be achieved by concentrated graduate studies on paid sabbatical leaves.

Program Description: SABBATICALS FOR TEACHERS

1/2 year leave at full pay after seven years. Relevant program must be pursued while on sabbatical. This could include such activities as enrolling in a university, taking an extended trip with an academic interest in mind, or doing extensive readings on a chosen topic.

	Pilot Program	Operational Program
What:	Offer 10 teachers, from different disciplines, sabbaticals. These teachers must have taught in BIA schools at least 7 years.	All eligible teachers can take sabbatical
Where:	A compact area so possibility of sabbatical will seem possible for all teachers, thus affecting performance - try Oklahoma	↓
When:	Fiscal year 1970	Fiscal year 1972 - allow 2 years to see effect of leave on participants and other teachers.
How:	Accept applications - establish criteria; select about 10 for Fiscal year 1970	Increase number; make qualifications stricter.
Schedule:	Applications by May 1969; selection by June 30	
Costs:		replacements
Personnel	10 new teachers @ same cost: @ 1/2 time @ 5k ea. = 50,000 10 teachers @ ave. sal. 9K @ 6 mos. = 4.5k ea. = 45k	250 teachers (10% of total) - Same = 1,250,000 250 teachers (same) = \$1,125,000
Facilities:	none	none
Equipment:	none	none
Other:	none	none
TOTAL:	\$95,000	\$2,375,000



BIA EDUCATION PROGRAM DESCRIPTION

Problem: CULTURAL ISOLATION, INADEQUATE HOME LIFE, LOW INTELLECTUAL STANDARDS AND INADEQUATE INSTRUCTION in remote areas having dispersed school populations, such as the Navaho reservation and Alaska.

Rationale: Mobile schools may overcome the problems of isolation by other means than those fixed boarding schools with their inadequate home life, or small dispersed and educationally inadequate one-room schools.

Program Description: MOBILE SCHOOLS

The small mobile schools would be in two modes: two four-wheel drive 2 1/2 ton trucks with self-contained classrooms and teacher/driver housing that can be parked end-to-end for one large classroom, and a helicopter or air-transportable pod (or classroom-fitted large helicopter). The large mobile schools would be reconverted surplus WWII troopships, operating along the Alaskan and West Coast. A unique aspect would be the use of the crews of these vehicles as teachers. Commercial cargo operations might be run as a cost-reducing sideline. The ships would visit various ports of interest (San Francisco, Los Angeles, Vancouver) with field trips ashore.

	Pilot Program	Operational Program
What: Small truck and airborne and large ship-borne mobile schools TRUCKS	1 truck-pair, (for 20 students)	Coverage of most remote dispersed school-age population of 20K +: 800 trucks (12K)
Where:	1 truck-pair on Papago	Arizona - New Mexico - Alaska - Pacific Coast
When:	Start Jan., 1970	Start in Fall, 1972, following evaluation of pilot
How:	Procure and reconvert trucks, recruit and train teacher/drivers,	
Schedule:	1-year operational trial following preparation	1972 start, build up to full capability in 1974
Costs:		
Personnel	2 driver/teachers @ 12k ea. = 24k	300 driver/teachers @ 12,000/yr. = \$3,600,000
Facilities:	Classroom A-V for trucks 5k each = 10K	Same @ 5k each = \$1,500,000
Equipment:	2 trucks @ 10K ea. = 20K	300 trucks @ 10k ea. = 3,000,000
Other:	Annual operations & main. costs @ 20k ea. = 40k	Annual operations costs @ 20k ea. = 6,000,000
TOTAL:	\$84,000 (cost/pupil: \$8.5K)	\$14,100,000

125(53) BIA EDUCATION PROGRAM DESCRIPTION

Problem: CULTURAL ISOLATION, INADEQUATE HOME LIFE, LOW INTELLECTUAL STANDARDS AND INADEQUATE INSTRUCTION in remote areas having dispersed school populations, such as the Navaho reservation and Alaska.

Rationale: Mobile schools may overcome the problems of isolation by other means than those of fixed boarding schools with their inadequate home life, or small dispersed and educationally inadequate one-room schools.

Program Description: MOBILE SCHOOLS, both large and small.

The small mobile schools would be in two modes: two four-wheel drive 2 1/2 ton trucks with self-contained classrooms and teacher/driver housing that can be parked end-to-end for one large classroom, and a helicopter or air-transportable pod (or classroom-fitted large helicopter). The large mobile schools would be reconverted surplus WWII troopships, operating along the Alaskan and West Coast. A unique aspect would be the use of the crews of these vehicles as teachers. Commercial cargo operations might be run as a cost-reducing sideline. The ships would visit various ports of interest (San Francisco, Los Angeles, Vancouver) with field trips ashore.

	Pilot Program	Operational Program
What:	Small truck, airborne, and large ship-borne mobile schools. 1 troop ship (200 students)	Coverage of most remote dispersed school-age population of 20K +: 20 ships (4K)
Where:	West Coast ports.	Arizona - New Mexico - Alaska - Pacific Coast
When:	Start Jan., 1970	Start in Fall, 1972, following evaluation of pilot
How:	Procure and reconvert ships. Recruit and train teacher/sailors.	Same.
Schedule:	1-year operational trial following preparation	1972 start, build up to full capability in 1974
Costs:		
Personnel	20 ship crew/teachers @ \$12,500 ea. yr. = 250k	400 ship crew/teachers (same) = 5,000,000
Facilities:	Classroom A-V, ships 50K	@ 50k per ship = 1,000,000
Equipment:	1 yr. rental 1 surplus ship 200K	20 ships @ 200k each = 4,000,000
Other:	Annual operations costs 150K	Annual operations costs @ 500 k ea = \$10,000,000
TOTAL:	\$650,000	\$20,000,000 (cost/pupil: \$19K)

BIA EDUCATION PROGRAM DESCRIPTION

26(61)

Problem: POOR GUIDANCE COUNSELING due to the poor quality of personnel and lack of staff to insure adequate student-counseling time.

Rationale: The lack of communication between teachers and counselors existing in many schools can be overcome by combining these functions within one individual.

Program Description: TEACHER/COUNSELORS: There are two aspects to this program: The first is to increase the number of qualified psychologists working in the BIA schools to the ratio of one psychologist per school. The psychologist would in turn train teachers to act as guidance counselors for students. Teachers will receive pay for their counseling services. After the initial training period, the staff psychologist would continue in-service training for teacher/counselors, offer expert assistance upon request from teachers, and coordinate the overall guidance program. The teacher/counselors would be able to offer guidance to more students more often than is now the case. Students would be given a choice in the selection of their counselors.

	Pilot Program	Operational Program
What:	Stepped-up recruitment of school psychologists.	Coverage of all small schools can be accomplished by a field psychologist who will work out of a larger school.
Where:	2 locations-both large boarding schools. One on Navajo, other on Oglala Comm. Sch. 2600 or more students/sch.	All Bureau Schools
When:	Sept. 1969	Sept. 1971 - following evaluation of pilot
How:	Selection of own (teacher) counselors at first of school year. Teachers will receive additional pay	Same
Schedule:	Sept. 1969 - June 1971 (2 years)	1971 and should be run at full capacity
Costs:	2 psychologists @ 15,000 = 30,000	100 psychologist @ 15,000 = 1,500,000
Personnel	Teacher incentives @ \$2,000/school x 2 x 15 tchrs/sch = \$30k	Teacher incentives @ 1k x 100 x 15 = 1,500,000 (ap. 15 teachers/sch. or area)
Facilities:	Existing	Existing
Equipment:	Existing	Existing
Other:	Adm @ 20,000/sch. = 40,000	Adm. @ 20,000/sch or area = 2,000,000
TOTAL:	Training @ 10,000/sch. = 20,000 (cost/pupil: \$60) Total cost/year \$120,000	Training @ 10K/sch. or area = 1,000,000 (cost/pupil: \$86) 6,000,000

27(62)

BIA EDUCATION PROGRAM DESCRIPTION

Problem: LACK OF SELF-CONFIDENCE IN COMMUNICATING WITH NON-INDIANS

Due to insufficient contact and working relationships with non-Indian peers. This is particularly acute for Indian students in remote areas.

Rationale: Cross-cultural communications in the home setting will reduce cultural isolation and increase English language facility.

Program Description: PUPIL EXCHANGE PROGRAM - FOSTER HOME METHOD
Elementary school children who would have to spend 9 months in a Boarding school would be placed in non-Indian foster homes where they would stay throughout the school year. Foster parents would be subsidized financially. Older students would have a similar experience except that the stay would be for one month and each student would be required to produce a story about his foster family using photographs for presentation to his class. The foster parents would have children the same age as the Indian children. This would help to increase oral expression in the Indian child with his peers.

	Pilot Program	Operational Program
What:	A foster family program which would eliminate the lack of attention given to Indian children in boarding school.	Same.
Where:	Navajo, Papago, Alaska (45 students each area) 135 students (90 East, 45 South)	All Bureau schools
When:	Sept. 1969	Sept. 1971, upon evaluation of first two years.
How:	Screening, finding foster parents who wish to participate, and getting permission from the Indian family, etc.	50 areas @ 150 per area = 7,500 Stud. part. - 6,000 - elem. & 1,500 high school students
Schedule:	Sept. 1969 - June 1971	Sept. 1971 - June 1973
Costs:		
Personnel:	3 placement workers: @ 10k ea. = 30k Trav: @15k/PW = 45k	50 P.W. @ 10K = 500,000 Travel & Adm. @ 20K/P.W. = 1,000,000
Facilities:	Existing	Existing
Equipment:	Existing	
Other:	Subsidy @135 @ \$100/mox 10 = 135k	Subs. @ 7.5k@100 stud/mo. x 10 = 7,500,000
TOTAL:	Trav. @75 ea. x 135 = 10,125 \$220,125 184	Trav. @75 ea. x 7,500 = \$562,500 (cost/pupil: \$360) \$9,562,500

8/68) BIA EDUCATION PROGRAM DESCRIPTION

Problem: LACK OF PARENTAL SUPPORT FOR STUDENTS DUE TO LACK OF KNOWLEDGE OR MEANS BY WHICH THEY CAN EXERT SUPPORT

Rationale: Parents will reinforce educational activities if they are involved in student evaluation.

Program Description: PARENT EDUCATION IN STUDENT EVALUATION METHODS

Parents will learn the value of such communications devices and techniques as report cards, meetings with the teacher, and asking children performance-related questions. These devices will be presented in the framework of alternative paths in education and career.

	Pilot Program 1500 students	all students Operational Program
What:	one 15 minute film on using report cards, one 1-hour small group instructional program concerning other student evaluation techniques	Same, plus a pamphlet which (5 films) which would be distributed to all parents with children attending BIA schools
Where:	At 1 elementary and 1 high school at one midwest and 1 southwest reservations	At all schools
When:	Fall, 1969	Spring, 1970, if successful
How: develop film develop group program	Contact all parents personally, and invite them to the film showing. Arrange small-group sessions through a tribal education Committee	Develop pamphlet by a team of BIA staff members.
Schedule:	Development summer 1969 Admin before reports 1969	Develop winter 1969-70 Admin. spring 1969-70
Costs:	(Dev) @ 75 man-days @ \$50/day = \$3,750	First year 2500 man-days @ \$50/day = 125k After 500 man-days @ 50/day = 25k
Personnel		
Facilities:	travel and adm. @ 2k/sch. x 4 = 8k	travel & adm. = 125,000 travel & admin. = 25k
Equipment:	program 10,000	books 30,000 same = 10k program 50,000 same = 10k
Other:	film 12,000	5 films @ 12k = 60k none
TOTAL:	\$33,750	\$390k \$70k

24(69) BIA EDUCATION PROGRAM DESCRIPTION

Problem: POOR STUDENT ABILITY OR ORAL EXPRESSIONS, POOR PARENT PERCEPTION OF SCHOOLS AND ITS FUNCTIONS.

Rationale: Parental ignorance of school activities can be overcome by student briefings, also giving students exercise in formal oral expression.

Program Description: PARENT SCHOOL ORIENTATION: outstanding students would prepare and give parent orientation presentations in their home communities. Students would speak informally on academic and social activities at the school, school staff, living conditions, etc. Talks could be illustrated with slides, pictures, and examples of student work. Students would also be available to answer questions from parents. In addition to being a way of informing parents about the ongoing functioning of the school, the program would reward outstanding students by enabling them to face their home communities as "experts" on their schools and would give students increased opportunity for refining communication skills. The students would work in teams of two; each community would be visited annually by a team from each school that local children attend.

