AN ASSESSMENT OF AN INSERVICE PROGRAM FOR VOCATIONAL EDUCATORS OF INDIAN STUDENTS

By

Joe Mitchell Kinzer, Jr.

Bachelor of Science
Oklahoma State University
Stillwater, Oklahoma
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AN ASSESSMENT OF AN INSERVICE PROGRAM FOR VOCATIONAL EDUCATORS OF INDIAN STUDENTS

Thesis Approved:

Donald E. Phillippi
Thesis Adviser

Eric W. Leuggen

Wm. A. Stevenson

Odell I Walker

D Durham
Dean of the Graduate College

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CHAPTER I

INTRODUCTION

The preliminary 1970 census count reported the American Indian population for the nation, including Alaska, to be 827,091. This is an increase of approximately 33 percent from the 1960 census report of 551,669. This rate of increase is more than that of the total United States non-Indian population. The Indian population is comparatively young, with the median age of rural Indians in 1960 reported at 17.7 years as compared with 27.3 for the total United States rural population. More than 60 percent of rural Indians were under 25 as compared to 48 percent for the total (Trimble, 1972).

The 1960 census on educational attainment reported that 14 percent of rural American Indians received no formal schooling at all as compared to only 2 percent of the total rural population. Only one-third of the nation's Indians had attended high school as compared to 45 percent of the total rural population. About 20 percent of the total Indian population was enrolled in school in 1970, with 68.4 percent enrolled in public schools, 25.8 percent attending federal schools, and 5.8 percent attending mission and other schools.

American Indians living in Oklahoma have increased from 64,689 in 1960 to 97,731 in 1970 (Trimble, 1972). This increase results in Oklahoma becoming the number one state in the nation in Indian population. Oklahoma is ranked sixth nationally in percentage of Indian population

to total state population. However, Oklahoma is one of the few states with no Indian reservations as such. The employment of Indian people in Oklahoma reflects their educational and social handicap. In Oklahoma in 1960, of all Indians 14 years old and over, only 36 percent were attached to the civilian labor force as compared to 49.6 percent for the remaining population and 49.3 percent for all races combined (Hunter and Tucker, 1966). This situation results in Indians having smaller incomes. Oklahoma's total population in 1959 had average earnings of $2,145 while Indian residents averaged $1,212. Both of these figures for Oklahoma were below that of the nation's total which was $2,798 and $1,348 respectively. Educators of vocational and technical programs have indicated renewed interest in occupational training for Indian students and Indian leaders realize that the best opportunity for attaining the economic benefits they desire for their people is through education and training. They also realize that vocational and technical programs are currently more nearly job oriented with increased emphasis on job opportunities in the local communities.

The increased interest on the part of vocational and technical educators to serve American Indian students is not sufficient, however, to ensure that more Indian people become involved in vocational and technical education in Oklahoma.

American Indian students in Oklahoma in the past have not enrolled in great numbers in vocational and technical programs and the dropout rates have been excessive (Trimble, 1972). The National Study of American Indian Education conducted by Robert Havighurst (1970) found that the problems result in part from the cultural and socio-economic differences of non-Indian teachers with those of their Indian students.

The expertise necessary for vocational and technical educators to motivate and attract American Indian students carries with it an inherent requirement of an understanding of the students' cultural background, value systems, goals, and needs.

Statement of the Problem

The American Indian student has had difficulty in adjusting to a changing society and culture. His adjustment is made difficult because of his environmental and cultural heritage which sometimes is in conflict with the dominant environment and culture.

The vocational and technical educator who is unaware of the adjustment problems faced by the Indian student may inadvertedly contribute to the student's difficulty in succeeding in a multi-cultural environment. Many efforts, including conferences, workshops, and seminars, have been directed toward the solution of these problems.

One of the major concerns in planning, developing, and conducting projects and programs relative to improving American Indian education relates to the evaluation of the effectiveness of such efforts and is the specific problem with which this study is concerned.

Purpose of the Study

The purpose of this study was to assess the effectiveness of an in-service education program designed to sensitize selected Oklahoma vocational and technical educators to the problems of American Indian students. This program was conducted by the Oklahoma State Department of Vocational and Technical Education during the period June, 1971 through May, 1972, under the sponsorship of the United States Department

of Health, Education, and Welfare, Office of Education, Bureau of Educational Personnel Development of the Vocational Education Training Branch (EPDA).

A description of the in-service program is given in the following section.

Description of the In-Service Program

The in-service program, entitled "Sensitizing Vocational-Technical Professional Personnel to the Characteristics and Goals of the American Indian," was directed by Mr. Arch B. Alexander, Deputy State Director of the Oklahoma State Department of Vocational and Technical Education. The associate program director was Dr. William W. Stevenson, Assistant State Director of the Oklahoma State Department of Vocational and Technical Education and Head of the Division of Research, Planning, and Evaluation. The investigator, a research specialist in the Division of Research, Planning, and Evaluation of the Oklahoma State Department of Vocational and Technical Education, served as assistant program director.

The in-service program was divided in two phases. The first phase was the two-week workshop conducted June 28 through July 10, 1971. The second phase involved personal follow-up visits with each of the workshop participants at their home schools during the 1971-72 academic school year by the assistant program director.

The participants in the two-week workshop included vocational and technical instructors and administrators from public high schools and area vocational-technical schools in Oklahoma. The criterion for participant selection was based on the percentage of American Indian student enrollment. In order for a participant to be selected, at least ten

percent expected Indian student enrollment must exist in his program for the 1971-72 academic school year.

Fifty-one applications were received, formal and informal (telephone calls, etc.). Forty-five applicants met the criteria for selection with forty applicants being chosen as participants.

The primary objective of the program was to provide professional vocational and technical personnel with a greater understanding of the American Indian in Oklahoma--his needs, ambitions, goals, and history. The desired end products of the program were:

1. Increased enrollment of American Indian students in vocational and technical programs in Oklahoma.
2. Greater holding power of vocational and technical programs for the American Indian student in Oklahoma.
3. The presentation of course material by vocational and technical educators in a manner that has a positive relationship to the American Indian student's educational, social, and economic environment.
4. Greater involvement of the American Indian communities in the planning and evaluation of vocational and technical programs in Oklahoma.

The strategies utilized in an attempt to accomplish the main objective were as follows: (1) American Indians were included in all planning phases of the workshop, (2) American Indians were utilized as consultants and speakers during the two-week workshop, (3) other personnel known to be successful in working with American Indians were utilized in the planning phases of the project, and (4) personnel known to be successful in working with American Indians were utilized as

consultants and speakers during the two-week workshop. The names and titles of speakers and consultants are included in Appendix A.

The two-week workshop was conducted at the Great Plains Area Vocational-Technical School in Lawton, Oklahoma. Seven hours of presentation including discussion and dialogue between the participants, consultants, and other resource personnel were utilized each day. Films and visits to American Indian museums and other points of significance were also included.

Miss Oklahoma of 1971, Miss Susan Supernaw, was the first speaker to begin the workshop on June 28. Her presentation was entitled "Opportunities for Success." She discussed the general social relationships in the integrated classroom between the teacher and the American Indian student.

Miss Sheila Alexander's presentation was entitled "So You Have an Indian in Your Classroom." Miss Alexander's presentation was very effective in challenging the participants to review their attitudes concerning American Indian students. Miss Alexander also stressed the importance of the participants' knowledge of the background and culture of the Indian student as it relates to the solutions of the educational problems being dealt with during the workshop.

Mr. Dick Swift, American Indian Education Specialist, Carnegie, Oklahoma, presented the history of the Plains Indian. Specifically, the history of the Comanche, Apache, Cheyenne, and Arapaho were presented in greater detail because of the prevalence of these Indian tribes in the school systems in the western half of Oklahoma.

After a brief introduction to the background of American Indians of western Oklahoma, the participants visited "Indian City" in Anadarko,

Oklahoma. The participants were directed and assisted in their tour by Mrs. Thedis Mitchell, a Wichita Indian who had been raised in the Anadarko, Oklahoma, area.

The participants attended a presentation by the Director of the Southern Plains Indian Museum and Crafts Center in Anadarko on the importance of the Arts and Crafts Industry in the American Indian community. A tour of the museum followed the presentation.

Visits to Anadarko included Sequoyah Mills, an employer of American Indians in that area, and a visit to Riverside Indian School.

On Wednesday, June 30, several American Indian students from the surrounding area of Lawton, which included students from the Fort Sill Indian School, formed reaction panels for group interaction with the participants. The participants were divided into groups of ten and the students' reaction panels were rotated between groups in an attempt to maximize personal interaction between participant and student.

Dr. Muriel Wright, authoress of the book, A Guide to the Indian Tribes of Oklahoma, presented the history of the five civilized tribes. Dr. Wright, with the Oklahoma Historical Society, is the editor of the Chronicle and has been chosen the outstanding American Indian woman of the 20th century.

Mr. Rudy Clements, the director of the Northwest Area Manpower Institute for Development of Staff in Seattle, Washington, presented his views on American Indian life styles. Mr. Clements, a Warm Springs Indian, also has had several years experience working on the Navajo reservation in Arizona.

Mr. Hank Jacobs, Special Assistant and Coordinator of Industrial and Technical Services for the Oklahoma State Department of Vocational

and Technical Education, discussed the results of an American Indian training and relocation project in Medera, California. Mr. Jacobs was the director of the project operated by Philco-Ford through a training contract with the Bureau of Indian Affairs. Mr. Jacobs also presented a film concerning the Medera project entitled "The Big Chance."

A tour of the Great Plains Museum in Lawton included a presentation by Mrs. William Bradley, granddaughter of Quannah Parker, last chief of the Comanche, about the life styles of the Comanche Indian.

Two vocational and technical educators from the Southern Oklahoma Area Vocational and Technical School in Ardmore, Oklahoma, Mr. Cleo Dupy and Mrs. Geraldine Tote gave presentations on American Indian students in vocational education at the post-secondary level.

Mr. Howard Walkingstick, Assistant Supervisor for Children Services for Social and Rehabilitative Services, Oklahoma City, discussed the social environment of American Indian students as it affects their success in public education.

The first week of the workshop was designed to give the participants a knowledge and appreciation of the environmental and cultural background of American Indian students in Oklahoma.

The underlying training goal for the second week of the workshop was the development of workable concrete solutions for attainment of the program objectives.

Dr. Don Mitchell, Professor from Southwestern State College and experienced in American Indian education, discussed appropriate teaching methods for Indian students in vocational and technical education.

To accomplish the training goal, the participants were divided into four task force groups. They were assisted by four consultants who

rotated between the task force groups. The consultants included Dr. Don Mitchell; Mr. Bob Randolph, Academic Head, Fort Sill Indian School, Lawton, Oklahoma; Miss Jan Hall, Educational Specialist for Area Manpower Institute for Development of Staff, Oklahoma City, Oklahoma; and Mr. Don Bluejacket, Consultant for American Indian Education to the Oklahoma State Department of Vocational and Technical Education.

Additional formal presentations were made by staff personnel from the Area Manpower Institute for Development of Staff, Oklahoma City, Oklahoma. The formal presentation of group reports by task force leaders was completed on the last day of the workshop.

The workshop was concluded by Mr. Charles Holleyman, former superintendent of schools in Mustang, Oklahoma, who delivered a stirring address entitled "The Improvement of Vocational Education for Indian students." Mr. Holleyman, a Cherokee Indian and a recognized educational leader in Oklahoma, challenged the participants to attain the objectives of the program.

The second phase of the program was conducted during the 1971-72 academic school year. Personal visits with each participant at the participant's home school were conducted by the investigator. The purpose of the visits was to assist in the implementation of participant activities established during phase one of the program. The characteristics of the visits included personal interviews with participants, discussions with American Indian students in participant's programs, and the completion of instruments designed to assess the extent to which the program objectives were being accomplished.

The personal follow-up visits with participants began during August, 1971, and were concluded at the end of May, 1972.

Research Questions

The purpose of this study was to assess the effectiveness of an in-service education program designed to sensitize selected Oklahoma vocational and technical educators to the problems of American Indian students. Four questions were formulated for consideration in this study.

Question One: Was there a change in verbal decisions relative to problems of American Indian students by:

a. Participants during the two-week summer workshop?

b. Participants and selected non-participants (from the same schools) during the 1971-72 academic school year?

c. Participants and non-participants (from different schools) during the 1971-72 academic school year?

Question Two: Was there an increase in the number of American Indian students enrolled in selected vocational and technical programs during the 1971-72 academic school year over the number enrolled in the same programs during the 1970-71 academic school year?

Question Three: Was there a decrease in the number of American Indian student dropouts in selected vocational and technical programs during the 1971-72 academic school year from the number of dropouts reported during the 1970-71 academic school year?

Question Four: To what extent have the in-service participants engaged in activities consistent with the recommendations that were formulated during the two-week workshop.

Scope of the Study

This study was limited to vocational and technical educators who participated during the summer workshop and the 1971-72 academic school year.

Assumptions

Design of the study was based on the assumption that the selected educators provided accurate information. An additional assumption relates to the scaling (A-E) of the decision alternatives on the Classroom Integration Inventory. It was assumed that decision alternatives for each item ranged from most desirable (A) to least desirable (E).

Definition of Terms

In-service teacher education - Those activities on the part of educational faculties "which contribute to the professional growth of the teacher and the improvement of instructional programs" (Brooks, 1963).

Student dropouts - Those students who withdraw from a vocational-technical program of study and do not reenter an educational institution.

Vocational and technical educators - Teachers, counselors, and administrators of vocational and technical programs in the public school systems of Oklahoma at the secondary or post-secondary level.

CHAPTER II

REVIEW OF THE LITERATURE

This chapter contains a review of the literature relative to the assessment of selected effects of an in-service teacher education program for vocational and technical educators of American Indian students in an integrated educational environment. For ease of presentation, this chapter is presented in the following order: (1) the rationale which provided the framework for the design of the in-service program, (2) a survey of assessment techniques for in-service teacher education programs, and (3) a summary.

This review deals with selective studies whose results bring into focus what seems to be some of the most educationally significant factors important to the assessment of an in-service program for vocational and technical educators of American Indian students in an integrated educational environment.

The Rationale

A study conducted by George Kneller (1965), an antropologist, found that the typical American school is permeated with middle class white values. This value system or culture expects students to be polite, to follow conventions, and to respect other people's property. The educational system encourages hard work, sportsmanship, and, above all, ambition. He noted that to all these values the middle class white

student is already accustomed. His teachers, members of the middle class themselves, react to him with understanding and appreciation. To the minority student, however, many of these values are alien. He does not consider himself a part of the school because the values of the school system are not his. The results of the study indicate that in order for educators to surmount the cultural differences that hinder effective communication, they must study the cultures in which the students are reared.

