

THE DEVELOPMENT OF AN AUDIO-VISUAL LESSON FOR
INDIAN STUDENTS ON MANAGING MONEY
FOR CLOTHING

By

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TABLE OF CONTENTS

Chapter	Page
I. INTRODUCTION.....	1
II. THEORETICAL BACKGROUND.....	5
National Consumer Education.....	5
Clothing Consumer Education.....	6
Poverty and Consumer Education.....	8
Importance of Audio-Visual Materials.....	9
Understanding Other Cultures.....	11
Economic Status of the Eskimo.....	11
Cultural Traits of the Eskimo.....	14
Economic Status of the Navaho.....	18
Education for Transitional Cultures.....	23
III. PROCEDURE.....	25
Choice of the Sample.....	25
Development of the Audio-Visual.....	25
Plan for Evaluation of the Audio-Visual.....	31
Administration of the Audio-Visual and Pre- and Post-Tests.....	32
IV. FINDINGS.....	34
Analysis of Pre-Test and Post-Test Results.....	34
Analysis of Questions on Post-Test for Part I (Appendix A).....	37
Analysis of Questions on Post-Test for Part II (Appendix B).....	38
Correlation Between Pre- and Post-Test Scores and Semester Grades.....	40
Correlation Between Pre- and Post-Test Scores and California National Achievement Test Scores.....	40
Achievement Relative to Class Rank.....	41
Achievement Relative to Tribal Background.....	42
Student Evaluation of the Audio-Visual.....	42
Teacher Evaluation of the Audio-Visual.....	44
V. SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS.....	47

Chapter	Page
A SELECTED BIBLIOGRAPHY.....	50
APPENDIX A - PART I PRE- AND POST-TEST.....	52
APPENDIX B - PART II PRE- AND POST-TEST.....	55
APPENDIX C - STUDENT RATING SCALE.....	58

LIST OF TABLES

Table	Page
I. Percentage of Students Gaining or Losing Points Between the Pre-Test and Post-Test on "Style Within Your Income".....	35
II. Average Number of Points Gained by Individual Tribes Between the Pre-Test and Post-Test on "Style Within Your Income".....	43

CHAPTER I

INTRODUCTION

If we, as a nation, are to use our resources and productive facilities wisely and efficiently, consumer education is an absolute necessity. It is a necessity for the millions of young people who will set up homes in the next few years. Approximately thirty-eight million Americans today lack the opportunities for education, for job training, and for health and social services to maintain a decent level of living.¹

Presently, over 1,000 Indian and Alaskan Eskimo students representing over 80 tribes are attending Chilocco Indian Boarding School in Oklahoma. They are fortunate to have the opportunity for education as some of their families are among the 38 million Americans caught in the webs of poverty. While consumer education is important to all persons, it is particularly important to the poor who cannot afford to make mistakes as consumers. If the quality of consumer education offered to these youth is effective it will benefit them and their families as they transmit their knowledge and help to break the vicious circle of poverty.

¹Esther Peterson. "Consumer Problems of Low-Income Families," Working with Low-Income Families, (University of Chicago, March, 1965), pp. 140-148.

Through personal experience in teaching money management to Eskimos and Indians a need was recognized for better teaching aids. Resource materials in money management of clothing are primarily designed for the "middle-class" white individual. Allison Davis stated at the 1965 AHEA Low-Income Workshop that home economics curriculum materials which deal with life realistically as the pupils know it are greatly needed, but few of the existing materials have realism and interest for students. He said we have had thirty years of talk about development of new realistic curriculum materials and we now need to do more than just talk. We must develop these materials and use them in experimental form as part of classroom work.²

A sincere interest in the future welfare of the American Indian and Alaskan Eskimo student made the writer concerned with their methods of money management. The basic problems of this research were to determine what is relevant course content to include in teaching clothing money management to Indian students and to design this content for a slide-tape recording teaching aid.

This developmental research was begun in an attempt to fulfill the following research objectives:

1. To develop an audio-visual device to increase student's knowledge concerning individual planning, management, and judgment involving wise clothing money management.
2. To determine the effectiveness of this slide-tape recording teaching aid for Indian and Eskimo students.

²Allison Davis. "Changing the Culture of the Disadvantaged Student," Working with Low-Income Families, (University of Chicago, March, 1965), pp. 22-33.

3. To determine if learning achievement in clothing money management differs among various tribal groups, and if so, how cultural backgrounds affect these achievements.
4. To identify guidelines for future preparation of audio-visual materials to be used at Chilocco or among groups having similar needs.

Before determining this research project the author visited Chilocco Indian School to choose a subject area to teach which would meet existing needs and interests of home economics students. Home economics educators recognized the need for consumer information and believed it was imperative that information in all areas of consumer education be taught in order to prepare these young people to avoid financial hardship in the future. The project of developing a teaching aid in clothing money management was chosen because these students enjoy clothing, have little or no home training regarding its purchase, have added responsibilities for their wardrobes because of living at a boarding school, and can relate to its tangible characteristics more easily than to some other aspects of consumer information. Slides and magnetic tape were chosen because they lend themselves to the subject matter and to the audience. To the author's knowledge from literature review, the materials have not been previously developed to teach clothing money management to disadvantaged students.