	Pilot Program	Operational Program
What:	Trips conducted during school year. Visits own community 20 visits taken from each each school per year. Some one-day trips others may be from 1-3 days.	Same
Where:	Phoenix Indian School, Flandreau, Wingate	All Bureau Schools (230 schools)
When:	Sept. 1969	Sept. 1971
How:	Starting project after 1st semester. Trips taken in Spring. Scheduling by school setup. Teachers select students	
Schedule:	Sept. 1969 - June 1971	Sept. 1971 - June 1973
Costs:		9,200 children
Personnel	1 teacher for every 2 students as chaperone. Incentive to both (travel) 20 trips from each sch. 120 kids 60 teachers. Existing	
Facilities:	Average trip=2 days, Room and board-@\$20/da. \$7,200	Average trip 1 day, Room & board @ \$20/da. = \$184,000
Equipment:	Slides, pictures @ \$500/sch. = \$1.5k	Film @ 500 per sch. = \$115,000
Other:	Transportation @\$50 ea x 180 = \$9k	Transportation= aver. 50/ stu. \$460,000
TOTAL:	\$17,700	\$759,000 (cost/pupil: \$13)

0 (71)

BIA EDUCATION PROGRAM DESCRIPTION

Problem: LACK OF PARENT PARTICIPATION IN SCHOOL PROGRAMS DUE TO LACK OF EDUCATION

Rationale: The instructional capacities of rural schools can be multiplied by recruiting and training parents as paraprofessional teachers.

Program Description: PARENT EDUCATION THROUGH MASTER TEACHERS: Master teachers assigned to each reservation will train a small seed group of parents on the reservation (5-10) to teach other parents such things as Home Care, Child Development, Budgeting, Community Organization, English, Reading, Math, etc. The Parent Teachers would hold their classes at the local school where a free dinner could be offered as an incentive for parent students to attend. The master teacher would continue to work with the seed teachers in a consulting advisory capacity.

	Pilot Program	Operational Program
What: Hiring Master Teachers to train Local Parent Ed. Teachers	Each MT to train 5-10 local parent teachers who in turn would set up education classes in own area working with approximately 10 local parents.	Optimal goal would be to have all participants pass a high sch. equivalency test. Parents will get paid in cash for attending classes.
Where:	Navajo, Alaska and Papago - where parents have low education	- All reservations with poor parent education level - 25 areas
When:	Sept. 1969	Sept. 1970
How:	Working with local school for use of facilities for training purposes and getting clearance to earn high school credits in courses taken.	
Schedule:	Sept. 1969-June 1970 - 1 year	Sept. 1970 - June 1972
Costs:		
Personnel	3 MT @ 12,000 ea. = 36,000 15 LPET @ 3,000 ea. = 45,000 (local) 15 areas (include training classes)	25 MT @ 12,000 ea. = 300,000 125 LPET @ 3,000 ea. = 375,000
Facilities:	Local rental of classroom @ 15,000 (1000/local area)	Local rental of classrooms @ 1000/local area = 125,000
Equipment:	Adm. A 10,000/Regional area x 3 = 30k	Adm. @ 10,000/Regional area x 25 = 250k
Other:	Training/reg. area 10,000 x 3 = 30k	Training/area = 10 x 25 = 250k
TOTAL:	parent incentive @ 100 ea. x 150 = 15k \$171,000 187	Parent incentive @ 100 ea. = 1250 parents in all = 125k \$1,425,000

31 (80) BIA EDUCATION PROGRAM DESCRIPTION

Problem: CULTURAL ISOLATION, LANGUAGE BARRIER

Rationale: Cultural isolation can be reduced, and English language learning increased, by bringing a large minority of non-Indian students into BIA schools.

Program Description: INTEGRATED BIA SCHOOLS: Local non-Indians would be invited to attend BIA schools to provide Indians with early, in-school cross-cultural experiences and to improve learning of English. Poor rural non-Indian children from remote dispersed homes would be encouraged to attend BIA boarding schools. Target would be up to 50% non-Indian attendance.

	Pilot Program	Operational Program
What:	Integrate BIA schools: At 4 schools: 2 boarding, 2 day, (2 elementary, 2 high school) Increase ADA by 25% non-Indians	All BIA schools near non-Indian populations 150 schools
Where:	2 in plains 2 in Southwest	Everywhere
When:	9/69 - 6/71	9/71
How:	Recruit added teachers, Build added classrooms, Recruit non-Indian students	Same.
Schedule:	2-year trial	9/71
Costs:	existing tchrs. + 2 more for each school: 8 tchrs. @ 10k = 80k	existing tchrs. + 2 more for each school = 300 x 10k = \$3,000,000
Personnel		
Facilities:	Build 1 more classroom at 4 schools @ 15k ea. = 60,000	150 sch. x 15k ea. = 3,250,000
Equipment:		
Other:	Recruiting, administrative overhead @ 15k ea. = 60,000	Recruiting, admin, overhead @ 15k ea. x 150 = 3,250,000
TOTAL:	200,000	\$9,500,000

(82)

BIA EDUCATION PROGRAM DESCRIPTION

Problem: Lack of industrial development on reservations principally because of the high cost of locating on reservations.

Rationale: A labor subsidy to the unemployed, which would accrue to employers both on and off reservation, would encourage industrial development and employment of Indians.

Program Description: Each unemployed Indian would get a voucher which would be worth \$2000 to his employer, if such a person were unemployed. This labor subsidy would be in effect for 5 years. Thus providing a continuing incentive to the employer to keep the person employed. This policy should be contrasted to the present BIA labor subsidy for training which is only for an 18-month period after which there is no incentive to maintain the employee, thus creating a high labor turnover.

	Pilot Program	Operational Program
What:	Labor subsidy	Labor subsidy
Where:	Pine Ridge for 1300 unemployed	Every Indian reservation for about 20,000 Indians
When:	Fiscal year 1969	Fiscal year 1971, when results from field program are available
How:	By BIA and/or EDA, Dept. of Labor, OEO	Same
Schedule:	Program to last for 5 years	5 year program starting Fiscal year 1971
Costs:	10 personnel @ 8000 = \$80k	100 personnel @ 8k ea. = \$800k
Personnel		
Facilities:	offices @ adm. @ 50k (operation)	20 offices @ 50k ea. (also admin) operation = 1,000,000
Equipment:	none	
Other:	1300 x \$2000 = \$2,600,000	20,000 x \$2000 = \$40,000,000
Subsidy		
TOTAL:	2,730,000 max. (for 5 years = \$13,650,000)	41,800,000 per year (209,000,000 for 5 years)

33 (87) BIA EDUCATION PROGRAM DESCRIPTION

Problem:

Poor alternatives of boarding school with inadequate home life or day school with inadequate instruction.

Rationale: One centralized school could serve two old ones of equal size, realizing an economy in one facility, using the same total teaching and other staff, working 2, two-week periods followed by 2 weeks off.

Program Description:

Periodic Centralized School. Rather than spend 30 weeks at a boarding school with 6-hour school days and infrequent vacations, students would attend school in intensive (10-hour study day) 6-day week) 2-week periods and go back home for 4 weeks.

	Pilot Program	Operational Program
What:	2 high schools serving a homogenous area, using only one physical plant est 1500 students	as many boarding schools as possible (est 50 consolidated to 25) (25,000 students)
Where:	Southwest	
When:	2 yr trial, 9/69-9/70	9/72 if successful
How:	Recruit staff. Develop programs. Staff & consultants would provide usual services.	same
Schedule:	recruitment 5/69 development 5/69 - 8/69 start 9/69	same
Costs:		
Personnel	} all costs similar	} all costs similar
Facilities: some saving		
Equipment:		
Other:	travel = 6 extra round trips per child at \$40 = \$240,000	travel = \$40 x 25,000 x 6 = \$6,000,000 prog. redesign = \$20k
TOTAL:	prog. dev. = 10k evaluation = 10k (cost/pupil: \$220) \$380,000	\$6,020,000 (cost/pupil: \$240)

491)

BIA EDUCATION PROGRAM DESCRIPTION

Problem:

Adult education and support for education.

Rationale: Impersonal computerized instruction may be more acceptable to some adults embarrassed by attending formal classes.

Program Description:

Reservation equivalent of storefront computerized instruction centers to be located at local community center, trading post, etc. Computers teach 4 three-hour courses of interest to both young and older adults (such as consumer education, tribal history, local agriculture management, home management, citizens legal right, etc.). Centers open during hours when adults most likely to be in town for a total of about 40 hours/week. Local people free to drop by and use facilities when they wish.

	Pilot Program	Operational Program
What:	Two computer terminals located in community center or reservation near time sharing computer - teaches 4 three-hour courses.	Seven centers.
Where:	Navaho reservation (time sharing computer in Phoenix) probably in Window Rock.	Sizeable reservations relatively near time sharing computers.
When:	Spring 1970.	Spring 1971.
How:	Develop instructional materials, rent computers & space. Publicize locally.	Same - developing 2 new courses /year.
Schedule:	Immediately - Spring 1970 - Develop materials. Open Spring 1970 - try for one year.	2 new centers/year/up to 70 centers.
Costs:		
Personnel	Proctor at 8K/year.	7 Proctors @8K/year = 56K.
Facilities:	Rent Space @ 1K/year ea. = 2K	Rent Space = @1K/year ea. = 7K
Equipment:	2 terminals @ 150/mo. each 2K/year = 4K	14 Terminals @ 2K/yr ea. = 28K Dev. 6 new courses @ 10K ea = 60K
Other:	Develp. 4 3hr. courses @ 10K/course = 40K	Computer time - 112K/year. Tolls & Maintenance @ 2, 5K ea/yr
TOTAL:	Computer time 15hr./wk. @20/hr. = 16K/year. Tolls - Maintenance = 5K/yr. Total - 75,000-191	Fully operational program Total - 298,000

15 (15) BIA EDUCATION PROGRAM DESCRIPTION

Problem: POOR MOTIVATION AND CULTURAL AND GEOGRAPHIC ISOLATION

Rationale: Presently, it is fairly easy administratively for an Indian in a public school to get into a BIA boarding school, but it is harder for him to transfer out, except on his own initiative. A Guidance Counselor actively pursuing the public school placement of pupils, either at home or in foster-home communities would increase the pupils' motivation to do well so that they can transfer back to the more racially mixed public school environment. At present, there seems to be little reward for rehabilitation of semi-delinquents or for students who left public school because of poor home life and now do well in BIA schools.

Program Description: Guidance Counselors devoted to public school placements.

	Pilot Program	Operational Program
What:	1 guidance counselor in 3 schools to actively seek public school placement of dissatisfied but bright and well-behaved students	Same in all BIA boarding schools
Where:	Flandreau; Albuquerque, and Concho	19 BIA boarding high schools
When:	Fall 1969	Fall 1970 if pilot is successful
How:	Add one guidance counselor to the schools concerned; he should stay out of other problems (e. g., grad. placement) caused by present under staffing.	Same
Schedule:	Recruit now	
Costs:		
Personnel	3 guidance counselors @ \$10,000/yr. 30,000	19 staff @ 10K 190,000 3 area staff @ 12K 36,000
Facilities:		
Equipment:		
Other:	overhead & support from other BIA field staff 30,000	Same 226,000
TOTAL:	\$60,000	\$452,000



36 (106) BIA EDUCATION PROGRAM DESCRIPTION

Problem: Adult Education

Rationale: A community or "folk" school with a wide range of ages, skills and educational levels within the student body would provide great potential for informal peer teaching and the trading of information and hard and social skills within the student group.

Program Description: FOLK SCHOOL FOR INDIAN ADULTS OF ALL AGES: School would take both boarding and day students. There would be no educational prerequisites for admission. Instruction would be in both Indian languages and English. Curriculum would be based on needs and skills of students and could include such things as community and political organization, home management, Indian crafts, carpentry, consumer education, agricultural skills, written and spoken Indian languages, English, etc. School would include nursery for mothers with children; nursery could also serve as laboratory for students studying child care. Students could do maintenance work (cooking, keeping up buildings and grounds) and could carry out the construction of additional facilities. Enterprises associated with the school such as a farm or crafts shop could provide products for school use and for sale.