Havighurst (1962) in the study, Growing Up in River City, concluded that talented minority students rarely do so well in school as middle class students of equal or even lesser ability, and some of them drop out even when they are intellectually capable of continuing. He found that for every high school dropout from the upper and upper-middle class there were about 32 from the lower and lower-lower classes including a significant proportion of minority students.

A study involving Plains Indians by Otto Klineberg (1935) reported that procedures of the school may violate the canons to which the student is accustomed. He discovered that some students had failed in the Indian schools because they would not act competitively in the way their white teachers wanted them to. Each student was expected to recite publicly and be praised for his display of knowledge, but none did so because in their value system this was "felt to be boastful and a public showing of one's kinsman."

Probably the most comprehensive study of Indian education reported in the literature was conducted by Havighurst (1970). The study attempted to evaluate the present situation relative to American Indian education. Havighurst states that:

> ...the major purpose of the National Study of American Indian Education was to look at the education of Indian children and youth through the eyes of the people most involved in the process--students, parents, local community leaders, and teachers.

The sample of the communities to be surveyed was selected on the basis of socio-economic and geographic representation. Havighurst felt it was most useful to study a more limited number of schools and communities rather intensively than to make a superficial study of a random sample of schools.

When the participant communities had been chosen, a team of researchers was sent to live and work in the community for several weeks. The research team observed, interviewed, and administered questionnaires. In most cases, the research team was rounded out by a small group of local persons who interviewed parents. The interviews with students, teachers, and community leaders were generally made by members of the visiting research team, though a few interviews with students were also made by local persons.

Four dimensions were used in gathering information from local teachers. These dimensions were: (1) teachers' experience and knowledge of the local community, (2) teachers' degree of understanding of and sympathy for the problems of local Indian people, (3) attitude toward assimilation versus maintaining a separate Indian culture, and (4) teachers' attitudes toward teaching Indian children.

Even though the results of the teachers were positive on all dimensions, Havighurst states:

> ...there is a difference between what we say we believe and our actual behavior, and it may be that the teachers of Indian children are more "enlightened" in their verbal attitudes than in their actual classroom and community behavior.

The recommendations, as a result of the study, relative to teachers of American Indian students included the following statements:

1. It might be possible in several states for the State Department of Public Instruction to work out an arrangement with one or more of the state colleges or universities to recruit teachers for schools with large Indian enrollments, to provide in-service training for them, and possibly to give them some advisory service during the school year unless the State Department is staffed for that function.
2. Teacher education programs should include, in addition to traditional academic skills, education in cultural awareness and techniques for learning the specific conditions of the community in which one will be working.
3. Opportunity for educational experience and training away from the school should be encouraged, but greater attention should be given to providing continuing in-service education and educational support to teachers while they are at work in the local community.
4. For teachers with large numbers of Indian students there might be created a role of Indian Education Specialist in school systems with 200 or more Indian pupils. Such a person might offer an in-service training program for classroom teachers who have Indian students and might work out cooperative programs between the school system and local Indian centers or other Indian organizations.

5. The school principal or the administrator must take major responsibility for seeking out new teachers and helping to provide in-service training for them and for other staff members.

Assessment Techniques

The self-perception theory of Daryl Bem (1970) appears to have a relationship to this study. His theory predicts that attitudes follow behavior. Bem states that Leon Festinger's theory of cognitive dissonance is also important to the hypothesis that behavior causes attitudes because it is the only consistency theory which deals explicitly with the consistencies and inconsistencies between an individual's behavior and his beliefs or attitudes. Most of the recent experimental evidence which supports this hypothesis has come from the testing of Festinger's theory.

Lieberman (1956) conducted one of the first studies which confirmed the cause-and-effect sequence of attitudinal change resulting from role change. His study involved the comparison of attitude changes that occurred among labor union workers who were promoted to foremen and union stewards before and after the promotion. The longitudinal study also included changes in attitude consistent with those of labor union workers when the foremen were demoted back to the rank and file labor position.

Another study which confirmed the cause-and-effect relationship of behavior and attitude was Pettigrew (1969).

A study by Raymond Johnson (1969) attempted to identify an evaluation system which would be effective in evaluating teacher training programs at a minimal cost. The research design involved a pre-test,

mid-test, and post-test. The subjects in the study were randomly assigned to the control group and the experimental group. No significant differences were found between the pre-test and the post-test although the mid-test was quite different from either the pre-test or post-test.

Other studies reviewed that attempted to assess changes in verbal behavior as a result of an in-service treatment included Adenika (1970), Baty (1970), Skrocki (1970), and McFarland (1970). Each of these studies found no statistically significant differences between the experimental group and the control group.

A study by Adams (1970) attempted to assess changes in classroom teacher behavior and involved the Flanders Interaction Analysis procedure which includes ratings on the classroom behavior of teachers such as (1) accepts feeling, (2) praises or encourages, (3) accepts or uses ideas of students, (4) asks questions, (5) lecturing, (6) giving directions, (7) criticizing or justifying authority, (8) student-talk response, (9) student-talk initiation, and (10) silence or confusion. Adams found statistically significant differences between the experimental groups and the control groups.

Summary

An attempt was made in this chapter to indicate the relationship of completed studies to this investigation through the rationale, theoretical framework from which the assessment techniques were developed, and other studies which utilized at least one aspect of teacher behavior.

From a review of several studies, it appeared that in-service teacher education programs have typically been evaluated on the basis of a single aspect of teacher behavior. No study was reviewed that

investigated both verbal and overt behavior that could be related to the effectiveness of an in-service program.

CHAPTER III

METHODOLOGY

The major purpose of this study was to assess the effectiveness of an in-service education program designed to sensitize selected Oklahoma vocational and technical educators to the problems of American Indian students.

This chapter will be devoted to reporting the methodology used in attempting to accomplish the purpose of this study and will be divided into the following sections: (1) Sample, (2) Instrumentation, (3) Data Collection, and (4) Statistical Treatment.

Sample

Subjects employed in this study were selected from a population using the following criteria:

1. They must be employed as vocational and technical educators in a public high school or an area vocational-technical school.
2. Their program must have an expected enrollment percentage of at least 10 percent Indian for the 1971-72 academic school year according to a state-wide report prepared by the Research, Planning, and Evaluation Division of the Oklahoma State Department of Vocational and Technical Education.
3. The participants in the two-week summer workshop must have been involved in both weeks of the workshop.

4. The participants must have agreed to participate in the follow-up phase of the program for the 1971-72 academic school year.
5. The non-participants from the same school as the participants must be vocational and technical teachers.
6. The non-participants from different schools must be vocational and technical teachers with no representation from their school system in the program as participants.

In addition to the criteria stated above, the vocational and technical educators who were program participants expressed an interest in the program by completing a formal application for admission to the in-service program. They received a stipend of $75.00 per week for two weeks and travel allowance to and from their home for one trip at the rate of $.09 per mile. They paid all other expenses such as meals, lodging and incidental expenses. In some cases, more than one vocational and technical educator from a single school system was selected as a program participant. Appendix B contains a listing of the schools and the programs from which the participants were employed.

The non-participants from the same schools were vocational and technical teachers in at least secondary vocational programs and received no stipend or expense payments. They were chosen because they were employed in the same school system as the program participants in an effort to assess the environmental influence which might act to affect the verbal decisions of vocational educators.

The non-participants from different schools were chosen at random. The selection process involved placing a number on a piece of paper for each school which had an expected enrollment of 10 percent in a box and selecting a number. In the event a school was selected which was a

participant school, the number was replaced in the box and a new choice made. A total of 29 vocational and technical teachers were chosen in the sample. Appendix C contains a listing of the schools and vocational and technical programs which comprised the second control group.

Instrumentation

The in-service program involved a two-week workshop during the summer of 1971 and personal follow-up visits with each participant at his home school during the 1971-72 academic school year. Several research instruments were deemed to be most practical for obtaining the relevant data.

Verbal Decisions

The first step in this investigation was to identify an instrument that would accurately measure verbal decisions which would be consistent with the in-service program objectives. A review of the literature revealed that an appropriate standardized test was not available. Discussions with Dr. Donald S. Phillips and Dr. Harry Brobst resulted in the identification of "The Classroom Integration Inventory." This instrument was developed by Nader in a similar in-service program for teachers of Indian students in an integrated environment which was held at Arizona State University (Roessel, 1960). The purpose of the instrument is to check decisions made by educators who deal with American Indian students in the integrated public classroom.

"The Classroom Integration Inventory" consists of 36 situations which involve American Indian students. The respondent was asked to

make a decision as to what action he would take given five alternatives.

The instructions for completion of the instrument follow:

Instructions

An example of a situation from the instrument with the instructions for making a decision relative to the situation follows.

Teachers are always faced with a wide variety of problems arising from the different types of students involved in the classroom. Sometimes Indian students are included in this situation.

On the following pages you will find brief descriptions of the behavior and problems involved with these Indian students. In each case you are to indicate how you would prefer to handle the situation if the decisions were entirely up to you. Read each item and mark your decision with the corresponding letter as follows:

A. If you feel you could handle such an Indian student in your regular classroom.

B. If you feel you could handle such an Indian student in your regular classroom provided advice from a specialist or consultant was occasionally made available to you when you felt a need for such aid in dealing with some problem.

C. If you feel you could handle such an Indian student in your regular classroom provided there was a full-time specialist available at your school who could provide supplementary training for the student and frequent consultation for you.

D. If you feel that such an Indian student would benefit most by being assigned to a special class or school.

E. If you feel that such an Indian student cannot be handled properly within the regular or special classroom.

An example of a situation cited appears below.

22. Betty cannot follow directions that are given clearly to the whole class; but she never asks questions about the directions when she has the opportunity.

A complete copy of the instrument is included in Appendix D.

The 36 situations relate to decisions concerning 12 characteristics which sometimes are stereotyped about American Indian students. The instrument was designed in such a way that three situations randomly distributed relate to a given characteristic. A description of these characteristics is located in Table I along with the identification of the 12 clusters and the item number of the situations which relate to each characteristic.

Student Enrollment

The instrument used in securing data relative to the enrollment mix (non-Indian and Indian) of students in selected vocational and technical programs was developed after consultation with Dr. Donald S. Phillips, Professor and Head, Technical Education, Oklahoma State University. The number of non-Indian and Indian students by classification of freshman, sophomore, junior, and senior for the academic school years 1970-71 and 1971-72 was included. Appendix E contains a copy of the instrument.

Student Dropouts

The instrument used to secure data relative to numbers of dropouts of non-Indian and Indian students in selected vocational and technical programs was designed at the same time as the one for enrollment. For convenience they were included on the same form. Appendix E mentioned above contains a copy of the instrument.

TABLE I

ITEM DESCRIPTIONS

Cluster	Item Number	Characteristic
A.	2-12-17	Decisions toward cleanliness
B.	5-16-22	Decisions toward lack of understanding directions
C.	4-28-36	Decisions toward shyness
D.	3-26-32	Decisions toward aggressiveness
E.	1-19-25	Decisions toward "Too stupid to learn"
F.	7-13-29	Decisions toward "Draws all the time"
G.	6-14-18	Decisions toward superiority attitude
H.	8-30-35	Decisions of "Does not try"
I.	9-27-33	Decisions toward language as a barrier
J.	10-21-24	Decisions toward holding to cultural background
K.	15-20-34	Decisions toward "I.Q."
L.	11-23-31	Decisions toward "Tries hard"

Participant Activities

The instruments developed to assess the participant activities indicating their increased awareness of Indian student problems were designed from task force reports prepared during the second week of the workshop. The participants were divided into four groups to develop specific recommendations concerning activities which accomplish the following goals:

1. The modification of vocational and technical programs so they are more relevant and responsive to the American Indian and are consistent with his wants, interests, and needs in order to achieve his aspired goal.
2. The improvement of presentation of vocational and technical instruction in a manner that has a positive relationship to the Indian student's educational, social, and economic environment.
3. The implementation or improvement of a plan that will involve the Indian community in the planning and evaluation of vocational and technical programs.
4. The development of suggestions and recommendations to improve career information materials for orientation of junior high and elementary school age Indians.

Problems inherent in the attainment of each goal were identified along with the facts and causes. Action steps to achieve solutions relative to each goal were formulated and presented by the task force leaders. The task force reports are included in Appendix F.

The data relative to activities were elicited from personal interview schedules developed from the task force recommendations. The

interview schedules were revised as a result of consultations with Mr. Arch B. Alexander, Dr. William W. Stevenson, and Dr. Donald S. Phillips. They were pre-tested, revised again, and then administered to the program participants.

Data Collection

Verbal Decisions

A pre-test (Classroom Integration Inventory) was administered to the program participants during the first day of the two-week workshop, June 28, 1971.

The post-test (test 2) was administered to the program participants at the close of the workshop on July 10, 1971.

The mid-test (test 3) was given to the experimental group (program participants) during the first visit of the follow-up period which occurred at the beginning of the 1971-72 academic school year. During this same period of time, the control groups (non-participants from the same schools, and non-participants from different schools) were given a pre-test (test 1).

The post-posttest (test 4) was administered to the program participants in May at the end of the 1971-72 academic school year.

The post-test (test 2) was also administered during May to the control groups which included the non-participants from the same schools and non-participants from different schools.

Student Enrollment

The enrollment data for the 1970-71 academic school year and for the 1971-72 school year was collected during the first follow-up visit

to the participants. This data was also collected from both control groups during this time.

Student Dropouts

The number of dropouts from the 1970-71 academic school year was collected at the same time as was the enrollment data from the program participants, non-participants from the same schools and non-participants from different schools.

Participant Activities

Twenty-five school systems were visited on a routine basis beginning on August 31, 1971 and continuing through May 23, 1972. The follow-up phase involved individual visits with 35 program participants. The visits ranged from forty-five minutes to one and one-half hours and involved personal interviews, general program and classroom observation and visits with American Indian students.

Personal interviews were involved with completion of interview schedules located in Appendix G which provided follow-up data necessary for the study. Interview schedule A was completed from October 5, 1971 through November 16, 1971. Interview schedule B was completed from March 3, 1972 through May 26, 1972. Completion of interview schedule B also included taping the interview with a magnetic tape recorder. This method was utilized in an effort to formalize the interview because of existing informal personal relationships between interviewer and program participant which might have served to bias the data. This technique also provided the facility of more completely gathering data which could be reviewed more fully at a later date.

Statistical Treatment

The instruments used in collecting data from program participants and non-participants were identical. This provided the basis for comparing verbal decision responses between program participants and non-participants. The comparison of responses between groups gave basis for identifying consensus areas of verbal decisions common to the perception of problems of American Indian students in an integrated environment.

The vocational and technical educators were asked to respond to situations on the Classroom Integration Inventory in terms of decision alternatives described earlier. A number was assigned to each decision alternative (A = 5, B = 4, C = 3, D = 2, and E = 1) in order to facilitate comparison between groups.

The data from each testing was processed using the "consensus number method." (Voth, 1967) This method provides the facility to develop an index for each situation of each group (participants, non-participants from the same schools, and non-participants from different schools). The index is developed by totaling the assigned value for each situation and dividing by the number in each group responding to the situation to derive a situation group mean.

The consensus index values were then computed by characteristic cluster by totaling index values for each situation within a cluster and dividing by the number of situations (3) within the cluster.

The Kendall Coefficient of Concordance which yields a W was chosen to measure degree of agreement among verbal decisions of program participants, non-participants from the same schools, and non-participants from different schools. The Kendall W is used to measure degree of agreement

among a number of (K) independent rankings and a set of (N) individuals (Folkers, 1967). The Kendall W yields a correlation coefficient and a chi-square statistic which with its associated degrees of freedom may be tested for significance. The null hypothesis of the Kendall Coefficient of Concordance states that the (K) rankings are unrelated. The null hypothesis then may be rejected when the computed chi-square value equals or exceeds that value shown in a Table of Critical Values of Chi-Square for a particular level of significance and a particular number of degrees of freedom (Siegel, 1956). The .05 level of statistical significance was used in determining significance in all statistical treatments utilized: The Kendall Coefficient of Concordance W, the related chi-square value of W, and the chi-square test of statistical significance.

The Kendall Coefficient of Concordance is calculated by the following formulas:

$$W = \frac{S}{1/12\ [K^2(N^3 - N)] - K \sum T}$$

Where:

$$S = \frac{N\ (R_j - E\ R_j)^2}{N}$$

The term S is obtained by finding the mean of the sum-of-ranks for each individual, finding the deviation for each individual sum-of-ranks for this mean, and then summing the squares of these deviations.

K is the number of rankings (groups).

N is the number of situations ranked.

The term $1/12\ [K^2(N^3 - N)]$ is the maximum possible sum of the squared deviations.

R_j is the sum of ranks assigned to the jth situation.

Correction for Ties:

The previous formula for W is corrected for ties by the $\frac{K\Sigma T}{T}$ term.

The tie correction factor is given by:

$$T = \frac{(t^3 - t)}{12}$$

Where t is the number of observations tied for a given rank. The Σ indicates a sum over all groups of ties within any one of the rankings. The term $\sum_T T$ then indicates a summation of the T's calculated for each ranking.

If N is greater than 7 a test of significance of the calculated W may be made by use of a chi-square and its associated degrees of freedom in conjunction with a Table of Critical Values of Chi-Square.

The chi-square is calculated as:

$$X^2 = K\ (N - 1)W$$

Where K, N. and W are the same as above, the degrees of freedom (df) is given by:

$$df = N - 1$$

The chi-square test was utilized to determine if the responses of the program participants and the non-participants are different. The null hypothesis of the chi-square test is stated as: There is no difference between responses of program participants and non-participants. Responses consisted of frequencies falling into discrete categories as indicated. The null hypothesis was tested by calculating the frequencies by the following formula:

$$\text{Chi-Square} = \frac{(\text{Observed Frequencies} - \text{Expected Frequencies})^2}{\text{Expected Frequencies}}$$

The degrees of freedom are computed as follows:

Degrees of freedom = (row - 1)(column - 1)

or:

$df = (r - 1)(c - 1)$

Because of small numbers of responses in some cells, the cells were collapsed to meet the criteria of chi-square (Siegel, 1956). This caused most response frequencies to fall into 2 x 3 and 2 x 2 contingency tables. The 2 x 3 tables were computed by the formula on the preceding page and the 2 x 2 tables by the formula below:

$$X^2 = \frac{N([AD - BC] - \frac{N}{2})^2}{(A + B)(C + D)(A + C)(B + D)}$$

The chi-square test of significance was utilized to determine if decisions of program participants and non-participants were statistically significant on each of the 12 clusters of the test. Data relative to enrollment patterns and dropout rates of vocational and tecnical students and activities of program participants were analyzed using percentages.

CHAPTER IV

PRESENTATION AND ANALYSIS OF THE DATA

The purpose of this chapter is to analyze and present data relative to the four research questions stated in Chapter I. The .05 level was utilized in determining statistical significance of results obtained by calculation of the Kendall Coefficient of Concordance, the related chi-square significance test for the calculated W, and the computed chi-square values calculated from decision responses. The null hypothesis of the Kendall Coefficient of Concordance (W) is that the decisions are unrelated. Rejection of the null hypothesis of the related chi-square (X^2) value for the calculated W would occur when the computed value of the statistic (X^2) is greater than the value under the .05 level of significance on a table of critical values of chi-square (Siegel, 1956). This would indicate the the K rankings are related. The null hypothesis of the chi-square test for statistical significance is stated as: "There is no difference between verbal decision responses of the in-service program participants and selected non-participants." The rejection of the null hypothesis of the chi-square test for statistical significance would occur when the value of the statistic is greater than the value under the .05 level of significance on a table of critical values of chi-square. This would indicate a difference of decision responses between program participants and selected non-participants.

Data relative to the enrollment mix and dropouts of non-Indian and Indian students in selected vocational and technical programs are analyzed and presented with frequencies and percentages as were data relative to the activities of program participants.

This chapter is divided into four sections which provide a separate analysis for each research question. Conclusions and recommendations based on these results are presented in Chapter V.

Data shown in Table II reflect testing periods and type of test given. In all cases, the instrument used was the "Classroom Integration Inventory." Data in the table also indicate the number of subjects in each group.

TABLE II

RESPONDENTS TO THE "CLASSROOM INTEGRATION INVENTORY"

Test Dates	Type of Test	Program Participants	Non-Participants Same Schools	Non-Participants Different Schools
June	Pre-Test	35	-	-
July	Post-Test	37	-	-
Sept.	Mid-Test	29	26	29
May	Post Post-Test	32	22	27

Research Question One: Was there a change in verbal decisions relative to problems of American Indian students by:

a. Participants during the two-week summer workshop?

The "Classroom Integration Inventory" was administered on a pre-test and post-test basis in an attempt to determine whether there was a change in verbal decision responses of program participants relative to problems of Indian students in integrated vocational and technical programs. The instrument contained 36 situations which involved Indian students. These situations comprised the 12 characteristic clusters presented in Table III.

The results shown in the table indicate group mean ratings increased after the post-test for all characteristic clusters with the exception of "J". The reader, however, should be aware of the two weeks elapsed time between the pre-test and the post-test.

b. Participants and selected non-participants (from the same schools) during the 1971-72 academic school year?

The data in Tables IV and V reflect a response analysis by decision alternatives between program participants and selected non-participants reported by characteristic cluster. The data indicate the number of responses by group for each decision alternative within each cluster.

A cluster analysis reflecting the computed chi-square value of each cluster and whether or not it is statistically significant is shown in Table VI. As reflected in the table, the degrees of freedom ranged from 2 to 4. The results indicate significant differences between responses of program participants and selected non-participants on clusters "A" and "I" and no significant difference on the remaining ten clusters.

The reader should be aware that the instrument was administered to program participants on two previous occasions--once at the beginning and

TABLE III

PRE-TEST AND POST-TEST RESULTS OF PROGRAM PARTICIPANTS ON THE "CLASSROOM INTEGRATION INVENTORY"

Cluster	Items	Pre-Test (6/28/71)	Problem	Post-Test (7/10/71)	Change
A	2-12-17	4.25	Cleanliness	4.32	+
B	5-16-22	3.77	Lack of Understanding Directions	3.98	+
C	4-28-36	3.19	Shyness	4.00	+
D	3-26-32	3.72	Aggressiveness	3.97	+
E	1-19-25	2.76	"Too Stupid to Learn"	3.06	+
F	7-13-29	3.62	"Draws All the Time"	4.17	+
G	6-14-18	4.28	Superiority Attitude	4.46	+
H	8-30-35	2.69	"Does Not Try"	3.30	+
I	9-27-33	3.77	Language as a Barrier	4.37	+
J	10-21-24	2.66	Holds to Cultural Background	2.65	-
K	15-20-34	3.27	"I.Q."	3.86	+
L	11-23-31	3.26	"Tries Hard"	3.59	+

TABLE IV

CLASSROOM INTEGRATION INVENTORY RESPONSE ANALYSIS AT THE BEGINNING OF THE 1971-72 ACADEMIC SCHOOL YEAR

Classification		Program Participants N = 35					Non-Participants (Same Schools) N = 26					Non-Participants (Different Schools) N = 29				
		*Decision Alternatives					*Decision Alternative					*Decision Alternatives				
Clusters	Items	A	B	C	D	E	A	B	C	D	E	A	B	C	D	E
A	2-12-17	72	23	3	4	0	40	36	3	1	3	45	37	9	2	2
B	5-16-22	28	43	24	10	0	26	28	15	14	0	14	26	24	23	0
C	4-28-36	39	37	13	13	1	31	28	12	12	1	25	22	18	22	0
D	3-26-32	50	30	18	5	1	39	27	12	4	1	23	31	21	10	2
E	1-19-25	10	22	13	56	3	9	17	15	42	1	10	11	18	44	4
F	7-13-29	38	42	16	9	0	38	28	9	9	0	21	31	20	15	0
G	6-14-18	70	26	5	2	2	51	24	4	0	5	48	25	8	4	2
H	8-30-35	15	32	20	35	2	8	24	16	33	3	7	11	22	43	4
I	9-27-33	72	24	9	0	0	39	30	6	8	1	34	31	12	8	2
J	10-21-24	6	14	15	65	5	7	7	13	49	8	4	7	12	57	7
K	15-20-34	30	43	22	10	0	27	29	20	8	0	15	35	20	16	1
L	11-23-31	20	34	24	27	0	18	26	12	28	0	15	22	21	29	0

*Columns contain the number of combined group responses for three items within each cluster.

TABLE V

CLASSROOM INTEGRATION INVENTORY RESPONSE ANALYSIS AT THE END OF THE 1971-72 ACADEMIC SCHOOL YEAR

Classification		Program Participants N = 32					Non-Participants (Same Schools) N = 22					Non-Participants (Different Schools) N = 27				
		*Decision Alternatives					*Decision Alternatives					*Decision Alternatives				
Clusters	Items	A	B	C	D	E	A	B	C	D	E	A	B	C	D	E
A	2-12-17	70	18	3	2	3	38	15	8	3	0	39	31	5	4	0
B	5-16-22	23	39	20	12	0	11	18	18	17	0	16	30	21	14	0
C	4-28-36	37	31	18	13	0	12	26	10	16	0	14	33	16	16	2
D	3-26-32	55	27	12	3	2	29	22	6	6	1	27	31	12	10	1
E	1-19-25	13	25	12	44	3	4	10	7	43	0	12	10	12	46	1
F	7-13-29	44	30	12	11	0	15	18	12	17	0	17	36	15	12	1
G	6-14-18	65	20	3	6	4	34	17	7	5	1	50	23	5	2	1
H	8-30-35	23	21	21	28	3	5	16	8	33	2	9	17	17	35	3
I	9-27-33	65	18	7	3	1	27	20	12	4	1	33	24	18	5	1
J	10-21-24	6	14	13	57	5	1	5	3	50	5	7	9	11	49	5
K	15-20-34	22	38	18	19	0	13	21	16	13	0	16	31	19	14	1
L	11-23-31	21	33	10	32	1	11	12	17	23	1	12	25	29	15	0

*Columns contain the number of combined group responses for three items within each cluster.

TABLE VI

CHI-SQUARE ANALYSIS BY CHARACTERISTIC CLUSTER BETWEEN DECISION RESPONSES OF PROGRAM PARTICIPANTS AND SELECTED NON-PARTICIPANTS (SAME SCHOOLS) AT THE BEGINNING OF THE 1971-72 ACADEMIC SCHOOL YEAR

Cluster	Items	Problem	X^2 Value	Sig at .05	df
A	2-12-17	Cleanliness	10.19	Yes	2
B	5-16-22	Lack of Understanding Directions	3.08	No	3
C	4-28-36	Shyness	.33	No	3
D	3-26-32	Aggressiveness	.45	No	3
E	1-19-25	"Too Stupid to Learn"	1.24	No	3
F	7-13-29	"Draws All the Time"	2.45	No	3
G	6-14-18	Superiority Attitude	.77	No	3
H	8-30-35	"Does Not Try"	1.64	No	3
I	9-27-33	Language as a Barrier	9.69	Yes	2
J	10-21-24	Holds to Cultural Background	3.14	No	4
K	15-20-34	"I.Q."	.80	No	3
L	11-23-31	"Tries Hard"	2.91	No	3

once at the end of the two-week summer workshop. The selected non-participants experienced the test for the first time when it was administered at the beginning of the 1971-72 academic school year.

The data in Table VII show the computed chi-square value for each characteristic cluster for program participants and selected non-participants at the end of the 1971-72 academic school year. The null hypothesis can be rejected on 7 of the 12 characteristic clusters in which statistically significant differences were found between verbal decision responses of program participants and selected non-participants.

c. Participants and selected non-participants (from different schools) during the 1971-72 academic school year?

The data reported in Table VIII indicate statistical significance between decision responses of program participants and selected non-participants from different schools on the twelve characteristic clusters from the "Classroom Integration Inventory" at the beginning of the 1971-72 academic school year. A statistically significant difference at the .05 level was found on 8 of the 12 characteristic clusters.

The data shown in Table IX indicate the chi-square test for statistical significance between the decision responses of participants and selected non-participants at the end of the 1971-72 academic school year. Statistically significant difference was found on 6 of the 12 characteristic clusters. Clusters "A", "C", "D", "F", "I", and "L" were found to be significant and the null hypothesis can be rejected on these clusters.