	Pilot Program	Operational Program
What: Indian Folk School	One school serving 100 students - 50 boarding, 50 day	3 schools serving 600 students - 1/2 boarding, 1/2 day
Where:	off, but near Navajo reservation	1 Southwest 1 Plains, 1 Oklahoma
When:	2-year trial starting 9/70	9/72 (if successful)
How:	contract with outside firm to provide everything	Same
Schedule:	Get contract 6/69 Select students - 6/70 Open - 9/70	Get contracts - 6/71 Select students - 6/72 Open - 9/72
Costs:	4 Guid. Coun. @ 12k = 48k 1 administrator @ 12k 6 teachers @ 10k ea = 60k	10 Guid. Coun. @ 12k = 120k 3 administrators @ 12k = 36k 18 teachers @ 10k = 180k
Personnel		
Facilities:	Existing = operation @ 200k (with dormitories)	operation @ 200k ea = 600k
Equipment:	@ 100k	100k ea = 300k
Supplies:	50k	50k ea = 150k
Other:	Program Planning - 50k Curriculum Dev. - 150k	Program Redesign = 50k
TOTAL:	Evaluation @ 50k \$570k	\$1,436,000

37(107) BIA EDUCATION PROGRAM DESCRIPTION

Problem: Continuing Education for Indian High School Graduates on the Reservation

Rationale: Through the free university system Indians with work or family responsibilities on the reservation could plan and carry out their own continuing education.

Program Description: INDIAN FREE UNIVERSITY: Groups of Indian high school graduates on the reservation would organize study groups and locate teachers to direct their studies. With the teacher, students would write statement of objectives for the course, outline the course, decide what books and materials they would need, and state how they plan to report on their progress. BIA would negotiate with local universities for academic credit to be granted for free university studies. Students would submit their application to a cooperating university. If application is approved, university would forward application to BIA for money grant to cover teacher pay and necessary course materials. The free universities would require no extra facilities; classes could be held in homes or local community center.

	Pilot Program	Operational Program
What:	Indian Free University System	
Where:	10 study groups of 10-20 (all/any reservations)	100 study groups (any/all reservations)
When:	1 year trial starting 9/69	9/70
How:		
Schedule:	negotiate with univ. for credit 3/69 publicize program 4&5/69 accept applications 6&7/69 award grants 8/69	9/70 on
Costs:		
Personnel	10 teachers (pt) 50k (5k/course)	100 teachers (pt) 5k/course = 500k
Facilities:	Existing	Existing
Equipment:	Books & course materials @500/group = 5k	Books & course materials @500/group = 50k
Other:	publicity 5k planning 25k	ongoing publicity 20k program redesign = 50k
TOTAL:	evaluation 30k 70k	620k



130(111) BIA EDUCATION PROGRAM DESCRIPTION

Problem: Alienation of Indian Parents from the Educational Process; Morale of Boarding School Pupils.

Rationale: Parents would take more interest in boarding schools if facilities were made available for them to be able to visit at little or no cost to them.

Program Description: INCREASE FACILITIES AND OPPORTUNITIES FOR PARENTAL INVOLVEMENT; students would build facilities and prepare special programs and projects for frequent parents' visits. Incentive for parents would be fare and room and board for a week's visit to vocational and high schools.

	Pilot Program	Operational Program
What:	Employ students in vocational and high schools to build facilities for parental visits; provide parents with fare for 1-week visit yearly.	Same.
Where:	4 schools (large boarding schools): Riverside; Phoenix; OCS, and Haskell.	10 large boarding schools.
When:	September, 1969.	Upon evaluation, Sept., 1971.
How:	Provide materials, direction, "airchecks" to parents.	Same.
Schedule:	Sept., 1969-Sept., 1971.	Sept., 1971-Sept. 1975.
Costs:	Students, Instructors, etc. Existing.	Same.
Personnel		
Facilities	4 bldgs. to board parents @ 50k ea. = 200k	10 bldgs. @ 50k ea. = 500k
Equipment	Beds, dressers, etc. @ 10k ea. = 40k	Same @ 10k/school = 100k
Other:	Parent fare @ average of 20k/sch Evaluation = 25k / = 80k	Same @ 20k/school = 200k Food @ 10k/school = 100k
TOTAL:	Food, etc. @ 10k/sch = 40k \$385,000-195	\$900,000

14)

BIA EDUCATION PROGRAM DESCRIPTION

Problem: Disintegration of School with the Indian Community.

Rationale: Economics of scale and advantages of community and parent involvement may be realized by consolidating school and community libraries.

Program Description: TO ENCOURAGE COMMUNITY PARTICIPATION IN THE ACTIVITIES OF THE SCHOOL, school and community libraries should be combined within or adjacent to the school buildings. A large section of the library should be devoted to books dealing with Indians, in order to increase the likelihood of the community's use of the facility.

	Pilot Program	Operational Program
What:	Combine school and community libraries in or adjacent to school.	Same.
Where:	4 schools: Plains and Southwest.	50 schools.
When:	September, 1969.	September, 1971 upon evaluation.
How:	Purchase books and build facilities, where necessary.	Same.
Schedule:		
Costs:	4 f-t librarians @ 8k = 32k	50 f-t librarians @ 8k = 400k
Personnel		
Facilities:	Est. of 10k/area = 40k	Est. @ 25/sch. @ 10k = 250k (other areas facilities exist)
Equipment:	None.	None.
Other:	Books @ 5k/school = 20k	Books @ aver. 5k/sch. = 250k
TOTAL:	\$92,000 196	\$900,000

BIA EDUCATION PROGRAM DESCRIPTION Social Studies Curriculum (9-12)

Problem: Exposure to Social Science Disciplines; Developing Analytical Skills; Analysis and Resolutions of Social Problems

Program Description and Rationale:
 The conceptual framework of the 7-12 grade social studies curriculum is human problem solving. Students will examine the ways different kinds of social, political, and economic problems are identified or make themselves known, how different kinds of problems happen; how to analyze problems, how to organize resources to resolve problems, and how to predict and control the occurrence of future problems. The approach will be both cross-cultural and historical. (See the following two sheets for more detail on 7-9, 10-12 curriculum.)

The curriculum will use a wide range of media from printed materials, movies, games, and simulations to the natural and human resources of the students' home community. Curriculum materials for each study unit will include printed background information, games and simulation exercises, guidelines for developing alternative student exercises, references to resource material not included in the curriculum package, and guidelines for using them.

	Pilot Program	Operational Program
What: Social Studies Curriculum	3 Jr./Sr. High Schools	All high schools
Where:	Steward Indian School, OCS, Phoenix Indian School	all high schools.
When:	7th grade ready school year '70-'71 8th and 9th grade ready school yr. 71-72 10th and 11th grade ready school yr. 72-73 12th grade ready school year '73	7th gr. 9/71 on 8th & 9th grade 9/72 10th & 11th gr. 9/73 12th grade 9/74 on
How:	Develop & produce curriculum materials	Same
Schedule:	(See following 2 pages)	
Costs:		
Personnel	Curriculum materials dist. for 6 years \$1.5 million	
Facilities:		
Equipment:	Materials production for about 2250 kids 18K	Materials production for about 18,000 kids \$144,000
Other:		
TOTAL:	\$1,518,000	\$144,000

144(142)

Program Description: By being "walked through" decisions of varying levels of complexity, junior high students will be exposed to a number of perceptual approaches and analytical skills useful for problem solving. On the senior high school level students will exercise these problem solving tools by themselves taking on responsibility for resolving real and hypothetical decision-makers. The student consultants will work on a competitive basis. Two or three class teams will simultaneously be working on the same problem, and each team must ultimately recommend solution to the problem under study. Solutions will be evaluated by both the teacher and the rest of the class and when possible outside experts.

Some of the study problems will refer to issues already on the junior high level such as:

advising Truman on the recognition of Israel.

advising Krushchey on how to handle the Hungarian or Polish crises in the 50's.

Some problems will open up entirely new areas of study. Others will be related to studies in other areas of the curriculum (advising Hickel on off-shore drilling can be related to material the student has learned in science) or to issues the student is familiar with through his non-school experience (advising a local trading post proprietor who must increase sales or go out of business; advising the school principal who wants the adult Indian community to become more involved in the schools, etc.)

As in the junior high course study problems will be selected so that the student is required to exercise problem solving skills of various levels of (over)

	Pilot Program	Operational Program
What: Social Studies Curriculum	3 high schools	all junior and senior high schools
Where:	Stewart Indian School, OCS, Phoenix Indian School	all junior and senior high schools
When:	10th & 11th grs. ready 9/72 12th gr. ready 9/73	10th & 11th grs. 9.73 on 12th gr. 9/74 on
How:	develop and produce curriculum materials	Same
Schedule:	10th & 11th Gr. dev't. 5/71-5/72 produce 6/71-7/71 12th gr. dev't 5/72-5/73 produce 6/73-7/73	10th & 11th gr. 9/73 on 12th Gr. 9.74 on
Costs:		
Personnel	curriculum materials dev't for 3 yrs. \$750,000.	
Facilities:		
Equipment:	materials production for about 1250 kids 10,000	materials production for about 8000 kids \$66,000
Other:		
TOTAL:	\$760,000/98	\$66,000

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sophistication and acquire and use information from a range of social science disciplines.

2(143) BIA EDUCATION PROGRAM DESCRIPTION

Problem: Teaching primary (grades 1, 2, and 3) school science

Rationale: Direct and palpable experience is believed to be a strongly motivating way of teaching elementary science.

Program Description:

Students will study basic ecology, utilizing first the plants and animals of their own environment and then those of others. Heavy reliance on personal observation, field trips, visual materials. Hunting games, tracing games, bird call games, animal sound games, permitting simple discussion of species differentiation. Food chains, habitat, populations discussed. Growing of different types of plants in greenhouses, terraria, aquaria. The desert and plains; other types of terrain and the plants and animals inhabiting them studied.

	Pilot Program	Operational Program
What:	Curriculum materials; printed, photographic, film, simulatory, auditory; teacher guides.	
Where:	2 Plains schools 1 Southwest school 1 Eskimo school	
When:	School year 1970-1971	
How:	Curriculum design; compilation of materials; filming; taping; writing guides.	
Schedule:	6/69-11/69	
Costs:		
Personnel	15 persons, 5 months 25 man-months @ \$3,000 \$15,000	
Facilities:	12 projectors, recorders, etc. \$12,000	
Equipment:	12 aquaria, terraria, greenhouses, plants animals \$48,000	c. 200 x \$12,000 \$2,400,000
Other:	printed and visual materials for 150 \$15,000	100 x \$13,000 \$1,300,000
TOTAL:	\$285,000 200	\$3,700,000

3 (144) BIA EDUCATION PROGRAM DESCRIPTION

Problem: Teaching elementary school science (Grades 4, 5, and 6)
Rationale: Indian children will be more motivated to learn if traditional Indian beliefs about the subject are compared with non-Indian theories.
Program Description:

Students will study the origins of the natural phenomena observed in the first three grades: Indian and non-Indian magical explanations of natural phenomena, and the development of Western thought from pre-scientific to scientific modes. Beginning of teaching of evolution: trait-adding game to illustrate advantages of some mutations. Origins of the solar system; of life; of species; of individual plants and animals. Last tied to beginning of sex education, developed through all three grades. Reliance on visual, written, auditory, simulatory materials, in addition to personal observation and field trips. Genetics, heredity, animal behavior observed in laboratory animals.

	Pilot Program	Operational Program
What:	Curriculum materials: printed, photographic, film, simulatory, auditory; teacher guides.	
Where:	2 plains schools 1 Southwest school 1 Eskimo school	all elementary schools
When:	school year 1970-1971	1971 on, on evaluation
How:	Curriculum design, compilation of materials, filming, taping, writing guides.	
Schedule:	6/69-1/70	
Costs:		
Personnel	15 persons, 7 months, 105 man-months @ \$3,000 \$315,000	
Facilities:	none	
Equipment:	projectors, recorders, aquaria, terraria, plants, animals etc.	\$15k x 200 \$3,000,000 \$60k
Other:	printed and visual mat'ls	\$15k 100 x \$10k \$1,000,000
TOTAL:	\$390,000 201	\$4,000,000

44 (145)

BIA EDUCATION PROGRAM DESCRIPTION

Problem: Teaching junior high (grades 7, 8, and 9) school science

Program Description:

The students will examine the adjustments which man and animals make in their environment to make it better suited to their needs, and the adjustments which man, animals, and plants make in their own needs to suit themselves better to their environment. Natural selection, evolution, and ecology will be studied in greater detail; pigmentation and racial differentiation in man will also be discussed. Students will be introduced to technology through games with simple machines; they will be encouraged to solve specific problems through simple technological inventions. The similarities between man's technological innovations and structures found in nature will be examined. Students will examine and illustrate by experimentation such such alterations in the environment as cloud seeding, irrigation, soil fertilization, animal breeding, plant grafting, etc. The teaching of biology, physiology, physics, and chemistry will be closely associated, rather than differentiated into separate courses. (Sample units, illustrative of the method used throughout, are attached.)

Rationale: At an age when students are very concerned with controlling their environment, a technology-oriented science course will be perceived as more relevant and hence interesting.

	Pilot Program	Operational Program
What:	Curriculum materials; printed, photographic, film, simulatory, auditory; teacher guides.	
Where:	2 plains schools 2 Southwest schools	all junior high schools
When:	school year 1970-1971	1971 on, on evaluation
How:	curriculum design, compilation of materials, filming, taping, game design, writing guides:	
Schedule:	6/69-3/70	
Costs:	15 persons, 9 mos., 135 man-mos @ \$3,000--\$405,000	
Personnel		
Facilities:	none	
Equipment:	12 projectors, recorders, aquaria, chemicals, tools, plants, animals, etc. \$96k	\$24k x 100 \$2,400,000
Other:	printed & visual mat'ls \$24k	\$1,150,000
TOTAL:	\$525,000	\$3,550,000



145 (146) BIA EDUCATION PROGRAM DESCRIPTION

Problem: Teaching senior high (grades 10, 11, and 12) school science

Program Description:

The senior high school science curriculum will combine the approaches of observation, explanation of origin, and adaptation. A mixture of courses will be offered; sex education will be continued, and will consider birth control and population control methods. More standard courses in chemistry and physics will be offered, again tied to relevant environmental material and other scientific disciplines. Courses in computer programming, aeronautics, and rocketry will serve as a "reward" to students who remain in school to the twelfth grade, as will a course in myth, magic, and dream interpretation.

Rationale:

Observationally-oriented science will be strongly motivational for senior high school students concerned with post-high school careers.

	Pilot Program	Operational Program
What:	curriculum materials, printed, photographic, film, simulatory, auditory, teacher guides.	
Where:	2 plains schools 2 Southwest schools	all senior high schools
When:	school year 1970 to 1971	1971 on, on evaluation
How:	curriculum design, compilation of mat'ls, filming, taping, game design, writing guides:	
Schedule:	6/69-5/70	
Costs:	15 persons, 11 mos, 165 mm @ \$3,000 \$495,000	
Personnel		
Facilities:	hangars, launching sites, etc. \$40,000	29 x \$10k \$290,000
Equipment:	projectors, recorders, chemicals, airplanes, animals etc.	\$200k 29 x \$50k \$1,450,000
Other:	printed and visual mat'ls for 300 \$30,000	8,500 x 100 \$850,000
TOTAL:	\$765,000 203	\$2,590,000

(51)

BIA EDUCATION PROGRAM DESCRIPTION

Problem: CULTURAL ISOLATION, INADEQUATE HOME LIFE, LOW INTELLECTUAL STANDARDS AND INADEQUATE INSTRUCTION in remote areas having dispersed school populations, such as the Navaho reservation and Alaska.

Rationale: Mobile schools would overcome the problems of isolation by other means than that of fixed boarding schools with their inadequate home life, or small dispersed and educationally inadequate one-room schools.

Program Description: MOBILE SCHOOLS, both large and small.

The small mobile schools would be in two modes: two four-wheel drive 2 1/2 ton trucks with self-contained classrooms and teacher/driver housing that can be parked end-to-end for one large classroom, and a helicopter or air-transportable pod (or classroom-fitted large helicopter). The large mobile schools would be reconverted surplus WWII troopships, operating along the Alaskan and West Coast. A unique aspect would be the use of the crews of these vehicles as teachers. Commercial cargo operations might be run as a cost-reducing sideline. The ships would visit various ports of interest (San Francisco, Los Angeles, Vancouver) with field trips ashore.

	Pilot Program	Operational Program
What:	Small truck, airborne, and ship-borne mobil schools: 1 helicopter (for 20 students)	Coverage of most remote dispersed school-age population of 20K +: 100 helicopters (4K)
Where:	1 helicopter in Alaska 1 term Navajo 1 term.	Arizona - New Mexico - Alaska - Pacific Coast
When:	Start Jan., 1970	Start in Fall, 1972, following evaluation of pilot
How:	Procure and reconvert heli recruit and train teacher/pilots	
Schedule:	1-year operational trial following preparation	1972 start, build up to full capability in 1974
Costs:		
Personnel	2 pilot/teachers @ 15k each = 30k	200 pilot/teachers @ 15k each = \$3,000,000
Facilities:	Classroom A-V, helicopter @ 5k each = 10K	Same @ 5k each x 200 = 1,000,000
Equipment:	1 yr. rental, helicopters @ 50k each = 100K	200 helicopters (rental) 10,000,000
Other:	Annual operations costs @ 50k each = 100k	annual operations costs 10,000,000
TOTAL:	\$240,000 204	\$24,000,000

89)

BIA EDUCATION PROGRAM DESCRIPTION

Problem: POOR HOME LIFE IN BOARDING SCHOOLS

Yet the only other alternative for students living in very remote, sparsely settled areas is poor one - room schoolhouse or no school at all.

Rationale: The best of every school could be offered to each school if they are netted together electronically.

Program Description:

Multiple small day schools accessible to dispersed remote population in all weather, providing instruction comparable to larger schools by use of CCTV, ETV, VTR's. All-weather access provided not by expensive good roads but by Ground Effect Machine (GEM's) and snow-cat school buses.

	Pilot Program	Operational Program
What:	Network of small dispersed day schools supported by advanced transport & ETV & CCTV: 2 groups of 5 small 1-room schools netted together.	Same.
Where:	Navaho, Alaska	All dispersed elementary school population areas (mostly Arizona and Alaska).
When:	September, 1969	September, 1971
How:	-purchase ETV-CCTV links, VTR's, -procure vehicles -train special teachers, -build one-room schools	Same.
Schedule:	Sept. 1969 to June 1971 --2 year trial	Sept 1971 -- Sept. 1973
Costs:		
Personnel:	existing	
Facilities:	10 1-room schools @ 20,000 200,000	500 10,000,000
Equipment:	CCTV links, VTR's 2 GEM's / school 500,000	25,000,000/
Other:	R & D program 100,000	500,000
TOTAL:	800,000	35,500,000

APPENDIX C

MONTHLY AND QUARTERLY EDUCATION

DIVISION MANAGEMENT REPORTS

1. Format
2. Data Requirements and Sources
3. Frequency of Reports and their Recipients

STATEMENT: EDUCATION DIVISION REPORT No. 1

Data Describing: xxxx xxxx Distribution No.: xxxxxx Date xx/xx/xx
 (Location: project no.)

Cost Code	Nomenclature	Planned Program	To-date Planned Program	To-date Actuals	To-Date Program Difference
Totals					

DATA REQUIREMENTS

EDUCATIONAL DIVISION REPORT No. 1

<u>Data</u>	<u>Source</u>
Cost codes	IADC
Nomenclature/cost code	IADC
Planned program	Central Office Education Division
to-date planned program	Central Office Education Division
to-date actuals/cost code	IADC
to-date program difference	calculated

STATEMENT: EDUCATION DIVISION REPORT No. 1 and No. 3

Frequency of reports and their Recipients

IADC OUTPUTS:

**Individual
School
Information**

**Agency
Summary**

**Area
Summary**

**Washington
Summary**

DATA TO:

School	monthly*			
Agency	monthly*	monthly		
Area	quarterly	monthly	monthly	
Washington	quarterly	quarterly	monthly	monthly

*Exception reports only; full report sent quarterly

STATEMENT: EDUCATION DIVISION REPORT No. 2

Data Describing: xxxx xxxx Distribution No.: xxxxxxxx Date: xx/xx/xx
 (Location or school)

Personnel Type	Authorized Personnel	Actual Personnel	Students/Type
Total and Averages	(Total)	(Total + %)	(Average)

DATA REQUIREMENTS

EDUCATION DIVISION REPORT No. 2

Data	Source
Personnel types	IADC
Authorized personnel	Central Office Education Division
Actual personnel	IADC
Student/type	Central Office Education Division-- to be calculated for relevant positions

STATEMENT: EDUCATION DIVISION REPORT No. 2

Frequency of the Reports and their Recipients

IADC OUTPUTS:

Individual
School
Information

Agency
Summary

Area
Summary

Washington
Summary

DATA TO:

School	F*			
Agency	F*	quarterly		
Area	F*	quarterly	monthly	
Washington	F*	quarterly	F*	monthly

*Frequency: monthly - July 31 to September 31, then quarterly - December 31, March 31 and June 30.

STATEMENT: EDUCATION DIVISION REPORT No. 3

Date: xx/xx/xx

Distribution No.: xxxxx

Data Describing: xxx xxx

Planned Enrollment	Average Daily Membership	Average Daily Attendance	Planned Dorm Occupants	Average Daily Dorm Membership
	year month	year month		year month

Cost Element	Planned \$ Pupil	Actual \$ Pupil

DATA REQUIREMENTS

EDUCATION DIVISION REPORT No. 3

Planned enrollment	not available at present
Average Daily Membership	at present available for past year only
Average Daily Attendance	at present available for past year only
Planned Dorm Occupants	Central Office Education Division
Average Daily Dorm Membership	at present available for past year only
Cost elements	Calculated using IADC data
Planned \$/student	Central Office Education Division-- to be calculated
Actual \$/student	Calculated using IADC data

STATEMENT: EDUCATION DIVISION REPORT No. 1 and No. 3

Frequency of reports and their Recipients

LADC OUTPUTS:

Individual
School
Information

Agency
Summary

Area
Summary

Washington
Summary

DATA TO:

School	monthly*			
Agency	monthly*	monthly		
Area	quarterly	monthly	monthly	
Washington	quarterly	quarterly	monthly	monthly

*Exception reports only; full report sent quarterly.

APPENDIX D

INSTRUCTIONS FOR MODEL USE FOR
PROGRAM MIX COST-EFFECTIVENESS MODEL

Program Mix Cost-Effectiveness Model

Introduction

The Program Unit Cost-Effectiveness Model is designed to help the administrator evaluate the effectiveness of alternative mixes of future expenditures. It accomplishes this by providing a straightforward way of asking the user to make explicit the relative importance of various problems, the relevance of each program in dealing with each problem, the user's confidence in the program, and program cost.

As presently designed, the model is based on nineteen ad hoc categories of Indian education problems which were used to evaluate programs generated during the present study. The BIA user may wish to modify, add to or delete from this problem area list to suit his own particular needs or conceptualization of problems. Such modification will not affect the basic logic of the model, and if it increases the model's utility for the user, it is to be encouraged.

A more detailed description of the model, underlying theory, and additional treatment of results is discussed in Volume IV, Chapter XI.

Instructions for Model Use

1. Distribute 100 IMPORT points among the nineteen problem areas according to the perceived relative importance of the problems. Enter IMPORTs on computation worksheet.
2. Rate each program's relevance to each problem area on a zero-to-one point scale, with one point for maximum (100%) relevance, where relevance may be defined as the percentage of the problem area population affected by the program. Enter this relevance rating in the left-hand part of the cell that is the intersection of the particular problem row and program column.
3. Rate each program's effectiveness in responding to each problem area on a zero-to-one point scale (0-100%), and enter this effectiveness rating in the cell that is the intersection of the particular problem row and program column.

4. For each program, determine confidence on the following basis:

- 0.8 to 1.0 = proven in the BIA
- 0.6 to 0.8 = proven in a similar population
- 0.4 to 0.6 = proven in a dissimilar population
- 0.2 to 0.4 = theoretical basis
- 0.0 to 0.2 = favorable opinion

Enter the confidence rating for the program in the appropriate place on the computation worksheet.