Output generated by the computation of the Kendall Coefficient of Concordance W indicates positive agreement between program participants and selected non-participants at the end of the 1971-72 academic school year. The comparison of ranks of group means yielded a coefficient of

TABLE VII

CHI-SQUARE ANALYSIS BY CHARACTERISTIC CLUSTER BETWEEN DECISION RESPONSES OF PROGRAM PARTICIPANTS AND SELECTED NON-PARTICIPANTS (SAME SCHOOLS) AT THE END OF THE 1971-72 ACADEMIC SCHOOL YEAR

Cluster	Item	Problem	X^2 Value	Sig at .05	df
A	2-12-17	Cleanliness	4.93	No	2
B	5-16-22	Lack of Understanding Directions	7.62	No	3
C	4-28-36	Shyness	8.60	Yes	3
D	3-26-32	Aggressiveness	10.18	Yes	3
E	1-19-25	"Too Stupid to Learn"	6.21	No	3
F	7-13-29	"Draws All the Time"	11.38	Yes	3
G	6-14-18	Superiority Attitude	7.32	No	3
H	8-30-35	"Does Not Try"	12.41	Yes	3
I	9-27-33	Language as a Barrier	9.56	Yes	3
J	10-21-24	Holds to Cultural Background	7.48	Yes	2
K	15-20-34	"I.Q."	1.28	No	3
L	11-23-31	"Tries Hard"	9.86	Yes	3

TABLE VIII

CHI-SQUARE ANALYSIS BY CHARACTERISTIC CLUSTER BETWEEN DECISION RESPONSES OF PROGRAM PARTICIPANTS AND SELECTED NON-PARTICIPANTS (DIFFERENT SCHOOLS) AT THE BEGINNING OF THE 1971-72 ACADEMIC SCHOOL YEAR

Cluster	Items	Problem	X^2 Value	Sig at .05	df
A	2-12-17	Cleanliness	33.52	Yes	2
B	5-16-22	Lack of Understanding Directions	12.86	Yes	3
C	4-28-36	Shyness	8.13	Yes	3
D	3-26-32	Aggressiveness	10.35	Yes	3
E	1-19-25	"Too Stupid to Learn"	4.12	No	3
F	7-13-29	"Draws All the Time"	6.82	Yes	3
G	6-14-18	Superiority Attitude	3.61	No	2
H	8-30-35	"Does Not Try"	13.08	Yes	3
I	9-27-33	Language as a Barrier	18.91	Yes	2
J	10-21-24	Holds to Cultural Background	2.26	No	4
K	15-20-34	"I.Q."	6.16	Yes	3
L	11-23-31	"Tries Hard"	1.89	No	3

TABLE IX

CHI-SQUARE ANALYSIS BY CHARACTERISTIC CLUSTER BETWEEN DECISION RESPONSES OF PROGRAM PARTICIPANTS AND SELECTED NON-PARTICIPANTS (DIFFERENT SCHOOLS) AT THE END OF THE 1971-72 ACADEMIC SCHOOL YEAR

Cluster	Items	Problem	X^2 Value	Sig at .05	df
A	2-12-17	Cleanliness	10.76	Yes	2
B	5-16-22	Lack of Understanding Directions	1.67	No	3
C	4-28-36	Shyness	8.65	Yes	3
D	3-26-32	Aggressiveness	10.39	Yes	3
E	1-19-25	"Too Stupid to Learn"	5.06	No	3
F	7-13-29	"Draws All the Time"	11.74	Yes	3
G	6-14-18	Superiority Attitude	1.73	No	3
H	8-30-35	"Does Not Try"	6.39	No	3
I	9-27-33	Language as a Barrier	15.34	Yes	2
J	10-21-24	Holds to Cultural Background	.82	No	4
K	15-20-34	"I.Q."	.75	No	3
L	11-23-31	"Tries Hard"	18.31	Yes	3

0.944056 for W. The statistical significance of this relationship was determined by the calculation of the related chi-square statistic (31.15384) which was beyond the .05 level of significance.

The significance of W may be interpreted as meaning that program participants and selected non-participants applied essentially the same standards in their verbal decision responses toward Indian students in an integrated classroom environment.

The data in Table X show the rankings of characteristic clusters by program participants, non-participants (same schools), and non-participants (different schools) at the end of the 1971-72 academic year. A characteristic cluster with a consensus index of 5.00 would indicate that all vocational and technical educators within the group agreed that the situations which comprise that particular characteristic cluster could be handled in the regular classroom. A consensus index value of 4.00 would indicate perfect agreement that the problems could be handled in the regular classroom with a part-time aide. A consensus index value of 1.00 would indicate that all vocational and technical educators within the group felt that the problem could not be handled in the public school. The consensus index values for each cluster could range from 5.00 to 1.00. The Kendall Coefficient of Concordance, in addition to providing a value for W and its associated chi-square statistic, generated a rank order by characteristic cluster for each group from most desirable to least desirable. The data in the table show the comparison of computed consensus index values ranked by groups on their perception of how Indian student problems should be handled in an integrated classroom environment. Five of the problems received identical rankings by all groups.

TABLE X

RANKING OF CHARACTERISTIC CLUSTERS BY PARTICIPANTS AND NON-PARTICIPANTS AT THE END OF THE 1971-72 ACADEMIC SCHOOL YEAR

Program Participants			Non-Participant (Same Schools)			Non-Participant (Different Schools)		
Item Number	Consensus Index Value	Characteristic Cluster	Item Number	Consensus Index Value	Characteristic Cluster	Item Number	Consensus Index Value	Characteristic Cluster
2-12-17	4.56	Cleanliness	7-13-29	4.33	Draws All the Time	6-14-18	4.47	Superiority Attitude
9-27-33	4.53	Language Barrier	2-12-17	4.32	Cleanliness	7-12-17	4.35	Cleanliness
6-14-18	4.40	Superiority Attitude	6-14-18	4.28	Superiority Attitude	9-27-33	4.03	Language Barrier
3-26-32	4.22	Aggressiveness	3-26-32	4.10	Aggressiveness	3-26-32	3.90	Aggressiveness
7-13-29	4.10	Draws All the Time	9-27-33	4.04	Language Barrier	7-13-29	3.70	Draws All the Time
4-28-36	3.87	Shyness	4-28-36	3.59	Shyness	15-20-34	3.58	I.Q.
5-16-22	3.74	Lack of Understanding Directions	15-20-34	3.46	I.Q.	5-16-22	3.57	Lack of Understanding Directions
15-20-34	3.62	I.Q.	5-16-22	3.33	Lack of Understanding Directions	4-28-36	3.45	Shyness
11-23-31	3.44	Tries Hard	11-23-31	3.15	Tries Hard	11-23-31	3.42	Tries Hard
8-30-35	3.32	Does Not Try	8-30-35	2.86	Does Not Try	8-30-35	2.90	Does Not Try
1-19-25	2.95	Too Stupid to Learn	1-19-25	2.35	Too Stupid to Learn	1-19-25	2.83	Too Stupid to Learn
10-21-24	2.50	Holds to Cultural Background	10-21-24	2.15	Holds to Cultural Background	10-21-24	2.56	Holds to Cultural Background

Research Question Two: Was there an increase in the number of American Indian students enrolled in selected vocational and technical programs during the 1971-72 academic school year over the number enrolled in the same programs during the 1970-71 academic school year?

Data in Table XI show the number of vocational and technical programs which were represented by selected vocational and technical teachers participating in the study. Twenty-seven vocational and technical programs were represented by program participants. Twenty-one programs were represented by non-participants (same schools) and twenty-seven programs by non-participants (different schools). Fourteen different vocational and technical programs from the service areas were represented in the study.

Enrollment data shown in Table XII for non-Indian and Indian students of selected program participants was reported by student classification. Data reflect the number of students enrolled by grade classification and academic year. The data represented only those program participants who were vocational and technical teachers at the secondary or post-secondary level and reflected that over-all enrollment for both non-Indian and Indian students was 129 less in 1971-72 than 1970-71. The over-all Indian student enrollment decreased three percent in 1971-72 from that of 1970-71.

Data in Tables XIII and XIV reflect enrollment figures and percentages of non-Indian and Indian students in vocational and technical programs of non-participants. Data indicate a decrease of total enrollment from 1970-71 to 1971-72 of 152 students for non-participants (same schools) as compared to an increase of 180 students in the non-participants (different schools) programs. The Indian student enrollment

TABLE XI

ANALYSIS OF SERVICE AREAS REPRESENTED BY PROGRAM PARTICIPANTS AND SELECTED NON-PARTICIPANTS

Type of Program	Program Participants	Non-Participants (Same Schools)	Non-Participants (Different Schools)
Agriculture	8	6	7
Automobile Mechanics	0	0	3
Business and Office	1	5	0
Carpentry	2	1	0
Cosmetology	2	0	1
Cooperative Vocational Education	0	1	1
Coordinated Vocational Education Training	1	0	0
Distributive Education	0	0	1
Data Processing	1	0	0
Electronics	0	0	1
Industrial Cooperative Training	0	1	0
Home Economics	10	7	10
Practical Nursing	1	0	2
Printing	1	0	1
TOTALS	27	21	27

TABLE XII

STUDENT ENROLLMENTS AND PERCENTAGES OF SELECTED PARTICIPANT VOCATIONAL AND TECHNICAL PROGRAMS

Grade	1970-71 School Year Enrollment					1971-72 School Year Enrollment				
	Non-Indian		Indian		Total	Non-Indian		Indian		Total
	No.	%	No.	%	No.	No.	%	No.	%	No.
Freshman	282	77	86	23	368	282	84	55	16	337
Sophomore	350	75	116	25	467	314	77	95	23	409
Junior	245	81	59	19	304	255	83	52	17	307
Senior	255	78	72	22	327	228	80	56	20	284
TOTALS	1132	77	334	23	1466	1079	81	258	19	1337

TABLE XIII

STUDENT ENROLLMENTS AND PERCENTAGES OF SELECTED NON-PARTICIPANTS (SAME SCHOOLS) VOCATIONAL PROGRAMS

Grade	1970-71 School Year Enrollment					1971-72 School Year Enrollment				
	Non-Indian		Indian		Total	Non-Indian		Indian		Total
	No.	%	No.	%	No.	No.	%	No.	%	No.
Freshman	139	78	40	22	179	157	82	34	18	191
Sophomore	194	87	28	13	222	234	82	53	18	287
Junior	213	50	217	50	430	217	83	46	17	263
Senior	223	83	45	17	268	162	79	44	21	206
TOTALS	769	70	330	30	1099	770	81	177	19	947

during the same period decreased from 30 percent to 19 percent and from 36 percent to 25 percent respectively.

TABLE XIV

STUDENT ENROLLMENTS AND PERCENTAGES OF SELECTED NON-PARTICIPANTS (DIFFERENT SCHOOLS) VOCATIONAL AND TECHNICAL PROGRAMS

Grade	1970-71 School Year Enrollment					1971-72 School Year Enrollment				
	Non-Indian		Indian		Total	Non-Indian		Indian		Total
	No.	%	No.	%	No.	No.	%	No.	%	No.
Freshman	200	63	118	37	318	254	69	103	31	357
Sophomore	134	54	115	46	249	202	70	86	30	288
Junior	147	68	69	32	216	198	76	62	24	260
Senior	190	73	71	27	261	268	84	51	16	319
TOTALS	671	64	373	36	1044	922	75	302	25	1224

Research Question Three: Was there a decrease in the number of American Indian student dropouts in selected vocational and technical programs during the 1971-72 academic school year from the number of dropouts reported during the 1970-71 academic school year?

The data in Table XV reflect a comparison between non-Indian and Indian student dropouts by grade classification for the 1970-71 and 1971-72 academic school years as reported by program participants. The percentage of Indian student dropouts decreased in 1971-72 from that of 1970-71 by 10 percent.

TABLE XV

NUMBER OF STUDENT DROPOUTS FROM VOCATIONAL AND TECHNICAL PROGRAMS OF SELECTED PARTICIPANTS

Grade	1970-71 School Year Dropouts					1971-72 School Year Dropouts				
	Non-Indian		Indian		Total	Non-Indian		Indian		Total
	No.	%	No.	%	No.	No.	%	No.	%	No.
Freshman	33	67	16	33	49	10	83	2	17	12
Sophomore	23	70	10	30	33	24	80	6	20	30
Junior	16	80	4	20	20	9	75	3	25	12
Senior	17	71	7	29	24	11	85	2	15	13
TOTALS	89	71	37	29	126	54	81	13	19	67

The data in Tables XVI and XVII reflect the number of non-Indian and Indian student dropouts reported by selected non-participants during 1970-71 and 1971-72. Table XVI shows that the number of non-Indian dropouts increased four and during the same time the number of Indian student dropouts decreased by thirteen. Table XVII shows a decrease of seven in non-Indian dropouts and an increase of nine in Indian student dropouts.

Research Question Four: To what extent have the in-service participants engaged in activities consistent with the recommendations that were formulated during the two-week workshop.

Twenty-eight program participants provided data relative to this research question. The method of data collection mentioned previously included personal follow-up visits with participants at their home schools. Personal interview schedules were used to record data.

TABLE XVI

NUMBER OF STUDENT DROPOUTS FROM VOCATIONAL AND TECHNICAL PROGRAMS OF SELECTED NON-PARTICIPANTS (SAME SCHOOLS)

Grade	1970-71 School Year Dropouts					1971-72 School Year Dropouts				
	Non-Indian		Indian		Total	Non-Indian		Indian		Total
	No.	%	No.	%	No.	No.	%	No.	%	No.
Freshman	5	45	6	55	11	7	78	2	22	9
Sophomore	11	65	6	35	17	29	85	5	15	34
Junior	10	67	5	33	15	8	67	4	33	12
Senior	20	71	8	29	28	6	86	1	14	7
TOTALS	46	65	25	35	71	50	81	12	19	62

TABLE XVII

NUMBER OF STUDENT DROPOUTS FROM VOCATIONAL AND TECHNICAL PROGRAMS OF SELECTED NON-PARTICIPANTS (DIFFERENT SCHOOLS)

Grade	1970-71 School Year Dropouts					1971-72 School Year Dropouts				
	Non-Indian		Indian		Total	Non-Indian		Indian		Total
	No.	%	No.	%	No.	No.	%	No.	%	No.
Freshman	7	44	9	56	16	6	43	8	57	14
Sophomore	19	54	16	46	35	20	61	13	39	33
Junior	20	71	8	29	28	10	36	18	64	28
Senior	11	73	4	27	15	14	67	7	33	21
TOTALS	57	61	37	39	94	50	52	46	48	96

The primary program objectives will be presented along with the data supporting each objective.

Increased enrollment of American Indian students in vocational and technical programs in Oklahoma. The data in Table XVIII show the recruitment activities of program participants.