5. Multiply the relevance rating by the effectiveness rating in each cell, to find the import-unweighted relevance-effectiveness product.
6. Multiply the relevance-effectiveness product in each cell by the problem import weighting, to find the import-weighted relevance-effectiveness rating of a program for a particular problem area.
7. Add all the import-weighted relevance-effectiveness ratings for the program to find the total program import-weighted relevance-effectiveness rating (SUM).
8. Multiply the total program import-weighted relevance-effectiveness rating by the program confidence factor to find the overall estimated program effectiveness rating.
9. Divide the overall estimated program effectiveness rating by COST to determine the estimated program cost-effectiveness.

BIA Program Mix Cost-Effectiveness Model: Computation Worksheet

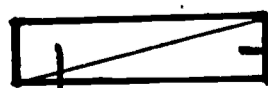
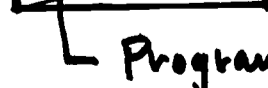
User _____

Date _____

Problem area **IMPORT** rating method _____

Problem Area		IMPORT	Program Number		
			1	2	3
Number	Description				
1.	Instruction and Classroom Process				
2.	Student Motivation				
3.	Student Academic Achievement/Success				
4.	Teacher Role				
5.	Curriculum				
6.	Student Inhibitions				
7.	Boarding School Life				
8.	Language Barrier				
9.	Job Opportunities				
10.	Further Educational Opportunities				
11.	Guidance and Counseling				
12.	School Administration				
13.	Innovation				
14.	Resource Allocation				
15.	Parental Involvement				
16.	Community Organization				
17.	Lack of Alternative Success Models				
18.	Cultural Isolation				
19.	Geographic Isolation				
		Program	SUM		
			CONFIDENCE		
			COST		
			Cost - Effectiveness		

Key to information:

 Program **EFFECTIVENESS** on problem area (% change)
 Program **RELEVANCE** to problem area (% affected)

Problem Area IMPORT Ratings Used for Runs of the
Program Mix Cost-Effectiveness Model

Problem Area #	IMPORT from point of view of:				
	Students*	Teachers*	Administrators**	Parents*	Consultant
1	.01	.10	.03	.05	.07
2	.02	.12	.07	.00	.10
3	.12	.10	.10	.19	.10
4	.00	.08	.03	.05	.07
5	.02	.06	.03	.05	.07
6	.01	.08	.02	.01	.01
7	.08	.02	.02	.06	.05
8	.10	.01	.03	.05	.04
9	.18	.05	.10	.19	.15
10	.18	.03	.05	.19	.05
11	.10	.15	.10	.05	.04
12	.00	.02	.15	.00	.04
13	.00	.01	.01	.00	.04
14	.00	.00	.15	.00	.04
15	.02	.01	.02	.05	.04
16	.02	.05	.03	.05	.02
17	.01	.02	.01	.00	.02
18	.12	.07	.02	.01	.04
19	.01	.02	.03	.00	.01

*Adapted from EDPLAN game results

**Estimated by consultant role-play

PROGRAM LIST

1. Contract Schools
2. Cash for Achievement
3. Curriculum Development
4. Tutoring of Infants
5. Seminar Groups
6. Students Rating Teacher
7. Work Week in Review
8. Role Switching
9. Intra-School Academic Competition
10. Cost-Effectiveness System
11. Classroom Teams
12. Upward Bound to High School
13. College Preparatory High School
14. College Preparatory Post High School
15. College System
16. Separate Sexes
17. Family Cottage Boarding
18. Indian Elite School
19. Work/Study Program
20. Master Tutors
21. Inter-School Academic Competitions
22. Indian Corps
- 23.
24. Instructional Structures
25. Evaluate ESL Programs
26. Master Linguist Tutor
27. Senior Language Teacher
28. Student Produced Films
29. Student Produced Texts.
30. Intensive School Drama Program
31. Standardized Testing
32. Innovation Councils
33. Cross-Discipline Course
34. Flight Training
35. Ham Shacks
36. Elementary School Zoos
37. Improvisational Theatre Techniques
38. Information Exchange Newsletter
39. Long Summer Field Trips
40. Short Field Trips
41. Vocational Mobility
42. Heavy Construction Course
43. Mechanical Zoo
44. Technological Micro-Museums
45. Teacher Recruitment

PROGRAM LIST -- continued

46. On-Bus, On-Line Education
47. Pay Teachers Based on Achievement
48. Academic Awards
49. Sabbaticals for Teachers
50. Recruit Indian Teachers
51. Mobile School Helicopter
52. Mobile School Ship
53. Mobile School Truck
54. Team Learning
55. Increase Research and Development Sources
56. Improved Public Relations
57. Subscription to Journal
58. Indian Teachers Aides
59. Research and Development Sabbaticals
60. Incentives for Principal Performance
61. Teacher/Counselors
62. Pupil Exchange Foster Homes
63. Video Tape Classroom
64. Biographical Films on Indians
65. World of Work Films
66. Film and T.V. Analysis
67. Contract School
68. Parent Education in Evaluation
69. Parent School Orientation
70. Local School Boards
71. Master Teachers for Parents
72. Parent Orientation Film
73. Home Service Centers
74. Pre-College Work
75. College Scholarship
76. Loan Program
77. Income-Producing Projects
78. Local School Control of Budget
79. Research and Development Budget Times Four
80. Integrated BIA Schools
81. Social Studies Via Art and Folk Songs
82. Vouchers for Employment
83. Political Science Courses
84. Touring Success Models
85. Traveling Shows
86. Foster Homes Near Central Schools
87. Periodic Centralized Schools
88. Home Instruction by Siblings
89. Multiple Small Day Schools
90. Para-Professional Scholarship Grants
91. Storefront Computer Instruction
92. Eleventh Grade Educational Research
93. Orientation Centers

PROGRAM LIST -- continued

94. Distribution of Television Sets
95. Computerized Instruction
96. Homework Helper Program
97. High School Work/Study: Pupils Live On Own
98. Year End High School Conference
99. Public School Placement by Guidance
100. Parent Involvement Planning Model
101. Classroom Role Play
102. Indian Social Dynamics Study
103. Educational Board Game
104. Sociology and Language Arts Course
105. Game for High School Students
106. Folk School
107. Indian Free University
108. Greenhouse Construction
109. Language Teaching Machine
110. Community Planning New Schools
111. Facilities for Parental Involvement
112. Educational Exchange Program
113. Film Series
114. Library Combination
115. Printing Presses
116. Intensive Study Schools
117. Teacher Training Program
118. Teacher In-Service Training
119. Relate Language Instruction to Other Subjects
120. Student Participation in Educational Material Selection
121. Use of College Facilities
122. College Special Centers
123. Adult Illiteracy Sociology
124. Minority Sociology Course
125. Government-Tribe Sociology Course
126. Environmental Economics Course
127. Ethnic Differentiation Course
128. Land Use Course
129. Wales Minority Sociology Course
130. Junior High National Minority Sociology Course
131. Non-Self-Sufficient Economics Course
132. Sociology of Minority Education Course
133. Nations Within Nations Course
134. K-3 Language Arts Curriculum
135. 4-6 Language Arts
136. Junior High Language Arts Curriculum
137. Media and Communications Curriculum
138. K-3 Social Studies Curriculum
139. 4-6 Social Studies Curriculum
140. 7-12 Social Studies Curriculum
141. 7-9 Social Studies Curriculum
142. 10-12 Social Studies Curriculum
143. 1-3 Science Curriculum
144. 4-6 Science Curriculum
145. 7-9 Science Curriculum
146. 10-12 Science Curriculum

Relevance and Effectiveness Data for 146 Programs
Evaluated by the Program Mix Cost-Effectiveness Model

(R = RELEVANCE and E = EFFECTIVENESS)

Program #	1		2		3		4		5		6		7		8		9		10		11		12		13		14					
	R	E	R	E	R	E	R	E	R	E	R	E	R	E	R	E	R	E	R	E	R	E	R	E	R	E	R	E				
1	.5	.3	.8	0	.8	.6			.6	.5	.3	.5	.1	.5	.10	.8	.2	.9			.10	.8										
2	.5	.3	.8	.7	.8	.7	.7	.5	.9	.7	.5	.6			.4	.8	.4	.9			.10	.9	.8	.5	.2	.5						
3	.5	.2	.7	.5	.5	.8	.10	.5									.3	.5			.6	.7	.9	.4	.10	.8	.10	.3				
4	.5	.2	.2	0	.4	.5			.4	.5	.7	.5	.1	.4	.3	.5	.1	.4														
5	.5	.3	0	0	.10	.8			.3	.5															.6	.5	.5	.4				
6	.4	.4	.2	.4	.1	.1	.4	.5	.3	.8	.3	.2			.6	.5	.5	.8			.9	.7			.2	.5						
7	.3	.5	0	0	0	0																	.2	.5								
8	.2	.6	.2	.1	.2	.3	.7	.9							.6	.8										.6	.5	.2	.8			
9	.3	.7	.2	.1	.4	.4																				.5	.3					
10	.3	.4	.2	.2	.5	.5																		.5	.4	.7	.8	.10	.8			
11	.5	.5	.1	0	0	0																		.2	.5							
12	.5	.4	.3	.1	1	0					.7	.5									.8	.7										
13	.5	.3	.1	.2	.5	.3					.5	.3			.6	.5					.2	.2										
14	.5	.4	0	0	0	0															.10	.9										
15	.4	.2	.4	.4	.1	.1	.2	.2																								
16	.4	.2	0	0	0	0																										
17	.5	.6	0	0	.2	.2																		.9	.5							
18	.5	.7	.3	0	.6	.7																		.1	.2	.3	.5	.3	.6			
19	.3	.5	.2	0	.1	.2																										

Relevance and Effectiveness Data for 146 Programs
Evaluated by the Program Mix Cost-Effectiveness Model

(R = RELEVANCE and E = EFFECTIVENESS)

Program #—:

Problem Area Number	15		16		17		18		19		20		21		22		23		24		25		26		27		28	
	R	E	R	E	R	E	R	E	R	E	R	E	R	E	R	E	R	E	R	E	R	E	R	E	R	E	R	E
1			.2	.5	.4	.5			.3	.7	.4	.8							.1	.5							.2	.5
2	.5	.6			.5	.8	.1	.5	.5	.8	.5	.9	.2	.5	.5	.6			.2	.5							.9	.8
3	.7	.5			.6	.5	.1	.8	.5	.4	.2	.8							.1	.5							.2	.5
4					.5	.4					.2	.5							.1	.4					.5	.1		
5									.2	.5									.1	.6	.4	.5	.5	.2			.3	.5
6			.10	.5	.4	.5					.1	.8	.1	.8														
7					.8	.5			.5	.8									.4	.5					.90	.5		
8					.2	.8	.1	.8			.2	.8								.9	.5	.90	.8			.2	.8	
9									.10	.9	.1	.2			.8	.7												
10					.2	.5	.1	.8	.2	.5																		
11					.8	.6																						
12					.4	.5																						
13							.1	.5	.2	.4	.1	.4							.1	.5	.4	.5						
14																												
15					.1	.2					.1	.5			.2	.5												
16							.10	.1	.2	.2					.2	.8												
17					.6	.5	.1	.5	.5	.6	.5	.8	.2	.8														
18					.5	.8			.2	.5			.1	.5	.5	.8			.1	.4			.2	.5	.2	.5	.1	.6
19													.225	.1	.5	.2	.7											

Relevance and Effectiveness Data for 146 Programs
Evaluated by the Program Mix Cost-Effectiveness Model

(R = RELEVANCE and E = EFFECTIVENESS)

Program # →	29		30		31		32		33		34		35		36		37		38		39		40		41		42			
	R	E	R	E	R	E	R	E	R	E	R	E	R	E	R	E	R	E	R	E	R	E	R	E	R	E	R	E		
1	.3	.4	.3	.5	.5	.6	.5	.4	.7	.5					.3	.4	.8	.5	.2	.6			.3	.6						
2	.9	.5	.5	.9					.3	.5	.4	.8	.2	.5	.4	.8	.5	.8			.2	.6	.9	.8	.4	.5	.4	.9		
3	.8	.6	.4	.5					.3	.5	.2	.5	.2	.3	.3	.5	.5	.7	.2	.5			.2	.6	.7	.6				
4			.2	.3													.8	.5	.6	.8			.2	.5						
5	.4	.5	.2	.4	.5	.6	.5	.4	.6	.5			.1	.4	.2	.5	.5	.6	.4	.6	.1	.7	.3	.5	.3	.5	.3	.5		
6			.4	.5													.5	.8												
7			.4	.5			.5	.6			.1	.7			.4	.2	.3	.7			.3	.7	.4	.8			.4	.8		
8	.1	.9	.4	.8						.2	.5			.2	.8			.4	.9			.3	.5	.2	.6					
9										.2	.4	.2	.9	.2	.5								.2	.5	.3	.5	.4	.8		
10										.5	.5									.5	.2	.3	.6	.2	.5	.2	.6			
11																		.2	.4	.6	.5			.2	.5	.4	.5			
12					.8	.9														.2	.6					.2	.2			
13							.6	.8												.5	.8							.2	.5	
14					.8	.5																								
15			.1	.3														.2	.3					.2	.3					
16													.1	.5										.2	.2			.2	.5	
17												.1	.8											.5	.7					
18	.1	.4	.4	.5						.2	.4	.2	.6	.3	.8			.1	.4			.1	.8	.9	.7					
19																							.7	.9	.7	.5				

PROBLEM AREA NUMBER

Relevance and Effectiveness Data for 146 Programs
Evaluated by the Program Mix Cost-Effectiveness Model

(R = RELEVANCE and E = EFFECTIVENESS)

Program #	43		44		45		46		47		48		49		50		51		52		53		54		55		56	
	R	E	R	E	R	E	R	E	R	E	R	E	R	E	R	E	R	E	R	E	R	E	R	E	R	E	R	E
1	.1	.5	.1	.4	.4	.5	.7	.2	.4	.8							.6	.5	.3	.4	.6	.2	.8	.8				
2	.2	.4	.2	.5	.2	.5	.5	.3	.2	.7	.8	.6			.5	.6			.3	.8	.1	.5	.7	.9	.3	.5		
3					.8	.6	.7	.4	.2	.8	.2	.5											.5	.8	.4	.8		
4					.5	.7			.7	.6			.8	.7	.9	.5							.5	.6				
5	.3	.5	.3	.5			.2	.5											.2	.5			.4	.5				
6					.4	.2									.8	.5							.7	.7				
7							.2	.8									.9	.5	.8	.8	.9	.4						
8							.3	.7											.2	.5			.4	.5				
9																												
10					.2	.4																					.1	.5
11					.2	.4	.2	.5							.8	.4							.2	.5				
12					.2	.5													.2	.4	.1	.2			.2	.6	.3	.6
13																			.4	.5					.6	.9		
14																												
15																												
16																											.4	.7
17					.4	.5	.2	.7							.7	.5			.2	.5			.4	.5				
18	.2	.4	.2	.7			.3	.9			.1	.5			.2	.6	.5	.4	.7	.8	.1	.2						
19							.9	.6			.3	.6	227				.10	.8	.80	.9	.60	.4						

PROBLEM AREA NUMBER

Relevance and Effectiveness Data for 146 Programs
Evaluated by the Program Mix Cost-Effectiveness Model

(R = RELEVANCE and E = EFFECTIVENESS)

Program #	57		58		59		60		61		62		63		64		65		66		67		68		69		70	
	R	E	R	E	R	E	R	E	R	E	R	E	R	E	R	E	R	E	R	E	R	E	R	E	R	E	R	E
1	.2	.5	.8	.6	.3	.7	.8	.5	.5	.2			.2	.5					.2	.2	.6	.5						
2			.4	.8					.5	.6			.4	.5	.7	.8			.5	.6	.3	.5					.8	.5
3			.4	.7	.2	.5	.8	.5													.4	.5						
4	.2	.5			.3	.8			.8	.5			.7	.8														
5							.5	.4					.5	.2					.7	.2								
6											.3	.4									.2	.6						
7							.8	.7			.7	.5																
8			.5	.7							.7	.8							.8	.7								
9			.8	.5														.6	.7		.8	.5						
10							.8	.3										.4	.5		.8	.7						
11							.8	.2	.8	.4								.6	.8		.7	.4						
12					.2	.4	.8	.5																			.4	.5
13	.4	.8			.2	.7	.8	.5																				
14							.8	.3																				
15			.6	.5																			.4	.5	.3	.6	.1	.9
16																											.1	.9
17			.5	.4											.9	.6											.2	.7
18											.8	.7			.7	.4	.6	.8	.4	.5								
19											.5	.6																

PROBLEM AREA NUMBER

Relevance and Effectiveness Data for 146 Programs
Evaluated by the Program Mix Cost-Effectiveness Model

(R = RELEVANCE and E = EFFECTIVENESS)

Program#	71		72		73		74		75		76		77		78		79		80		81		82		83		84				
	R	E	R	E	R	E	R	E	R	E	R	E	R	E	R	E	R	E	R	E	R	E	R	E	R	E	R	E	R	E	
1																	.9	.5			.3	.5									
2									.3	.8								.9	.5			.7	.6						4	.5	
3							.4	.9	.9	.5	.6	.5						.9	.5			.3	.5								
4																															
5													.1	.5				.9	.4			.3	.6								
6																			.5	.4											
7																		.5	.4	.4	.5								.6	.5	
8																			.6	.9											
9					.2	.5																	.9	.9							
10							.3	.9	.10	.9	.9	.7						.4	.3												
11					.2	.4												.8	.5												
12																.4	.8	.5	.4												
13													.3	.5				.10	.5												
14														.1	.8	.8	.7	.3	.2												
15	.4	.7	.2	.9	.7	.9								.5	.7																
16					.3	.7								.7	.3	.2	.5										.7	.5			
17																														.7	.7
18					.2	.5														.8	.7	.3	.4						.2	.5	
19																															



Relevance and Effectiveness Data for 146 Programs
Evaluated by the Program Mix Cost-Effectiveness Model

(R = RELEVANCE and E = EFFECTIVENESS)

Program # →	85		86		87		88		89		90		91		92		93		94		95		96		97		98	
	R	E	R	E	R	E	R	E	R	E	R	E	R	E	R	E	R	E	R	E	R	E	R	E	R	E	R	E
1							.5	.6	.6	.3					.1	.5					.3	.5					.2	.6
2							.3	.6							.1	.4							.7	.8	.3	.5	.2	.6
3							.4	.5							.1	.6			.4	.1	.2	.5	.8	.8	.3	.5		
4											.6	.6															.4	.9
5																					.2	.5						
6																												
7	.7	.6	.5	.8	.7	.5			.8	.5																		
8			.4	.8							.3	.3						.9	.9									
9											.5	.4					.2	.7							.4	.7		
10											.7	.5																
11							.4	.5																				
12																												
13																												
14																												
15														.1	.4													
16																												
17																												
18	.2	.5	.8	.8													.6	.2	.7	.9					.5	.7		
...							.3	.5																				



Relevance and Effectiveness Data for 146 Programs
Evaluated by the Program Mix Cost-Effectiveness Model

(R = RELEVANCE and E = EFFECTIVENESS)

Program#	99		100		101		102		103		104		105		106		107		108		109		110		111		112	
	R	E	R	E	R	E	R	E	R	E	R	E	R	E	R	E	R	E	R	E	R	E	R	E	R	E	R	E
1					.6	.5	.8	.8											.1	.4	.4	.3						
2	.3	.4			.9	.6							.5	.5					.3	.5	.5	.3					.6	.4
3													.4	.5			.2	.3			.4	.2						
4																												
5																												
6							.7	.7																				
7																												
8											.6	.6																
9																												
10																		.4	.3									
11	.2	.4																										
12			.1	.2																								
13																												
14																												
15			.2	.2			.8	.8	.5	.3					.3	.3						.7	.6	.8	.7	.5	.4	
16							.7	.8							.3	.2						.8	.6					
17					.7	.5							.4	.6														
18	.4	.6									.7	.6			.3	.3										.7	.5	
19	.4	.6													231											.7	.5	

PROBLEM AREA NUMBER

Relevance and Effectiveness Data for 146 Programs
Evaluated by the Program Mix Cost-Effectiveness Model

(R = RELEVANCE and E = EFFECTIVENESS)

Program #	113		114		115		116		117		118		119		120		121		122		123		124		125		126					
	R	E	R	E	R	E	R	E	R	E	R	E	R	E	R	E	R	E	R	E	R	E	R	E	R	E	R	E				
1																																
2	.6	.4					.5	.5							.8	.7	.2	.5														
3							.6	.5	.2	.8			.3	.8			.3	.5	.2	.7												
4									.2	.8	.9	.7																				
5							.4	.4												.2	.5	.3	.5	.3	.5	.3	.5					
6																																
7																																
8													.5	.8																		
9					.4	.7																										
10																			.4	.7												
11																																
12																																
13																																
14																																
15																																
16	.8	.8	.7	.8	.8	.6																						.1	.1			
17																																
18	.7	.7																									.1	.2	.1	.2	.1	.1

PROBLEM AREA NUMBER



Relevance and Effectiveness Data for 146 Programs
Evaluated by the Program Mix Cost-Effectiveness Model

(R = RELEVANCE and E = EFFECTIVENESS)

Program#	127		128		129		130		131		132		133		134		135		136		137		138		139		140	
	R	E	R	E	R	E	R	E	R	E	R	E	R	E	R	E	R	E	R	E	R	E	R	E	R	E	R	E
1																												
2																												
3																												
4																												
5	.3	.5	.5	.8	.5	.5	.4	.5	.3	.5	.8	.7	.3	.6	.9	.7	.9	.8	.7	.5	.8	.8	.8	.7	.8	.8	.8	.5
6															.2	.5	.1	.2										
7																												
8															.7	.9	.6	.9	.5	.9	.5	.9						
9																												
10																												
11																												
12																												
13																												
14																												
15																												
16	.1	.1	.2	.1							.2	.1	.1	.1														
17																												
18	.1	.2			.1	.1	.1	.1	.1	.1	.2	.2	.1	.1										.8	.1	.8	.1	
19																												

APPENDIX E

BIBLIOGRAPHY

BIBLIOGRAPHY

- Alaska, State of, Department of Education; Guidelines of Programs of Special Education in Alaska; Alaska Department of Education; Juneau, Alaska, 1966.
- Alaska, University of, Barrow Community Development Study, College, Alaska; March 1964.
- The American Indian; Message from the President of the United States; House of Representatives, 90th Congress, Second Session; Document #272, March 1968.
- American Scientific Corporation; Creation of New Industries on the Turtle Mountain Reservation; Alexandria, Virginia; August 1963.
- American Scientific Corporation; Introduction of Industry to the Zuni Reservation; Alexandria, Virginia; February 1965.
- American Scientific Corporation; Investigation of Miscellaneous Industries for the Zuni Reservation; Alexandria, Virginia; February 1965.
- American Scientific Corporation; A Study to Determine the Feasibility of Locating a Pottery Plant on the Pine Ridge Indian Reservation; Alexandria, Virginia; August 1964.
- Anderson, Kenneth A.; Collister, E. Gordon; Ladd, Carl E.; The Educational Achievement of Indian Children, A Re-examination of the Question: How Well are Indian Children Educated?; U.S. Dept. of the Interior, BIA; March 1953.
- Annette Islands Reserve Reservation Population Support Capacity Report Southeast District, Juneau Area; Juneau, Alaska; December 1967.
- Annual Statistical Review, Hospital and Medical Services, Fiscal Year 1967; U.S. Dept. HEW, Division of Indian Health; 1967.
- Area Action Plan for Blackfeet Indian Reservation, Montana; U.S. Dept. of Commerce, Ec. Dev. Adm., Western Area Office; January 1968.
- Area Action Plan for Crow Indian Reservation; U.S. Dept. of Commerce, Ec. Dev. Adm., Western Area Office; December 1967.
- Area Action Plan for Navajo Indian Reservation-Arizona, New Mexico, and Utah; U.S. Dept. of Commerce, Ec. Dev. Adm.; January 1968.
- Artichoker, John; Supt. of Papago Reservation; Master's Thesis About South Dakota Indians.
- Avco Economic Systems Corporation; The Preparation of BIA Teacher and Dormitory Aides, Vol. I, Vol. II, Vol. III, for the BIA, Dept. of the Interior.
- Bass, William P.; An Analysis of Academic Achievement of Indian High School Students in Federal and Public Schools, 1966-67, A First Year Progress Report to Charles Zellers; Asst. Comm. Ed. BIA, Southwestern Cooperative Educational Lab., Inc.; Albuquerque, January 1968.