TABLE XVIII

ANALYSIS OF INDIAN STUDENT RECRUITING ACTIVITIES BY PROGRAM PARTICIPANTS

1971-72 Academic Year	Personal Contact With Indian Students or Indian Community		Personal Contact With Other Public School Personnel		No Action		Negative Response		Total
	No.	%	No.	%	No.	%	No.	%	
Beginning of Year	12		5		6		5		28
Percent		43		18		21		18	100
End of Year	11		7		7		3		28
Percent		39		25		25		11	100

At the beginning of the 1971-72 academic school year, the question was asked: "What action do you feel you can take at the present time to increase Indian student enrollment?" Responses ranged from "I don't

know" to "more personal contact with the Indian community." At the end of the 1971-72 academic year, the program participants were asked the question, "What action have you taken this year to increase student enrollment?"

The category "No Action" included responses from program participants in which all freshmen are required to enroll in at least the first year of the program. The responses were included in the "Negative Response" category if the participant responded "I don't know" or "None" and the students in the school were not required to enroll in the program.

Greater holding power of vocational and technical programs for the Indian student in Oklahoma. The data shown in Table XIX reflect the activities of program participants directly aimed at increasing the holding power of their program for the Indian student. At the beginning of the year, 46 percent of the participants utilized instructional techniques in the classroom to decrease dropouts of Indian students. Fifty-seven percent of the participants at the end of the year utilized instructional techniques and closer personal relationships to increase the holding power of their programs for Indian students.

The development of new vocational and technical programs or the modification of existing programs so they are more relevant to American Indian students' needs and interests. Data shown in Table XX indicate that activities of program participants relative to development or modification of vocational programs are quite limited. The data do indicate that participant activities for modification of their programs increased during the 1971-72 academic school year.

TABLE XIX

ANALYSIS OF PARTICIPANT ACTIVITIES DESIGNED TO INCREASE HOLDING POWER OF VOCATIONAL PROGRAMS FOR INDIAN STUDNETS

1971-72 Academic School Year	Holding Power No Problem		Improve Instructional Techniques		Improve Personal Relationships With Indian Students		Other External Sources		Negative Response		Total
	No.	%	No.	%	No.	%	No.	%	No.	%	
Beginning of Year	9		13		1		3		2		28
Percent		32		46		04		11		07	100
End of Year	4		9		7		5		3		28
Percent		14		32		25		18		11	100

TABLE XX

ANALYSIS OF PARTICIPANTS ACTIVITIES RELATIVE TO VOCATIONAL PROGRAM DEVELOPMENT OR MODIFICATION

1971-72 Academic School Year	Development of new Vocational Programs		Modification of Existing Vocational Programs		No Action		Total
	No.	%	No.	%	No.	%	
Beginning of Year	0		5		23		28
Percent		0		18		82	100
End of Year	3		10		15		28
Percent		10		36		54	100

The instructional presentation of vocational and technical course material in a manner that has a positive relationship to the American Indian students' educational, social, and economic environment. The data in Table XXI reflect the number of program participants that engaged in activities to provide positive instruction for Indian students. At the beginning of the 1971-72 academic school year, 43 percent of the participants modified their instructional techniques as compared to 72 percent at the end of the academic school year. The percentage of vocational and technical teachers utilizing individual student encouragement increased from 4 to 36 percent.

TABLE XXI

ANALYSIS OF INSTRUCTIONAL TECHNIQUES
OF PROGRAM PARTICIPANTS

1971-72 Academic School Year	Instructor Presentation Techniques		Personal Student Encouragement		Instructor Verbal Behavior		Nothing		Total
	No.	%	No.	%	No.	%	No.	%	
Beginning of Year	9		1		2		16		28
Percent		32		04		07		57	100
End of Year	9		10		1		8		28
Percent		32		36		04		29	100

Greater involvement of the Indian communities in the planning and evaluation of vocational and technical programs. At the beginning of the 1971-72 academic school year the participants were asked the following question: "What action do you feel you can take at the present time to involve the Indian communities in the planning and evaluation of your program?" The data in Table XXII represent the categorized responses of the participants. At the end of the year, the participants were asked, "What action have you taken this year to involve the Indian communities in the planning and evaluation of your program?" The results are also reported in Table XXII.

TABLE XXII

ANALYSIS OF PARTICIPANT ACTIVITIES TO INVOLVE INDIAN COMMUNITIES IN THE PLANNING AND EVALUATION OF VOCATIONAL AND TECHNICAL PROGRAMS

1971-72 Academic School Year	Include Indians on Advisory Boards		Personal Contact with Indian Adults		Home Visits		Nothing		Total
	No.	%	No.	%	No.	%	No.	%	
Beginning of Year	11		6		2		9		28
Percent		39		21		07		32	100
End of Year	2		6		2		18		28
Percent		07		21		07		64	100

The results indicate that while 67 percent of the participants expressed intent to involve the Indian communities only 35 percent actually did so.

CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

One of the major concerns in conducting projects and programs relative to improving American Indian education relates to the evaluation of the effectiveness of such efforts and is the specific problem with which this study was concerned.

The American Indian student has had difficulty in adjusting to a changing society and culture. His adjustment is made difficult because of his environmental and cultural heritage which sometimes is in conflict with the dominant environment and culture.

The vocational and technical educator who is unaware of the adjustment problems faced by the American Indian student may inadvertedly contribute to the student's difficulty in succeeding in a multi-cultural environment. Conferences, workshops, and seminars have in the past been directed toward the solution of these problems.

Summary

The purpose of this study was to assess the effectiveness of an in-service education program designed to sensitize selected Oklahoma vocational and technical educators to the problems of American Indian students. The program was conducted by the Oklahoma State Department of Vocational and Technical Education during the period June, 1971 through May, 1972, under the sponsorship of the United States Department of

Health, Education, and Welfare, Office of Education, Bureau of Educational Personnel Development of the Vocational Education Training Branch (EPDA). The in-service program was entitled "Sensitizing Vocational-Technical Professional Personnel to the Characteristics and Goals of the American Indian."

The primary objective of the program was to provide professional vocational and technical personnel with a greater understanding of the American Indian in Oklahoma--his needs, ambitions, goals, and history. The desired end products of the program were:

1. Increased enrollment of American Indian students in vocational and technical programs in Oklahoma.
2. Greater holding power of vocational and technical programs for the American Indian student in Oklahoma.
3. The presentation of course material by vocational and technical educators in a manner that has a positive relationship to the American Indian student's educational, social, and economic environment.
4. Greater involvement of the American Indian communities in the planning and evaluation of vocational and technical programs in Oklahoma.

In order to attempt to accomplish the purposes of this study, four research questions were considered.

Question One: Was there a change in verbal decisions relative to problems of American Indian students by:

a. Participants during the two-week summer workshop?
b. Participants and selected non-participants (from the same schools) during the 1971-72 academic school year?

c. Participants and non-participants (from different schools) during the 1971-72 academic school year?

Question Two: Was there an increase in the number of American Indian students enrolled in selected vocational and technical programs during the 1971-72 academic school year over the number enrolled in the same programs during the 1970-71 academic school year?

Question Three: Was there a decrease in the number of American Indian student dropouts in selected vocational and technical programs during the 1971-72 academic school year from the number of dropouts reported during the 1970-71 academic school year?

Question Four: To what extent have the in-service participants engaged in activities consistent with the recommendations that were formulated during the two-week workshop?

Data used in considering the research questions were collected from 93 vocational and technical educators located in high schools and area vocational-technical schools throughout the state of Oklahoma. Subjects utilized in this study were selected from a population of vocational and technical educators using the following criteria:

1. They must be employed as vocational and technical educators in a comprehensive public high school or an area vocational-technical school in Oklahoma.
2. Their program must have an expected enrollment percentage of at least 10 percent American Indian for the 1971-72 academic school year according to a state-wide report prepared by the Division of Research, Planning, and Evaluation of the Oklahoma State Department of Vocational and Technical Education.

3. The participants must have been involved in both weeks of the two-week summer workshop.
4. The participants must have agreed to participate in the follow-up phase of the program for the 1971-72 academic school year.
5. The non-participants from the same schools must be vocational-technical teachers.
6. The non-participants from different schools must be vocational-technical teachers with no representation from their school system in the program as participants.

Several instruments were used to obtain data for the study. The "Classroom Integration Inventory" was used to obtain data relative to verbal decisions of subjects employed in the study. The Student Enrollment and Dropout Information Form was used to obtain data relative to the enrollment mix and dropout patterns of vocational and technical students. Interview schedules were used to gather data relative to professional activities of program participants during the 1971-72 academic school year. Data collection began June 28, 1971, and was completed May 27, 1972. The data were collected in group and individual settings by the investigator. Data from the "Classroom Integration Inventory" were punched into cards for machine processing in order to facilitate the computation of Kendall's Coefficient of Concordance W and its associated chi-square statistic. Percentage analysis and chi-square tests for statistical differences were used as additional numerical assessment techniques in the study.

Certain limitations relative to the design of this study should be kept in mind while interpreting results of the investigation. The

investigator was unable to control random selection or random assignment of subjects to control and experimental groups.

The elapsed time between the pre-test and post-test was two weeks which may have had an effect of biasing results of the post-test. This limitation, however, was dealt with by utilizing a multiple-time-series testing procedure designed to overcome maturation and historical effects (Van Dalen, 1966).

Another limitation has to do with interview and conference techniques of collecting data. Regardless of the care exercised in the design and administration of interview schedules, no guarantee can be given that the respondent's interpretation of the questions asked will be the same as intended by the designer of the interview schedule (Dugger, 1968). Therefore, there can be no absolute assurance subjects gave valid responses. The reader, then, must accept the assumption that the investigator did not select subjects or make use of data that would intentionally bias results.

The reader should be reminded of an assumption relative to scaling of decision alternative responses included on the "Classroom Integration Inventory." It was assumed that the most desirable response to each of the 36 situations was "A" and the least desirable was "E". This assumption is of particular significance when considering the findings and conclusions relative to research question one.

Findings Related to Research Questions

Research Question One: Was there a change in verbal decisions relative to problems of American Indian students by:

a. Participants during the two-week summer workshop?

The results of the pre-test and post-test indicate positive changes on 11 of 12 characteristic clusters from the "Classroom Integration Inventory."

b. Participants and selected non-participants (from the same schools) during the 1971-72 academic school year?

The "Classroom Integration Inventory" was administered to program participants and non-participants at the beginning of the 1971-72 academic school year and again at the end of the year. A chi-square analysis computed at the beginning of the year indicated the responses of the two groups were significantly different at the .05 level on 2 of the 12 characteristic clusters. These clusters were "Cleanliness" and "Language as a Barrier."

A chi-square analysis computed at the end of the year indicated the responses of the two groups were significantly different at the .05 level on 7 of the 12 characteristic clusters. These were: "Shyness," "Aggressiveness," "Draws All the Time," "Does Not Try," "Language as a Barrier," "Holds to Cultural Background," and "Tries Hard." With the exception of "Draws All the Time," the program participants scored higher on each of the clusters in which a significant difference was found.

c. Participants and non-participants (from different schools) during the 1971-72 academic school year?

The "Classroom Integration Inventory" was administered to non-participants from different schools in the same manner as was stated in part b. above. A chi-square analysis computed at the beginning of the year indicated the responses of the two groups were significantly different on 8 of the 12 characteristic clusters. These were: "Cleanliness,"

"Lack of Understanding Directions," "Shyness," "Aggressiveness," "Draws All the Time," "Does Not Try," "Language as a Barrier," and "I.Q."

A chi-square analysis computed at the end of the year indicated the responses of the two groups were significantly different at the .05 level on 6 of the 12 characteristic clusters. These were: "Cleanliness," "Shyness," "Aggressiveness," "Draws All the Time," "Language as a Barrier," and "Tries Hard." The program participants scored higher on all of the characteristic clusters which were significantly different. At the end of the 1971-72 academic school year, the Kendall Coefficient of Concordance was used to measure the degree of agreement as to ranking of the characteristic clusters between program participants and non-participants from the same schools and non-participants from different schools. The computation yielded a value for W of .94 with its associated chi-square statistic of 31.15. The chi-square statistic was statistically significant beyond the .05 level of significance.

> Research Question Two: Was there an increase in the number of American Indian students enrolled in selected vocational and technical programs during the 1971-72 academic school year over the number enrolled in the same programs during the 1970-71 academic school year?

A decrease in total enrollment of 9 percent from 1970-71 to 1971-72 was reported by program participants for their programs. A 22 percent decrease in Indian student enrollment occurred during the same time.

A 13.8 percent decrease in over-all student enrollment from 1970-71 was reported by non-participants (from same schools) for their programs. The enrollment of Indian students decreased by 46 percent during the same time.

The total student enrollment in programs of non-participants (different schools) increased 14.8 percent from the 1970-71 academic school year while the reported Indian student enrollment decreased by 18 percent during the same period.

> Research Question Three: Was there a decrease in the number of American Indian student dropouts in selected vocational and technical programs during the 1971-72 academic school year from the number of dropouts reported during the 1970-71 academic year?

The program participants reported that 37 Indian students dropped out of their programs during the 1970-71 academic school year as compared to 13 Indian student dropouts in 1971-72.

The non-participants (from the same schools) reported that 25 Indian students dropped out of their programs during the 1970-71 academic school year as compared to 12 Indian student dropouts in 1971-72.

The non-participants (from different schools) reported that 37 Indian students dropped from their programs in 1970-71 as compared to 46 Indian student dropouts in 1971-72.

> Research Question Four: To what extent have the in-service participants engaged in activities consistent with the recommendations that were formulated during the two-week workshop?

Activities relative to the following program objectives were identified.

Increased enrollment of Indian students in vocational and technical programs in Oklahoma. Participant activities relative to recruiting practices increased very little during the 1971-72 academic school year.

Greater holding power of vocational and technical programs for the Indian student in Oklahoma. A slight increase in participant activities was realized during the year relative to improvement of instructional

techniques and improvement of personal relationships with Indian students in their programs.

The instructional presentation of vocational and technical course material in a manner that has a positive relationship to the Indian students' educational, social, and economic environment. Participant activities to improve classroom instruction through increased personal encouragement of Indian students increased 32 percent during the year. The number of teachers doing nothing to improve instruction decreased from 16 to 8 during the year.

Greater involvement of the Indian communities in the planning and evaluation of vocational and technical programs. The program participants engaged in very few activities to involve Indian communities in their programs. Sixty-four percent of the participants did nothing to involve the Indian community in the planning and evaluation of their programs.

Conclusions

This study was an attempt to evaluate an in-service program designed to sensitize selected vocational and technical educators to the characteristics and goals of the American Indian student. The evaluation of the program occurred as the program was in progress.