- L. H. Bell & Associates; Feasibility Study of an Industrial Park on the San Carlos Apache Indian Reservation, Arizona; Phoenix, Arizona; November 1967.
- Bickert, Carl von E.; The Sisseton Indians, A Socio-Psychological Study of the Indians on the Sisseton Reservation, South Dakota-Phase I; Industrial Economics Division; University of Denver; Denver, Colorado; July 1965.
- Big Bend Redevelopment Commission; Overall Economic Plan, Big Bend, South Dakota; Big Bend, South Dakota; October 1961.
- Bilingual Education Programs; Hearings before the General Subcommittee on Education of the Committee on Education and Labor; House of Representatives, 90th Congress, First Session; U.S. Government Printing Office, June 1967.
- The Blackfeet Tribal Business Council; Overall Economic Development Program, Blackfeet Reservation Redevelopment Program; Browning, Montana; June 1962.
- Borland, Hal; When the Legends Die; Bantam, Pathfinder editions, New York; 1963.
- Brophy, William A. and Aberle, Sophie D.; The Indian, America's Unfinished Business; University of Oklahoma Press; Norman, 1968.
- Bryde, John F.; New Approach to Indian Education; Holy Rosary Mission; Pine Ridge, South Dakota.
- Bryde, John F.; The Sioux Indian Student: A Study of Scholastic Failure and Personality Conflict; Holy Rosary Mission; Pine Ridge, South Dakota; 1966.
- Burger, Henry G.; "Ethno-Pedagogy": A Manual in Cultural Sensitivity, with Techniques for Improving Cross-Cultural Teaching by Fitting Ethnic Patterns; S. W. Coop. Ed. Lab., Inc.; Albuquerque, New Mexico; June 1968.
- Chambers & Campbell; Development Plan for Commercial Tourism Facilities Along Interstate 40; Albuquerque, New Mexico; November, 1965; 57 pages.
- Chambers & Campbell, Development Possibilities Along Navaho Hwy. No. 1; Albuquerque, New Mexico; November 1963; 112 pages.
- Chambers & Campbell; Tourism and Recreation Development Plan for the Zuni-Cibola Trails Area, New Mexico and Arizona; Albuquerque, New Mexico; September 1965.
- Cherokee Indian Agency; Cherokee Indian Agency Annual Council Reports; Cherokee, North Carolina; U. S. Dept. of the Interior, BIA; October 1967.
- Cherokee Indian Reservation; Cherokee Indian Reservation Overall Economic Development Program Progress Report; Cherokee, North Carolina.

Cherokee Indian Reservation; Preliminary Overall Economic Development Program, Cherokee Indian Reservation; Cherokee, North Carolina; May 1962.

Choctaw Indians, Tribal Council of Mississippi Band of; Comprehensive Overall Economic Development Program for the Mississippi Band of Choctaw Indians; Mississippi; July 1966.

Coddington, D. C.; Welles, J. G. & Bickert, C. E.; Analysis of Economic Opportunities Sisseton Reservation, South Dakota-Phase II; University of Denver; July 1965.

Cohen, Warren H. & Mause, Phillip J.; The Indian: The Forgotten American; Harvard Law Review, Vol. 81:1818.

Cohen, Ronald & Schlegel, Alice; The Tribe as a Socio-Political Unit: A Cross-Cultural Examination; Northwestern University.

Consumers Power District; Land of Profit and Productive People, Industrial Facts-Pine Ridge, South Dakota; Columbus, Nebraska; February 1968.

Coombs, L. Madison; Doorway Toward the Light, The Story of the Special Navajo Education Program; U. S. Dept. of the Interior, BIA, Branch of Education; 1962.

Coombs, L. Madison; Kron, Ralph E.; Collister, E. Gordon and Anderson, Kenneth E.; The Indian Child Goes to School; U. S. Department of the Interior; Haskell Press; 1958.

Crawford, Dean A.; Peterson, David R. & Wurr, Virgil; Minnesota Chippewa Indians: A Handbook for Teachers; Upper Midwest Regional Ed. Lab.; St. Paul, Minnesota; 1967.

Curriculum Charts Series; Languages, Arts, Skills: Grades Pre-First-Six; United Pueblos Agency; Albuquerque, New Mexico; January 1960.

Leo A. Daly Comprehensive Services; A Comprehensive Plan for Crow Creek Reservation, South Dakota; Omaha; 1967.

Department of the Interior and Related Agencies Appropriations for 1969, Part 2; Hearings before a Subcommittee on Appropriations; House of Representatives, 9th Congress, Second Session; U. S. Government Printing Office; Washington; 1968.

Doane Agricultural Service, Inc.; A Study of the Feasibility of Establishing a Cattle Feeding Program on the Omaha Tribe Reservation Land Near Macy, Nebraska for the Department of Commerce, Ec. Dev. Adm.; St. Louis, Missouri; December 1967.

EDA Strategy Paper for Hopi Indian Reservation, Arizona; South Western Area Office, U. S. Dept. of Commerce, Ec. Dev. Adm.; May 1967.

The Economic Feasibility of a Livestock Slaughterhouse on or near the Navajo Indian Reservation, A Report to the BIA, U.S.A. Agricultural Research, Inc.; Manhattan, Kansas; U.S. Department of the Interior, Contract #14-20--650-1048; November 1962.

Economic Research Association; Expansion for the Inter-Tribal Indian Ceremonial at Gallup, New Mexico: A National Indian Memorial Park; Los Angeles-D.C.; July 1967.

Engineering-Science, Inc.; A Study to Investigate the Feasibility of the Expansion and Diversification of Integrated Cattle Feeding and Beef Production on the Gila River Indian Reservation near Phoenix, Arizona; for the Dept. of Commerce, Ec. Dev. Adm.; Arcadia, California; July 1967.

Enrichment Program for the Culturally Different Child: sponsored by the Shoshonee-Bannock Tribes; Fort Hall Indian Reservation; Fort Hall, Idaho.

Erikson, Donald B.; Study to Determine the Feasibility of Establishing a Major Meat Packing Plant on the Crow Indian Reservation, Montana; for the Dept. of Commerce, Ec. Dev. Adm.; December 1967.

Evaluation of Population Support Capacity Report: Lower Brole Sioux Reservation; Dept. of the Interior, BIA; Pierre, South Dakota; May 1968.

Feasibility Study of an Industrial Park on the San Carlos Apache Indian Reservation, Arizona; U.S. Dept. of Commerce, Ec. Dev. Adm.

Fenton, William N.; Anthropological Papers, No. 56, Factionalism at Taos Pueblo, New Mexico; Smithsonian Institution, Bureau of Am. Ethology, Bulletin 1964.

Fenton, William F.; Factionalism in American Indian Society.

Fogg, Harrison G.; Development Opportunities, Crow Indian Reservation; Billings, Montana; May 1967.

Garber, Malcolm; Classroom Strategies: Culture and Learning Styles; S. W. Coop Ed. Lab., Inc.; Albuquerque, New Mexico; June 1968.

Gazaway, H. P.; National Program Inadequacies and Needs to Better Serve Rural and Native Alaska; U.S. Dept. of the Interior, BIA; March 1966.

Goertz, Jr., Cliff; Drought, Death and Alcohol in Five Southwestern Cultures; September 1951.

Gries, John P.; Mineral Resources and their Potential on Indian Lands, Pine Ridge Reservation, Shannon, Washabaugh, and Bennett Counties, South Dakota; U.S. Dept. of the Interior, BIA; May 1964.

Hammon, Jensen & Wallen Mapping & Forestry Services; An Opportunity in Forest Development for the Eastern Band of Cherokee Indians; Oakland California; October 1963.

Hough, Henry W.; Development of Indian Resources; World Press Inc; Denver, Colorado; 1967.

The Hopi Tribe, Provisional Hopi Overall Economic Development Program; U.S. Dept. of Commerce, ARA; November 1962.

Howard, Homer H.; In Step With the States; a comparison of State and Indian Service Educational Objectives and Methods; U.S. Indian Services, Ed. Division; 1949.

IIT Research Institute; The Technical and Economic Feasibility of Manufacturing Selected Construction Materials on the Navajo Reservation; Chicago, Illinois; September 1964.

Illness Among Indians, 1966; U.S. Dept. PHS, Bureau Health Services; 1967.

Indian Education-Part I; Hearings before Special Subcommittee on Indian Education, U.S. Senate, December 1967, Washington, D. C.; U.S. Government Printing Office; Washington; 1969.

Indian Education-Part 2; Hearings before Special Subcommittee on Indian Education, U.S. Senate, February 1968, Twin Oaks, California; U.S. Government Printing Office; Washington; 1969.

Indian Education-Part 3; Hearings before Special Subcommittee on Indian Education, U.S. Senate, March 1968, Flagstaff, Arizona; U.S. Government Printing Office; Washington; 1969.

Indian Health, Division of; Annual Discharge Summary Fiscal Year 1965; U.S. Dept. HEW, PHS; January 1968.

Indian Health, Division of; Charts on Health Trends and Services; U.S. Dept. HEW, PHS; April 1968.

Indian Health, Division of; Indian Health Highlights; U.S. Dept. HEW, PHS; 1966.

An Industrial Survey of the Crow Indian Reservation

1969 Issue Paper, Indian Irrigation Projects; U.S. Dept. of the Interior, BIA; July 1967.

Kelly, William H.; The Papago Indians of Arizona, A Population and Economic Study; Bureau Ethnic Research, Department Anthropology, University of Arizona; 1963.

Kelly, William H.; A Study of Southern Arizona School-Age Indian Children 1966-1967; Bureau Ethnic Research; University of Arizona, Tucson; 1967.

Kelly, William H.; Social and Cultural Considerations in the Development of Manpower Programs for Indians; A paper delivered at National Conference Manpower Programs for Indians; Bureau Ethnic Research, University of Arizona, Tucson; February 1967.

- Klein, Bernard & Icolari, Daniel; Reference Encyclopedia of the American Indian, B. Klein and Co.; 1967.
- Kluckhohn, Clyde; The Navajo, Doubleday; Garden City, New York; 1962.
- Kozely, Lado A.; Overall Economic Development Plan, Relation to the Yukon-Kuskokwirn River Basins; U.S. Dept. of the Interior, BIA; Bethel District Office; April 1964.
- LaFarge, Oliver; Laughing Boy; Houghton Mifflin (Sentry Edition); Boston; 1929.
- Laguna Reservation-The Potential Power of Tourism, A Report; Checchi & Company; Washington, D. C.; January, 1963.
- Logan, Eunice; Curriculum Planning for Cultural Adjustment; Branch Ed, BIA, Juneau Area Office; Juneau, Alaska; 1957.
- Logan, E. & Johnson, D.; We Teach in Alaska; BIA, Juneau Area Office; July 1965.
- Martin, Mavis & Caplan, Stanley; The SWCEL Program and Your School: An Administrator's Manual; S. W. Coop Ed. Lab., Inc.; Albuquerque, New Mexico; June 1968.
- Miller, Frank C.; Problems of Succession in a Chippewa Council; University of Minnesota.
- Mitchell, Emerson Blackhorse & Allen, T.D.; Miracle Hill: The Story of a Navajo Boy; University of Oklahoma Press, Norman; 1967.
- "The NCAI Sentinel," The National Congress of American Indians; Denver, Colorado; Spring 1968.
- Nason, Wehrman, Knight & Chapman, Inc.; Lower Brole Indian Reservation Administrative Report; Minneapolis, Minnesota; August, 1967.
- Nason, Wehrman, Knight & Chapman, Inc.; Lower Brole Indian Reservation Comprehensive Report and Plan; Minneapolis, Minnesota; July 1967.
- Nason, Wehrman, Knight & Chapman, Inc.; Lower Brole Indian Reservation Suggested Zoning Ordinance, Subdivision Regulations, Building Code; Minneapolis, Minnesota; July 1967.
- National Conference on Manpower Programs for Indians, February 15-16, 1967; under the auspices of the U.S. Dept. of Labor.
- Navajo Tribal Council; Overall Economic Development Program for the Navajo Redevelopment Area, Supplement #1; Window Rock, Arizona; December 30, 1963.
- Navajo Tribal Council; Overall Economic Development Program for the Navajo Redevelopment Area, Supplement #2; Window Rock, Arizona; March, 1966.

Navajo Tribal Council; Overall Economic Development Program for the Navajo Redevelopment Area, Supplement #3; Window Rock, Arizona; March, 1967.

Navajo Tribal Council; Overall Economic Development Program for the Navajo Redevelopment Area, Supplement #4; Window Rock, Arizona; March, 1968.

Nett Lake Indian Reservation; Overall Economic Development Program, Nett Lake Indian Reservation, Nett Lake, Minnesota; U.S. Dept. of the Interior, BIA; March 1967.

Northern Systems Company; A Proposal for the Economic Development of Omaha, Winnebago and Santee Sioux Reservations; Omaha, Nebraska.

Oglala Sioux Tribal Council; Overall Economic Development Program Planning for the Nekota Redevelopment Area; Pine Ridge, South Dakota; 1963.

Ohannessian, Sirarpi; The Study of the Problems of Teaching English to American Indians, Report and Recommendations, July 1967; Center for Applied Linguistics, Washington, D. C.; July 1967.

Oklahoma Employment Security Commission; Indians in Oklahoma, Social and Economic Statistical Data; Oklahoma Employment Security Commission, Oklahoma City; 1967.

Overall Economic Development Plan for the Ramah Navajo Redevelopment Area; Ramah, New Mexico; March 1967.

Overall Economic Development Program for the Navajo Redevelopment Area submitted to Area Redevelopment Administration, Advisory Committee of the National Tribal Council; Window Rock, Arizona; December 1961.

Overall Economic Development Program for the Nekota Redevelopment Area, Pine Ridge, South Dakota; Nekota Redevelopment Commission.

PSCS, Bethel District, Alaska; U.S. Dept of the Interior, BIA; Juneau, Alaska; March 1968.

PSCS, (Population Support Capacity Survey) Blackfeet Reservation, Montana; 1967.

PSCS, Evaluation of, Crow Indian Reservation, Billings Area; August 1967.

PSCS, Crow Sioux Reservation, Aberdeen Area; South Dakota; February 1968.

PSCS, Fort Yuma Reservation, Phoenix; Phoenix Area Office, Arizona; October 1967.

PSCS, Gila River Reservation; Phoenix Area Office, Arizona; 1967.

PSCS, Navajo Indian Reservation; 1967.

PSCS, Nett Lake Reservation, Minnesota Chippewa Tribe; Minnesota Agency, Bemidji, Minnesota; June 1968.

PSCS, Papago Reservation, Gila Bend, San Xavier, Sells; Phoenix Area, Arizona; October 1967.

PSCS, Red Lake Indian; Minnesota; August 1967.

PSCS, San Felipe Reservation; San Felipe, New Mexico; October 1967.

PSCS, Santo Domingo Pueblo Village; New Mexico; October 1967.

PSCS, Evaluation of, Turtle Mountain Reservation, Aberdeen Area; North Dakota; August 1967.

PSCS, Warm Springs Indian Reservation; Warm Springs Indian Agency; Warm Springs, Oregon; August 1967.

Pauker, Guy J.; "Political Structure", People of Rimrock; pp. 191-226.

Pandey, Triloki Nath; Tribal Council Elections in a Southwestern Pueblo; University of Pittsburgh.

Pine Ridge Research Bulletin; U.S. Dept. HEW, PHS; Div. Indian Health, Bulletin #3; June 1968.

Population Support Capacity Report; Juneau, Alaska; July 1968.

Program Memorandum Indians February 1969; U.S. Dept. of the Interior; 1969.

Progress Report, Psycho-Social Adjustment in an Indian Boarding School, September 1, 1963 - August 31, 1964; New Mexico Highlands University; November 1964.

Provisional Overall Economic Development Plan for Red Lake Indian Reservation, Minnesota; June 1967.

Provisional Overall Economic Development Plan of the Pueblo of Laguna; Council of Pueblo of Laguna; Laguna, New Mexico; December 1962.

Provisional Overall Economic Development Program: Crow Reservation Area prepared for U.S. Dept. of the Interior, Bureau of Indian Affairs, Washington, D.C., SRI Project #IE-3998, Carlton L. Wood and Howard M. Vollmer, April 1962.

The Pueblo Indians of New Mexico, "IV. Civil Organization".

Ray, Charles K.; A Program of Education for Alaskan Natives. A Research Report; University of Alaska; 1959.

Ray, Charles K.; Alaskan Native Secondary School Dropouts. A Research Report; University of Alaska; 1962.

Recreation and Tourism Potential Route 3--Chuska Area Navajo Reservation;
Kirschner Associates, Albuquerque, New Mexico; September 1965; 292
pages.

Red Lake County Overall Economic Development Program Updating Statements;
May 1966.

Office of Research & Evaluation, BIA; Characteristics of the Bureau of
Indian Affairs Instructional Staff, School Year 1967-68; U.S. Dept. of
the Interior, BIA; 1968.

Reservation of Oregon; Preliminary Overall Economic Development Program;
Confederated Tribes of the Warm Springs Reservation of Oregon.

Rosebud Redevelopment Commission; Rosebud, Overall Economic Develop-
ment Plan; Rosebud, South Dakota; March 1962.

Selinger, Alphonse D.; The American Indian High School Dropout: The
Magnitude of the Problem; Northwester Reg. Ed. Lab., Oregon;
September 1968.

Shopping Facility Feasibility Study, Pine Ridge, South Dakota. Prepared
for Area Development Administration Section of the U.S. Dept. of
Commerce, Order #P-344-5; October 1964; Stephen K. Plasman &
Associates, Inc., Minneapolis, Minnesota; 61 pages.

A Study to Determine Feasibility of Establishing Wool Processing Plant on
or near the Navajo Indian Reservation. A report to the U.S. Dept. of
the Interior, Bureau of Indian Affairs, Contract #14-20-0600-7602,
Ernst & Ernst, Denver, Colorado, and Werner Textile Consultants,
New York, New York, May 5, 1964; 86 pages.

Smith, Anne M.; New Mexico Indians: Economic, Educational and Social
Problems; Museum of New Mexico, Santa Fe; 1966.

Smith, Kenneth; An Analysis of Future Development Possibilities of Navajo
Forest Products Industries; April 26, 1963; 109 pages.

Snodgrass, John D.; Bethel Overall Economic Development Progress Report;
Juneau, Alaska.

The Social and Economic Effects of Reservation Industrial Employment on
Indian Employees and their Families, Pine Ridge Indian Reservation,
South Dakota; U.S. Dept. of the Interior, BIA; Billings, Montana;
February 1968.

Southwestern Area Office; Area Action Plan for Navajo Indian Reservation,
Arizona, New Mexico & Utah (attachment on the Ramah-Navajo Reser-
vation, New Mexico); U.S. Dept. of Commerce, Ec. Dev. Adm., South-
western Area Office; January 1968.

Southwestern Area Office; Area Policy Paper for Wind River Indian Reser-
vation, Wyoming; U.S. Dept. of Commerce, Ec. Dev. Adm., South-
western Area Office; June 1967.

Southwestern Cooperative Educational Laboratory; Oral Language Program; Information on SWCEL activities in the area of language arts curriculum development; S. W. Coop Ed. Lab., Inc.; Albuquerque, New Mexico.

Spencer, Robert F.; The North Alaskan Eskimo: A Study in Ecology and Society; U. S. Government Printing Office, Washington; 1959.

Statistics Concerning Indian Education Fiscal Year 1954; U. S. Dept. of the Interior, BIA, Branch of Ed.

Statistics Concerning Indian Education Fiscal Year 1956; U. S. Dept. of the Interior, BIA, Branch of Ed.

Statistics Concerning Indian Education Fiscal Year 1958; U. S. Dept. of the Interior, BIA, Branch of Ed.

Statistics Concerning Indian Education Fiscal Year 1959; U. S. Dept. of the Interior, BIA, Branch of Ed.

Statistics Concerning Indian Education Fiscal Year 1960; U. S. Dept. of the Interior, BIA, Branch of Ed.

Statistics Concerning Indian Education Fiscal Year 1961; U. S. Dept. of the Interior, BIA, Branch of Ed.

Statistics Concerning Indian Education Fiscal Year 1962; U. S. Dept. of the Interior, BIA, Branch of Ed.

Statistics Concerning Indian Education Fiscal Year 1963; U. S. Dept. of the Interior, BIA, Branch of Ed.

Statistics Concerning Indian Education Fiscal Year 1964; U. S. Dept. of the Interior, BIA, Branch of Ed.

Statistics Concerning Indian Education Fiscal Year 1965; U. S. Dept. of the Interior, BIA, Branch of Ed.

Statistics Concerning Indian Education Fiscal Year 1966; U. S. Dept. of the Interior, BIA, Branch of Ed.

Statistics Concerning Indian Education Fiscal Year 1967; U. S. Dept. of the Interior, BIA, Branch of Ed.

Statistics Concerning Indian Education Fiscal Year 1968; U. S. Dept. of the Interior, BIA, Branch of Ed.

Stefan, Steve A.; An Analysis of the Feasibility of Establishing Selected Business Enterprises and Developing Commercial Recreation Facilities on the Jicarilla Apache Indian Reservation, IIT Research Institute, Chicago, Illinois; October 1964.

Steiner, Stan; The New Indians; Harper and Row, New York; 1967.

Striner, Herbert E.; Industrial Opportunities and the Utilization of Indian Manpower; W. E. Upjohn Institute for Employment Research; April 1968.

Technomics, Inc.; Report of a Feasibility and Status Study. Performed for the Assistant Commissioner of Education BIA; Santa Monica, California; March 1968.

Ten-Year Goals, Turtle Mountain Indian Reservation; Memo to Sec. Interior from Avco Director, Martin Holms; Aberdeen Area Office; October 1964.

Ten-Year Planning Report, Laguna Reservation; requested by Secretary Stewart L. Udall; September 1964.

Ten-Year Planning Report, Navajo Reservation; requested by Secretary Stewart L. Udall; October 1964.

Ten-Year Planning Report, San Felipe Reservation; requested by Secretary Stewart L. Udall; September 1964.

Ten-Year Program, Ft. Apache Indian Reservation.

Ten-Year Program, Papago Reservation; Jenkins, Homer B.

Thompson, Hildegard; Education for Cross-Cultural Enrichment; U.S. Dept. of the Interior, BIA, Branch of Ed.; 1964.

Tiffany, Warren I.; Education in Northwest Alaska; BIA, Division of Ed.; Juneau, Alaska; 1966.

Tiffany, Warren I.; Old Ways for New, Selected Material on Alaska Native Culture & Education, BIA, Juneau, Alaska; July 1966.

Tribal Council of Turtle Mountain; Overall Economic Development Plan for Turtle Mountain Reservation; Belcourt, North Dakota; 1963.

Tribal Office Turtle Mountain Band of Chippewa Indians; Turtle Mountain Indian Reservation Continuing Overall Economic Development Program; Belcourt, North Dakota; April 1965.

U.S. Bureau of Indian Affairs; A Follow-Up Study of 1963 Recipients of the Services of the Employment Assistance Program, Bureau of Indian Affairs; U.S. Dept. of the Interior, BIA; October 1966.

Underhill, Ruth; The Northern Paiute Indians of California and Nevada; U.S. Dept. of the Interior, BIA, Branch of Ed.; 1941.

Underhill, Ruth; The Papago Indians of Arizona and their Relatives the Pima; U.S. Dept. of the Interior, BIA, Branch of Ed.; 1941.

Visitor Potential of the Kitt Peak Area, A Study for the Papago Tribal Council and the Bureau of Indian Affairs; U.S. Dept. of the Interior, Western Management Consultant; Phoenix, Arizona; November 1962.

Waters, Frank; The Man Who Killed the Deer, Farrar and Rinehart, New York and Toronto; 1942.

Wax, Murray L.; Wax, Rosalie H.; and Dumont, Jr., Robert V.; "Formal Education in an American Indian Community," Social Problems. Official Journal of the Society for the Study of Social Problems; Spring 1964, Vol. II, No. 4.

Whitman, Jr., Carl; Comprehensive Renovation of Education, Program for Indians.

Wilson, Edmund; Apologies to the Iroquois, with a study of Mitchell, Joseph, The Mohawks in High Steel; Vintage, New York; February 1966.

Wissler, Clark; Indians of the United States; Anchor, Garden City, New York; 1967.

Wissler, Clark; Indians of the United States; Doubleday & Co., Garden City, New York; 1966.

Young, Robert W.; The Navajo Yearbook; Navajo Agency, Window Rock, Arizona; 1961; 609 pages.