The results of the computation of the Kendall Coefficient of Concordance indicate that at the end of the program there was general agreement among program participants and selected non-participants concerning standards used in ranking their perceptions of Indian student problems.

Data reported relative to Indian student enrollment indicate that the in-service program objective was not accomplished to increase enrollment of Indian students in selected vocational and technical programs.

Data reported relative to the number of Indian student dropouts indicate that the in-service program objective was at least partially realized in developing increased holding power for Indian students in vocational and technical programs.

It appears from the data presented relative to the participant activities that the participants engaged in professional activities which were consistent with the objectives of the in-service program.

Recommendations

The effectivenss of the in-service program to sensitize selected Oklahoma vocational and technical educators to the characteristics and goals of American Indian students was assessed in relationship to the stated program objectives. With the exception of increased Indian student enrollment, each objective was at least partially accomplished during the 1971-72 academic school year.

Each in-service program objective is listed and followed with the investigator's recommendations.

1. Increased enrollment of American Indian students in Vocational and Technical Programs in Oklahoma.
    a. Further investigation be continued to determine the extent to which the objective will be accomplished by the program participants.

b. Financial assistance grants be awarded directly to local vocational and technical programs for supporting Indian student projects if required or practiced in the program.

c. An evening extension program be developed to enroll Indian adults in vocational and technical programs at the local level.

2. Greater holding power of vocational and technical programs for the American Indian student in Oklahoma.--Instructors of vocational and technical programs distribute printed instructions to all students for any special assignments or projects required in the program.

3. The presentation of course material by vocational and technical educators in a manner that has a positive relationship to the American Indian students' educational, social, and economic environment.--Indian specialists be utilized by the Oklahoma State Department of Vocational and Technical Education to assist in the development and dissemination of information relative to instructional techniques and curriculum materials for vocational and technical teachers of Indian students in Oklahoma.

4. Greater involvement of the American Indian communities in the planning and evaluation of vocational and technical programs in Oklahoma.

a. Formal advisory committees be established for vocational and technical programs which include Indian adults and Indian students.

b. Indian adults and Indian students be utilized as resource personnel relative to curriculum revision and development at the local level.

Other Recommendations

The researcher further recommends that:

1. Effective guidelines be developed at the national and state levels to insure increased participation of Indian students in vocational and technical programs and that Indian people be involved in the development of such guidelines.
2. These guidelines be disseminated to all state and local educational and social agencies located in areas with populations of American Indians.
3. That additional in-service workshops be conducted to sensitize vocational and technical professional personnel to these guidelines.

SELECTED BIBLIOGRAPHY

Adams, Warren S. "A Comparative Analysis of Three Approaches to In-service Education Designed to Change the Behavior of Classroom Teachers in the Social Studies (K-12)." (Unpub. dissertation, Oregon State University) 1970.

Adenika, Thelma Morrow. "Evaluation of the Conference Workshop Technique for Preparing Prospective Teachers for Multi-Racial Classrooms." (Unpub. dissertation, Florida State University) 1970.

Baty, Roger M. "The Effect of Cross-Cultural Inservice Training on Selected Attitudes of Elementary School Teacher Volunteers: A Field Experiment." (Unpub. dissertation, Stanford University) 1970.

Bem, Daryl J. Beliefs, Attitudes, and Human Affairs. (Belmont: Brooks/Cole Publishing Company) 1970, pp. 66-69.

Brooks, Don Lee. "A Study of the Improvement of Instruction Through an In-service Education Program in Land-Grant Colleges of Agriculture." (Unpub. Ed.D. thesis, Oklahoma State University) 1963.

Dugger, Cecil W. "An Analysis of Oklahoma School-Industry Practices in the Placement and Employment of Technician Graduates." (Unpub. Ed.D. thesis, Oklahoma State University) July, 1968, p. 127.

Fokers, Gary W. "Kendall Coefficient of Concordance." University Computer Center, Oklahoma State University, Stillwater, 1967, pp. 4-5.

Havighurst, Robert J. Growing Up in River City. (New York: Wiley) 1962, pp. 50-53.

Havighurst Robert J. "National Study of American Indian Education." Office of Education (DHEW), Washington, D.C.: Bureau of Research, 1970.

Hunter, Bill and Tom Tucker. "Indians in Oklahoma, Social and Economic Statistical Data." State of Oklahoma, Oklahoma City: Oklahoma State Employment Security Commission, ERIC ED 020 052, 1966.

Kerlinger, Fred N. Foundations of Behavioral Research. (New York: Holt, Rinehart and Winston, Inc.) 1964, pp. 484-487.

Klineburg, Otto. Race Differences. (New York: Harper) 1935.

Kneller, George F. Educational Anthropology: An Introduction. (New York: Wiley) 1965, pp. 128-131.

Lieberman, Seymour. "The Effects of Changes in Roles on the Attitudes of Role Occupants." Human Relations, Vol. 9, No. 4 (London: Tavistock Publications Ltd.) 1956, pp. 385-402.

Mazer, Gilbert E. "An Analysis of the Effects of a Training Program for Teachers of the Disadvantaged." U.S. Department of Health, Education and Welfare, Washington: Office of Education, Final Report, Project No. 7-E-184, Contract No. OEC-0-8-070184-1874.

McFarland, Gwen N. "Effects of Sensitivity Training Utilized as In-service Education." (Unpub. dissertation, George Peabody College for Teachers) 1970.

Pettigrew, Thomas F. "Racially Separate or Together." Journal of Social Issues, Vol. 25, No. 1 (Ann Arbor: The Society for the Psychological Study of Social Issues) 1969, pp. 43-69.

Ridley, Agnes F. "Inservice Teacher Education and the Affective Domain." American Vocational Journal. (January, 1971) p. 46.

Roessel, Robert. "A Comparison of Teachers' Attitudes Toward Indian Children in the Regular Integrated Classroom." Arizona State University, 1960, pp. 23-38.

Sarason, Seymour B. The Culture of the School and the Problem of Change. (Boston: Allyn and Bacon, Inc.) 1971.

Siegel, Sidney. Non-Parametric Statistics for the Behavioral Sciences. (New York: McGraw-Hill) 1956. p. 249.

Skrocki, Patricia M. "In-Service Education: An Evaluation of Title III Project EPIC." (Unpub. dissertation, Western Michigan University) 1970.

Trimble, Joseph E. "An Index of the Social Indicators of the American Indian in Oklahoma." Report prepared for the Office of Community Affairs and Planning, State of Oklahoma, 1972.

_____. Unpublished Census Report. Bureau of the Census, Washington, D.C., 1970.

Van Dalen, Deobold B. Understanding Educational Research. (New York: McGraw-Hill, Inc.) 1966, pp. 275-284.

Voth, Theodore H. "Occupational Curriculum for State Junior Colleges." Vocational Research Coordinating Unit, Oklahoma State University, Stillwater, Oklahoma, 1967, pp. 4-5.

APPENDIX A

WORKSHOP CONSULTANTS

Sheila Alexander
Lawton High School Librarian
Lawton, Oklahoma

Don Bluejacket
Consultant for Indian Education
Retired U.S. Army Colonel
Claremore, Oklahoma

Mrs. William Bradley
Granddaughter of Quanah Parker
Last Chief of the Comanche

Bob Brown
Coordinator of State Department of Vocational and Technical Education Offices
Oklahoma City, Oklahoma

Rudy W. Clements
Director of Northwest Area Manpower Institute for Development of Staff
Seattle, Washington

Beverly Gerard
Bureau of Indian Affairs
Riverside Indian School
Anadarko, Oklahoma

Wallace Glasscock
Educational Specialist
Area Manpower Institute for Development of Staff
Oklahoma City, Oklahoma

Jan Hall
Educational Specialist
Area Manpower Institute for Development of Staff
Oklahoma City, Oklahoma

Kathleen Haynes
Educational Specialist
Area Manpower Institute for Development of Staff
Oklahoma City, Oklahoma

Charles Holleyman
Superintendent of Schools
Mustang, Oklahoma

Hank Jacobs
Special Assistant and Coordinator of Industrial and Technical Services
Oklahoma City, Oklahoma

Donald L. Mitchell
Assistant Professor
Southwestern State College
Weatherford, Oklahoma

Thedis Mitchell
Formerly with the Bureau of Indian Affairs in the Division of Education
Weatherford, Oklahoma

Reverend Lynn Pauahty
Lawton, Oklahoma

Bob Randolph
Academic Head Supervisor
Ft. Sill Indian School
Lawton, Oklahoma

Bob Slade
Director, Area Manpower Institute for the Development of Staff
Oklahoma City, Oklahoma

Jack Stone
Director, Southern Oklahoma Area Vocational-Technical School
Ardmore, Oklahoma

Miss Susan Supernaw
Miss Oklahoma 1971
Tulsa, Oklahoma

Dick Swift
Indian Education Specialist
Carnegie High School
Carnegie, Oklahoma

Geraldine Tote
Coordinator-Division of Practical Nursing
Southern Oklahoma Area Vocational and Technical Center
Ardmore, Oklahoma

Howard Walkingstick
Assistant Supervisor for Children Services for Social and Rehabilitative Services
Oklahoma City, Oklahoma

Dr. Muriel Wright
Oklahoma Historical Society
Editor of the Chronical
Oklahoma City, Oklahoma

APPENDIX B

PROGRAM PARTICIPANT LOCATIONS

School	Program
Apache	Vocational Home Economics
Broken Bow	Vocational Home Economics
Broxton	Vocational Agriculture
Butner	Vocational Agriculture
Cache	Vocational Home Economics
Caddo-Kiowa Area Vocational-Technical School	Vocational Data Processing
Canton	Vocational Home Economics
Cave Springs	Vocational Agriculture
Colcord	Vocational Cosmetology
Cushing	Vocational Printing
Elgin	Vocational Home Economics
Great Plains Area Vocational-Technical School	Administration
Hammon	Vocational Agriculture
Henryetta	Vocational Agriculture
Indiahoma	Vocational Home Economics
Kansas	Vocational Business and Office
Kiamichi Area Vocational-Technical School (McAlester)	Vocational Cosmetology
Muldrow	Vocational Agriculture
Panola	Vocational Home Economics
Sallisaw	Vocational Carpentry

School	Program
Stilwell	Vocational Home Economics
Tri-County Area Vocational-Technical Center	Licensed Practical Nursing
Weleetka	Vocational Agriculture
Westville	Vocational Home Economics
Whitesboro	Vocational Agriculture
Wilburton	Vocational Agriculture

Other participant locations not completing program or non-vocational:

Lawton	Librarian
McAlester	Mobile Career Development
Smithville	Librarian
Stillwater	Mobile Career Development
Tulsa	Child Care
Wilburton	Vocational-Technical Administration

APPENDIX C

RANDOM SAMPLE

School	Program
Battiest High School	Vocational Agriculture
Bluejacket High School	Homemaking Useful
Boswell High School	Auto Mechanics
Buffalo Valley	Homemaking Useful
Byng High School	Cosmetology
Carnegie High School	Homemaking Useful
Dale High School	Vocational Agriculture
Dickson High School	Cooperative Vocational Education
Dustin High School	Vocational Agriculture
Gordon Cooper Area School	Radio, Television Repair
Hartshorne High School	Vocational Agriculture
Hulbert High School	Homemaking Useful
Indian Capital Area School	Licensed Practical Nursing
Jay High School	Homemaking Useful
Konawa High School	Homemaking Useful
LeFlore High School	Home Furnishings, Services
Locust Grove High School	Homemaking Useful
Morris High School	Vocational Agriculture
Oaks Mission High School	Homemaking Useful
Ponca City High School	Printing
Salina High School	Homemaking Useful
Seiling High School	Auto Mechanics

School	Program
Southern Oklahoma Area School	Licensed Practical Nursing
Tahlequah High School	Automotive
Talihina High School	Vocational Agriculture
Tulsa Will Rogers High School	Cooperative Distributive Education
Vinita High School	Vocational Agriculture
Wetumka High School	Homemaking Useful

APPENDIX D

NAME_____

PROGRAM_____

SCHOOL_____

INSTRUCTIONS

Teachers are always faced with a wide variety of problems arising from the different types of students involved in the classroom. Sometimes Indian students are included in this situation.

On the following pages you will find brief descriptions of the behavior and problems involved with these Indian students. In each case you are to indicate how you would prefer to handle the situation if the decisions were entirely up to you. Read each item and mark your decision with the corresponding letter as follows:

A. If you feel you could handle such an Indian student in your regular classroom.

B. If you feel you could handle such an Indian student in your regular classroom provided advice from a specialist or consultant was occasionally made available to you when you felt a need for such aid in dealing with some problem.

C. If you feel you could handle such an Indian student in your regular classroom provided there was a full-time specialist available at your school who could provide supplementary training for the student and frequent consultation for you.

D. If you feel that such an Indian student would benefit most by being assigned to a special class or school.

E. If you feel that such an Indian student cannot be handled properly within the regular or special classroom.

Mark each item on the line to the left of each number according to the following key:

A. In the regular classroom

B. With part-time aid classroom

C. With full-time aid classroom

D. In special class or school

E. Not for public education

_____ 1. According to the comments and grades on Fern's permanent record card, she is not capable of learning; so she is placed in the back of the room.

_____ 2. Anna smiles sweetly, but is untidy about herself. Her hair is stiff looking, her skirts are dirty, and in general she smells of greasewood fire and slept-in clothing.

_____ 3. Darrell sits in class and doesn't open a book just waiting for an opportunity to make trouble for someone sitting near him.

_____ 4. Cora seems to shun the other students in the class, hangs her head when addressed by the teacher, and refuses to respond in any way, regardless of how much time is given her for a response.

_____ 5. Ben is trying so hard to please, but he needs individual help with each set of directions given. (There are thirty-five other students in the class who get them the first time.)

_____ 6. Glenna, a bright girl, comes from an above average home. She tends to ignore the other Indian students in favor of Anglo friends.

_____ 7. Elbert is quite an artist when it comes to drawing horses, but he does not restrict his talent to art class--rather he draws through all of his classes, paying little or no attention the required work.

_____ 8. Helen speaks choppy, broken English with no apparent attempt at improving her articulation, even though she has been in public school several years.

_____ 9. Ivan selects all of his outside reading material from Indian and western books, not accepting the challenging new frontier that the other students in the class choose.

_____ 10. Geraldine ranks at the bottom of the class scholastically; her I.Q. also places her at the last place, but she doesn't bother anyone.

_____ 11. Leon always hands in his assignment, finished or not; correctly done or not. Sometimes he even does the wrong page, but he always has something.

_____ 12. Andrew is quiet and well-mannered; but he has worn the same unwashed clothing since school started.

_____ 13. Emert appears to be working hard on his assigned work, but close observation reveals that he is just doodling on the paper underneath his open textbook.

_____ 14. Gerald is excelling in both athletics and scholarship, but avoids any reference, direct or indirect, to his parents or home as if he was ashamed of them.

_____ 15. Kelley starts working industriously, then quits too soon; consequently, never finishes an assignment.

_____ 16. Bill just sits in his chosen seat in the back of the room. He neither volunteers nor contributes to the class when called upon to recite.

_____ 17. Alice is a fat, sloppy girl whose presence you can smell, but she does not cause any discipline problems.

_____ 18. Gina wrote a long, detailed autobiography, but none of the information contained in it could be verified through her permanent record card. Since she is quite articulate in English she understood the assignment, but proceeded to follow lines of wishful dreaming, rather than facing facts and reality.

_____ 19. Frank has a pleasant disposition; but he seems completely blank when trying to learn vocational subjects.

_____ 20. Katy has the attitude that "I can't do it, so why try." When she makes a mistake, she won't correct it.

_____ 21. Jerry could stay in this room for five years--according to the I.Q. and aptitude test scores--and never make any progress. He just doesn't have the ability to learn.

_____ 22. Betty cannot follow directions that are given clearly to the whole class; but she never asks questions about the directions when she has the opportunity.

_____ 23. Lena scarcely gets a correct answer, yet she always has a paper to be graded.

_____ 24. Juan entered late in the year after the testing program was finished; but he is not capable of doing the work and must have a low I.Q.

_____ 25. Flora has a record of three retentions, then has a series of social promotions. She doesn't seem to understand what is going on in the classroom.

_____ 26. Dora is polite and responsive to the teacher, but she tells fantastic untrue tales about herself and her social life; apparently to call attention to herself and scandalize the other girls in her class.

_____ 27. Ida is very interested in the Indian culture to which she falls heir, and does not want to accept the culture that surrounds her--even though it has been proven to be superior.

_____ 28. Chuck has beautiful penmanship, does well on written work and tests; but he remains silent through any class discussion. His stock answer to all questions is, "I don't know." He is quite verbal on the school ground.

_____ 29. Ellen seems talented in art, but she does not try to work with the class; rather she maintains her own style, unwilling to change.

_____ 30. Henry does not try to learn English, and associates only with boys of his own tribe so that he can avoid speaking English, even on the school ground.

_____ 31. Letty doesn't do acceptable level work, but she tries hard. She brings the teacher small tokens to demonstrate her approval of the teacher and the schools, even though she is not learning much.

_____ 32. Dallas comes into the classroom in dirty Levis that are too small; his shirt is unbuttoned to the waist; and dust tops his greasy duck-tailed hair.

_____ 33. When given opportunities for really creative writing, Iona always falls back on Indian tradition rather than developing skills along the lines of our present-day thinking.

_____ 34. Kurt puts the subject, date, and his name on the top of his paper, then dreams through the rest of the period.

_____ 35. Harlan is over-sized, over-aged, and really too dumb to learn English. He merely occupies space in the classroom.

_____ 36. Clara has never spoken a word in the classroom. When called upon, she stares blankly into the air, appearing to be deaf and dumb; but she does well on written work and tests.

APPENDIX E

STUDENT ENROLLMENT AND DROPOUT INFORMATION FORM

SCHOOL _____

INSTRUCTOR _____

PROGRAM _____

INSTRUCTIONS

1. Please complete for each category.
2. If you do not have students for a specific category, put N.A. (Not Applicable) in that space. For example, if last year you did not have freshman students, place N.A. in the space for freshman last year.
3. Please complete and return with the opinionnaire by October 15, 1971.
4. The dropouts should be counted as such if they quit school: Do not count students who transfer to other programs as dropouts.

Number Enrolled	1970-71 (Last Year)		1971-72 (This Year)	
	Non-Indian	Indian (¼ or more)	Non-Indian	Indian (¼ or more)
Freshman (9)				
Sophomore (10)				
Junior (11)				
Senior (12)				
TOTAL				
Number Dropped Out				
Freshman (9)				
Sophomore (10)				
Junior (11)				
Senior (12)				
TOTAL				

APPENDIX F

WORKSHOP TASK FORCE GROUP REPORTS

Program Participant Group One

I. Primary Goal. To develop suggestions and recommendations for the modification of vocational-technical programs, so they are more relevant and responsive to the Indian, his wants, interests, and needs to achieve his aspired goal.

A. Problem

Lack of a variety of vocational programs to meet the wants, needs, interests, abilities and occupational goals of the Indian student.

1. Objective

To provide a sufficient variety of vocational programs to meet the needs, wants, abilities, and occupational goals of the Indian student.

2. Facts and Causes

a. Disinterest in present problems by students.

b. Statement by students about their occupational goals indicate a lack of sufficient course offering.

c. Increased drop-out rate by secondary students.

d. Evidence of high unemployment in the world of work while jobs requiring technical training have an insufficient number of employees.

3. Action Steps to Achieve Solutions

a. Career development at an earlier age to educate students of opportunities and varieties available in the world of work.

b. Educate the students that success in work is not necessarily the type of occupation chosen but the quality of achievement in their chosen vocation.

c. Survey of Indian students in the area as to their occupational goals.

d. Survey of local business and industry to establish the types of possible employment in the area.

e. Localized control of new programs for immediate employment.

f. Establishment of short-term programs or entry level training to meet the needs of the local communities.

g. Establishment of cooperative type programs for low demand jobs.

B. Problem

Lack of two-way communication and understanding between student, faculty, administration, home, and community.

1. Objective

To decrease dropout rate and increase holding power and interest of Indian students in vocational programs by attempting to meet their needs, wants, interests, abilities, and occupational goals through establishment of two-way communication and understanding between students, faculty, administration, home and community.

2. Facts and Causes

a. Involvement of immediate problems decrease.

b. Limited knowledge of own circle of associates and associations.

c. Existence of community prejudices and biases.

d. Continual forcing of our values on others.

e. Resistance to change in teaching.

f. Failure of teachers to interpret programs to others.

3. Action Steps to Achieve Solutions

a. To form an advisory board representative of the entire community to help formulate suggestions to improve the program for all students.

b. Inform the public through the mass media what the program is doing in all areas.

c. Personal contacts through home visits, projects, public meetings, conferences, field trips, exhibits, and newsletters.

d. Reach adults through planned adult education classes.

e. Reach parents and students through youth organization projects and programs.

f. Conferences with administration of public school systems.

1) Evaluate past programs

2) Set goals for the program

3) Share conference and workshop information

g. Select an advisory committee.

1) Administration

2) Student Council

3) Civic leaders

4) Parents (Be sure to include parents of minority ethnic groups)

h. Learn all you can about their culture and get acquainted with the leaders of the Indian community.

i. Listen, let others talk, and listen to what is being said.

C. Problem

Lack of local, state, and national knowledge of manpower needs as related to our communities.

1. Objective

To inform the entire community of manpower needs as related to our geographical area.

2. Facts and Causes

a. Changes in local industry through technological advances.

b. New industry.

c. Population fluctuation.

3. Action Steps to Achieve Solutions

a. Utilize on the job summer training for teachers.

b. Read trade publications.

c. Join civic groups.

d. Advisory committee.

e. Keep in contact with state and local employment agencies.

f. Educate ourselves as to the needs of local industry and business.

g. More pertinent information from State Department of Vocational and Technical Education.

D. Problem

Lack of varied and current methods of teaching techniques to meet individual differences without lowering standards.

1. Objectives

Update and increase teaching techniques to meet the capabilities, needs, and interests of individual students.

2. Facts and Causes

a. No single technique or media will reach all students.

b. Individual responses to different techniques and media depend in part upon previous experiences.

c. All students cannot be expected to respond at the same academic level.

d. Many students lack basic skills in reading and interpreting materials.

e. Many skills and methods which are being taught are no longer in demand.

f. Teachers have not always kept in close association with the business world.

3. Action Steps to Achieve Solutions

a. Select materials and techniques geared to different levels of ability.

b. Increased variety in the media and techniques used.

c. Keep abreast of current knowledge, skills, and methods known and used in the business world.

d. Determine the level at which the student is operating.

e. Review present methods and techniques critically to determine what is useful and what needs to be changed.

f. Spend some time working in the business world.

g. Study current materials and reports to be aware of the trends.

h. Determine and acquaint the students with definite measurable objectives they are expected to achieve in the classroom.

Program Participant Group Two

II. Primary Goal. Develop suggestions and recommendations to improve the presentation of vocational-technical instruction in a manner that has a positive relationship to the Indian students' educational, social, and economic environment.

A. Problem

Lack of parental guidance for Indian students in vocational-technical education.

1. Objective

To plan a program to involve parents in school activities and increase parental guidance.

2. Facts and Causes

a. There is a lack of knowledge of vocational-technical education among parents of Indian students.

b. Parents misguide their children according to middle-class society.

c. Parents have not had the opportunity to know and understand vocational-technical education.

d. Different groups have different cultural values.

3. Action Steps to Achieve Solutions

a. Make home visits.

b. Conduct informal conferences consisting of the teacher, an influential friend, and the parents.

c. Involve the parents as resource people for cultural enrichment activities.

B. Problem

Relatively high rates of absenteeism of Indian students in vocational-technical education.

1. Objective

To reduce or eliminate high rates of absenteeism of Indian students in vocational-technical educational programs.

2. Facts and Causes

a. Students are absent from school to attend family ceremonial activities.

b. Parents call students out of class for various reasons.

c. Indian students have deep family ties.

d. Parents do not regard absenteeism as being detrimental to their children.

3. Action Steps to Achieve Solutions

a. Teacher emphasis to the Indian student on the importance and need of regular school attendance.

b. Postively reinforce the Indian student with acceptance and small successes in school.

C. Problem

Indian students' willingness to adapt to a different environment after formal training.

1. Objective

To orient the student to the life styles of other geographic areas.

2. Facts and Causes

a. Students have a vague knowledge of cities and have difficulty in adapting to unfamiliar surroundings.

b. In some instances the instructor is unfamiliar with life styles of populated urban areas.

c. People resist change to new surroundings.

d. There is a lack of exposure to these life styles.

3. Action Steps to Achieve Solutions

   a. Incorporate an interchange student program.

   b. Take field trips to urban areas.

   c. Use a Mobile Career unit to orient student to life styles in cities.

   d. Use a resource person from an urban area.

D. Problem

To develop greater holding power in the vocational-technical programs for the Indian student.

1. Objective

   To develop instructional programs relevant to the needs and interests of the Indian student.

2. Facts and Causes

   a. Students are forced to take courses for which they have no need or interest.

   b. There is a need for a wider variety of vocational subjects in the schools.

   c. There is a lack of development of guidelines on the part of the teacher and local requirements.

   d. Administrators do not realize the value of nor want vocational programs.

   e. Economic conditions may prevent the addition of vocational programs to the schools.

3. Action Steps to Achieve Solutions

   a. Have variety of visual aids and techniques of presentation.

   b. Give students the opportunity to use the audio-visual equipment themselves.

   c. Identify students, considering the background, as to whether they are Plains Indians or Five Civilized Tribes.

   d. Develop interest cards to make a choice of what they would like to study.

   e. Contact Indian Legal Service Aid - Washington, D.C.

f. Let the student structure a role-play to the climax, then have students write the ending to become aware that problems are relatively the same.

g. Keep photographic record and background information of each student.

h. Have a student come back and relate job experiences.

E. Problem

Indian students as a group display a tendency to reject responsibility and rewards.

1. Objective

To teach the student to accept responsibilities during and after training.

2. Facts and Causes

a. Students are treated as a group and not as individuals.

b. There is a lack of teacher initiative, lesson preparation, time, funds, and personnel.

c. All students are given the same tests and instructional materials.

d. The teacher programs standard lesson plans and methods of presentation for the average student.

3. Action Steps to Achieve Solutions

a. Have individualized instruction by reducing class size.

b. Provide teachers' aides throughout the school system.

c. Break larger classes into smaller work groups.

F. Problem

The concept of providing small achievement goals Indian students can attain without lowering academic standards.

1. Objective

To provide Indian students with small achievement goals without reducing academic standards.

2. Facts and Causes

   a. Students are not given responsibilities at home or at school.

   b. It is easier to do it yourself than instruct the student.

   c. Teachers overwork reliable students rather than train all students.

3. Action Steps to Achieve Solutions

   a. Give the student duties and responsibilities that he is capable of doing.

   b. Give credit for responsibilities.

   c. Incorporate responsibility into teaching task.

G. Problem

Greater involvement of Indian students in integrated group participation projects.

1. Objective

   To increase opportunities for integrated group participation.

2. Facts and Causes

   a. Students associate with their racial groups.

   b. They are more comfortable with the familiar peer groups.

3. Action Steps to Achieve Solutions

   a. Use a variety of techniques to provide group participation.

H. Problem

Lack of communication between Indian students and teachers.

1. Objective

   To reduce communication barriers between Indian students and teachers.

2. Facts and Causes

   a. There are communication gaps between students and teachers.

   b. The Indian student is in a bi-lingual and bi-cultural society.

3. Action Steps to Achieve Solutions

   a. More home visits.

   b. Have the student write an autobiography.

   c. Work with counselor and principal with a withdrawn student.

   d. Work with the student and two peers.

   e. Work with and through another peer group to bridge the gap.

   f. Show sincere concern for the student.

Program Participant Group Three

III. Primary Goal. To develop suggestions and recommendations to implement or improve a plan that will involve the Indian community in the planning and evaluation of vocational-technical programs.

A. Problem

To identify, interest, involve, and organize Indian adults and student leaders in vocational-technical education planning and evaluation.

1. Objective

To involve the participation of a recognizable percentage of the Indian community in the planning and evaluation of vocational-technical education.

2. Facts and Causes

   a. The Indian population does not involve itself in the planning and evaluation of vocational-technical education.

   b. The Indian culture places value in observation before action.

c. The Indian community does not intercede on behalf of its members.

d. Interference in the individual's affairs is forbidden by the Indian community.

3. Action Steps to Achieve Solutions

a. Let the men who are tribal leaders know that vocational and technical education programs are worthwhile for the Indian community.

b. Coordinate and parallel school and adult activities.

c. Plan activities to involve the whole community.

d. Offer the students a reward each day.

e. Take a survey in the community in order to determine which community leaders to include on advisory committees.

f. Establish an advisory committee including Indian community leaders.

g. Use newspapers to determine the Indian community leaders.

h. Contact established local farmers, county commissioners, and non-Indian businessmen to identify leaders.

i. Make contacts to establish better relationships through community centers, home visits, churches, and other community activities.

j. Have funds to work with and well-planned programs at no cost to them, under certain conditions.

k. Plan social and recreational activities with the cooperation of the advisory council.

l. Extend personal invitations to those in the Indian community for school meetings and affairs.

m. Involve alumni associations in planning and evaluation programs to meet the needs of Indian students.

n. There is an increasing need for sincere, interested, and qualified vocational-technical education teachers to work with the Indian community.

o. Encouragement should be given to Indian students interested in vocational-technical education from the instructional aspect.

B. Problem

How to show immediate rewards or benefits from vocational-technical education as well as long-range benefits.

1. Objective

To provide students with an immediate on-the-job related occupational training which would increase interest in vocational-technical education and aid student welfare.

2. Facts and Causes

a. The Indian community does not reward their members for satisfactory accomplishments because the Indian culture deems this unnecessary.

b. The Indian leaders are interested in the immediate welfare of their students.

c. The Indian community is immediate-reward oriented.

3. Action Steps to Achieve Solutions

a. Contact the State Employment Service and use resource persons in Indian job placement.

b. Involve Indian, non-Indian, and advisory councils in providing on-the-job training.

c. Consider the community organizations, churches, and agencies when looking for aids for student welfare.

d. Encourage total involvement of the entire educational staff including counselors, school administrators, and other personnel.

e. Show the Indian community that the Indian student has a current salable skill.

f. Take the Indian leaders to placement stations to show them successful alumni.

g. Individual encouragement for Indian students to continue their education and training.

h. Many agencies will assist students in obtaining aid for furthering their education.

C. Problem

How to coordinate agencies, programs, and policies to facilitate more effective vocational-technical education.

1. Objective

To aid in coordination of agencies, programs, and policies to facilitate more effective vocational-technical education in relation to the Indian community.

2. Facts and Causes

a. Many agencies are interested and involved in providing assistance, services, and education for the Indian.

b. The central coordination system of these agencies has had difficulty in functioning effectively.

3. Action Steps to Achieve Solutions.

a. Depend on organizations for the information and help that they have available for the Indian community.

b. Align with many organizations rather than one.

c. Know the organizations, what their purposes are, and what their work involves.

d. Utilize the State and National legislators for assistance in solving local problems.

e. Suggested agencies to approach for help for Indians.

1) Churches

2) State Welfare Department--including Vocational Rehabilitation

3) Indian Education Director at the State Department of Public Instruction

4) Oklahoma Indian Affairs Commission

5) O.I.O.

6) O.E.O.

7) Indian Community Health Representative

8) Manpower Skill Centers (Tulsa, Tahlequah, Sulphur, Oklahoma City)

9) Tribal leaders--Chief and council members

10) Mayor's Youth Council

11) Chamber of Commerce

12) Jr. Chamber of Commerce

Program Participant Group Four

IV. Primary Goal. The development of suggestions and recommendations to improve career information materials for orientation of junior high and elementary school age Indians.

A. Problem

Career information materials and career development curriculum of the past appear to have been inadequate or even non-existent in the elementary and junior high schools of Oklahoma. Through advancements such as the CVET Program, VIEW, and others, it appears there is an increased interest in this area.

Research, although limited, indicates that elementary, middle school, and junior high school teachers would be willing to learn more about this program in order to extend and implement their existing program.

The Indian youth who drops out of school cannot take advantage of the vo-tech education available at the secondary level. The present situation also is forcing the Indian students to have limited knowledge of available opportunities and to make unsound vocational decisions which affect their whole life span.

1. Objectives

a. To decrease the dropout rate among Indian students.

b. Increased enrollment in vocational-technical programs by Indian students.

c. To improve the holding power of Indian students enrolled in vocational-technical programs.

d. To develop within the Indian students an awareness of the world of work and the great diversity of occupational opportunities available to them.

e. To aid the Indian student to gain a knowledge of the major occupational fields.

f. To improve the self-image of the Indian student.

g. To develop proper attitudes among Indian students as they regard the world of work and society as a whole.

h. To encourage Indian students to be aware of their heritage, talents, and interests, and to consider these assets in their choice of careers.

2. Facts and Causes

a. Indian students have a higher dropout rate than the non-Indian at the junior and senior high level.

1) Over-age in their peer group

2) Lack of proper dress

3) No positive adult model

4) Insufficient school counseling

5) Avoidance of repeated failures

6) Lack of encouragement

b. Indian students have a poor self-image.

1) No positive adult models.

2) Unsuitable living conditions

3) Peer group criticism

4) Books and movies portray Indians as losers

c. Many Indian students do not see a need to work.

1) Poor dissemination of career information

2) Cultural background

3) No positive adult model

4) No feeling for reward and dignity of work

5) Limited exposure to work

d. Peer group pressures are high for Indian students.

1) Bi-cultural

2) Bi-lingual

3) Tribal values and customs differ from non-Indian expectations.

3. Action Steps to Achieve Solutions

   a. The Task Force suggests that in-service training be provided to elementary and junior teachers for the following purposes:

      1) To make teachers aware of the resource personnel available to assist in career development.

      2) To familiarize teachers with resource materials such as the "Dictionary of Occupational Titles," "Occupational Outlook Handbook," and "Job Guide for Young Workers," to assist them in the career development of Indian youth.

      3) To develop an understanding and appreciation of the Indian.

      4) Elementary, middle schools, and junior high faculty have an advisory committee consisting of the high school principals, vocational teachers, and counselors to assist these teachers in developing and implementing career development programs.

   b. This Task Force Sub-group strongly urges teacher education institutions to add the requirements: "Principles of Guidance," "Vocational and Occupational Information," and "Career Development" for new teacher certification.

   c. Techniques to implement career development in grades 1-3.

      1) Films

      2) Magazine material

      3) Resource people

      4) Career-oriented textbooks

      5) Posters

      6) Field trips

      7) Role-playing

      8) Educational TV and games

      9) Physical activity by constructing real models

      10) Career libraries

d. Techniques to implement career development in grades 4-6.

   1) Career oriented textbooks

   2) Exposure to multi-media learning

   3) Work and hands-on activities

   4) Field trips

   5) Demonstration of work by teachers and students

e. Techniques to implement career development at the middle school level - grades 7-9.

   1) Exploration programs through survey of world of construction, manufacturing and the consumer

   2) Provide consultant personnel

   3) Field trips

f. Adult Indian involvement in education

   1) ABE - Adult Basic Education

   2) Vocational Education

   3) Advisory Board

   4) Home-room mothers

   5) Resource people

   6) Parent re-enforcement of school values

   7) Welcome to school functions

APPENDIX G

INTERVIEW SCHEDULE A

1. To increase the enrollment of Indian students in your program, which technique have you used?

   ___ Personal Recruitment by the Teacher

   ___ Student Referral

   ___ School Services (counseling, publications, teacher referral)

   ___ Other

   Why_____

   _____

2. Have you established an Advisory Board for your program?

   ___ Yes ___ No If answer if yes, please list the members

   _____

3. Have you included Indian representation from your community on the Advisory Board?

   ___ Yes ___ No If answer is yes, please list names

   _____

4. How often does your Advisory Board have meetings?

   ___ Weekly ___ Monthly ___ Semi-Annually ___ Annually ___ Other

5. Have you become acquainted with Indian leaders in your community?

   ___ Yes ___ No

6. Please list names and tribe affiliation

   _____

7. Please list the community civic activities these Indian leaders are involved in.

   1._____ 3._____

   2._____ 4._____

8. Is your Advisory Board aware of the enrollment and dropout problems of the Indian student?

___ Yes ___ No ___ Unsure

9. Do you attend Advisory Board meetings?

___ Yes ___ No

10. What are the recommendations of the Advisory Board concerning solutions to the dropout and low enrollment problems of Indian students in your programs?

_____

_____

_____

_____

11. If the Indian students at your school tend to drop out before they reach your program, what have you done to overcome the problem?

_____

_____

_____

_____

12. Have you made home visits with your Indian students this year?

___ Yes ___ No

If yes, how often ___ Weekly ___ Monthly ___ Other_____

13. When you make home visits, with whom do you visit?

___ Parents ___Grandparents ___ Relatives ___ Other_____

14. Have the Indian students in your program provided leadership in program activities this year?

___ Yes ___ No

If yes, How_____

_____

15. Have you modified your instructional techniques for Indian students this year?

___ Yes ___ No Why_____

_____

16. Are your Indian students aware that you participated in a workshop for Indian students?

___ Yes ___ No Why_____

_____

17. What action have you taken this year to:

a. Increase Indian student enrollment_____

_____

_____

b. Develop greater holding power for your program for the Indian student_____

_____

_____

c. Develop or modify existing vocational-technical programs for Indian students in your community_____

_____

_____

d. Involve the Indian communities in the planning and evaluation of your program_____

_____

_____

e. Modify presentation techniques to increase positive instruction for the Indian students in your program_____

_____

_____

INTERVIEW SCHEDULE B

NAME_____ DATE _____ SCHOOL _____

1. To increase the enrollment of Indian students in your program, which technique have you used?

___ Personal Recruitment by the Teacher

___ Student Referral

___ School Services (counseling, publications, teacher referral)

___ Other

Why_____

_____

How much done?_____

_____

_____

How effective?_____

_____

_____

Which method do you like best?_____

_____

_____

Why not?_____

_____

_____

2. Have you established an Advisory Board for your program?

___ Yes ___ No (If answer is yes, please list the members)

_____

Why not?_____

_____

_____

How effective?_____

_____

_____

3. Have you included Indian representation from your community on the Advisory Board?

___ Yes ___ No If answer is yes, please list names.

_____

Why not?_____

_____

_____

How effective?_____

_____

_____

Which method do you like best?_____

_____

_____

4. How often does your Advisory Board have meetings?

___ Weekly ___ Monthly ___ Semi-annually ___ Annually ___ Other

5. Is your Advisory Board aware of the enrollment and dropout problems of the Indian student?

___ Yes ___ No ___ Unsure

6. Do you attend Advisory Board meetings?

___ Yes ___ No

7. What are the recommendations of the Advisory Board concerning solutions to the dropout and low enrollment problems of Indian students in your program?

_____

_____

_____

_____

How effective?_____

_____

_____

8. If the Indian students at your school tend to drop out before they reach your program, what have you done to overcome the problem?

_____

_____

_____

_____

Why not?_____

_____

_____

How much done?_____

_____

_____

How effective?_____

_____

_____

9. Have you become acquainted with Indian leaders in your community?

___ Yes ___ No

How much done?_____

_____

_____

How effective?_____

_____

Why not?_____

_____

_____

_____

10. Please list names and tribe affiliation

_____

11. Please list the community civic activities these Indian leaders are involved in.

1. _____ 3. _____

2. _____ 4. _____

How much done?_____

_____

_____

How effective?_____

_____

_____

12. Have you made home visits with your Indian students this year?

___ Yes ___ No

If yes, how often ___ Weekly ___ Monthly ___ Other_____

Why not?_____

_____

_____

How much done?_____

_____

_____

How effective?_____

_____

_____

13. When you make home visits, with whom do you visit?

___ Parents ___ Grandparents ___ Relatives ___ Other_____

How effective?_____

_____

_____

14. Have the Indian students in your program provided leadership in program activities this year?

___ Yes ___ No

If yes, How_____

_____

How much done?_____

_____

_____

Why not?_____

_____

_____

How effective?_____

_____

_____

15. Are your Indian students aware that you participated in a workshop for Indian students?

___ Yes ___ No Why?_____

_____

Why not?_____

_____

_____

How much done?_____

_____

_____

How effective?_____

_____

_____

16. What action have you taken this year to:

a. Increase Indian student enrollment?_____

_____

_____

How much done?_____

_____

_____

How effective?_____

_____

_____

Which method do you like best?_____

_____

_____

Why not?_____

_____

_____

b. Develop greater holding power for your program for the Indian student_____

_____

_____

How much done?_____

_____

_____

How effective?_____

_____

_____

Which method do you like best?_____

_____

_____

Why not?_____

_____

_____

c. Develop or modify existing vocational-technical programs for Indian students in your community_____

_____

_____

How much done?_____

_____

_____

How effective?_____

_____

_____

Which method do you like best?_____

_____

_____

Why not?_____

_____

_____

d. Involve the Indian communities in the planning and evaluation of your program_____

_____

_____

How much done?_____

_____

_____

How effective?_____

_____

_____

Which method do you like best?_____

_____

_____

Why not?_____

_____

_____

e. Modify presentation techniques to increase positive instruction for the Indian students in your program_____

_____

_____

How much done?_____

_____

_____

How effective?_____

_____

_____

Which method do you like best?_____

_____

_____

Why not?_____

_____

_____

VITA

Joe Mitchell Kinzer, Jr.

Candidate for the Degree of

Doctor of Education

Thesis: AN ASSESSMENT OF AN INSERVICE PROGRAM FOR VOCATIONAL EDUCATORS OF INDIAN STUDENTS

Major Field: Higher Education

Biographical:

Personal Data: Born in Frederick, Oklahoma, March 6, 1940, the son of Mr. and Mrs. Joe M. Kinzer, Sr.

Education: Graduated from Lawton High School, Lawton, Oklahoma, in 1958; received an Associate Degree from Cameron State College with a major in Business Administration in 1960; received the Bachelor of Science Degree from Oklahoma State University with a major in Business in 1962; completed additional courses at Oklahoma State University from 1964 through 1967; received the Master of Science Degree in Technical Education at Oklahoma State University in May, 1971; completed requirements for the Doctor of Education Degree at Oklahoma State University in July, 1972.

Professional Organizations: Phi Delta Kappa, American Vocational Association, Oklahoma Technical Society, Oklahoma Education Association, Red Red Rose, Oklahoma Educational Data Processing Association.

Professional Experience: Marketing Representative for Southwestern Stationary and Bank Supply in Lawton, Oklahoma, 1962-1964; Administrative Assistant, Comptroller's Office, Oklahoma State University, Stillwater, Oklahoma, 1964-1966; Assistant Professor, Data Processing, Cameron State College, Lawton, Oklahoma, 1966-1970; Research Assistant, Technical Education, Oklahoma State University, 1970-1971; EPDA Intern, Division of Research, Planning, and Evaluation, Oklahoma State Department of Vocational and Technical Education, 1971-72.