The clothing money management slide-tape recording was developed into two, 12 minute parts during October to December, 1968 and plans were made for its evaluation. During February, 1969 the lesson was presented to 133 students in 10 clothing classes of 9th, 10th, and 11th grades and one 12th grade money management class at Chilocco Indian

School. A pre-test was administered immediately before the students saw and heard the slide-tape recorded lesson; a post-test was taken immediately afterwards. Students saw Part I of the audio-visual and took the pre- and post-test on it during one, 50 minute class period. On a following day they saw and heard Part II and were tested upon it. These students and their teachers evaluated the device on a score sheet. Between March and June, 1969 the data were analyzed to determine the effectiveness of this audio-visual device.

There are no specific answers to the best way to develop teaching materials for the disadvantaged student. In designing this device the author drew upon previous teaching experience with Indian and Eskimo students, an extensive review of existing literature, and suggestions from research advisors and Chilocco teachers. However, experimentation inevitably plays a role in deciding materials and methods to use in the development of an effective teaching aid. It is recognized that some parts of the lesson may be unsuitable for future use with students at Chilocco but it is believed that these findings are worthwhile and a profitable result of this research. The author had had some previous photography and tape recording experience but this work represents her first efforts to combine these media.

The greatest limitation recognized in the study is the time factor relative to evaluation of the device. For control purposes no pre-preparation prior to seeing the audio-visual was given by a teacher to the students. Pre-tests and post-tests which measured immediate responses had to be limited to 15 minutes each. No research of achievements gained by students during follow-up study relative to this teaching aid was conducted.

CHAPTER II

THEORETICAL BACKGROUND

National Consumer Education

Today emphasis is being placed on consumer education stemming from the challenges of our affluent society, the ever increasing number of goods in the marketplace, and the lack of money management know-how among the young and the poor. Authorities unanimously agree that everyone should receive consumer education. This program must be tailored to fit the particular group, the community and capabilities of the students for there can be no uniform course in a subject dealing so closely with individual wants, needs, and values. Making consumer education interesting so consumers will be motivated to learn requires imagination and creativity on the part of the teacher.

A significant indication of the national need for consumer education is the Vocational Education Amendments of 1968 which have added Section F specifically related to the Consumer and Homemaking Education. It appropriated 120 million dollars to be spent from July 1, 1969 through June 30, 1972, one-third of which is to be used specifically in economically depressed areas. Programs under this Section receiving Federal funds aim to: encourage home economics to give greater consideration to social and cultural conditions and needs, especially in economically depressed areas; encourage preparation for

professional leadership; prepare youth and adults for the role of homemaker or to contribute to the employability of such persons in the dual role of homemaker and wage earner; include consumer education programs; and design programs for persons who have entered, or are preparing to enter, the work of the home.³

Clothing Consumer Education

One of the most notable changes in apportionment of the family clothing dollar has been the steady increase in outlays for women's clothing. Women's and girls' clothing accounts for well over half of all the money spent by American consumers for items of apparel, shoes, and accessories. Studies show that the expanded use of consumer credit makes clothing accessible to those who do not have the ready cash and in part accounts for the fact that America has the "best-dressed poverty" in the world. Effective clothing consumer education can assist in eliminating poverty while maintaining existing levels of "well-dressed" Americans.⁴

A study was made by this author to gain knowledge of the financial resources of Chilocco home economics students, their spending habits, clothing goals and values, and the types of wardrobes they own. The information obtained is essential to anyone teaching these students or designing teaching aids for them.

³Vocational Education Amendments of 1968. Public Law 90-576, 90th Congress, House of Representatives, 1968, p. 22.

⁴Marilyn J. Horn. The Second Skin, An Interdisciplinary Study of Clothing, (Boston, 1968), pp. 343-348.

The study showed that school bank deposits and money received through personal letters represented the primary income of the group. Data showed an extreme range of estimated total income varying from \$0 to \$542 for the 6 month period from September through February, 1969. Average incomes showed \$80 for Alaskans, \$15 for Navahos, and \$28 for other students. The average income of the total group was \$96. It was found that students received money from parental allowances (regular and irregular), earnings from working, social security payments, Indian Agency payments, inheritance funds and gifts.

Wardrobe inventories studied from questionnaire data indicated that the total sample tended to believe that the other girls at Chilocco had added more to their wardrobes than they had to their own. Like the incomes, the size of wardrobes and number of additions made during this 6 month period showed great variation. For instance, a random sample of girls interviewed had added an average of 5 dresses to their wardrobes but some had added none and others 13 dresses.

The group was shown to be likely to choose about one-half of their clothing from a low price range and the remaining items from a medium price range. Calculation of the values of wardrobe additions showed considerable variation in the money spent for individual clothing items. For instance, Navahos ranged in spending from \$0 to \$88 for footwear with the average spending \$18. Tabulation of the average expenditures for clothing showed the group to average spending \$183 for clothing for this 6 month period. Because of the extreme ranges of expenditures for each item the average may not be a meaningful indication of clothing expenditures.

Poverty and Consumer Education

In the Economic Opportunity Act of 1964 Congress declared it to be the policy of the United States to obliterate poverty. Since that date antipoverty programs of unusual scope and variety have been developed and put into effect by Federal, State, and local governments and by numerous private organizations representing business, labor, church, and other interested groups. The emphasis on education, health, retraining, and similar programs which increase and develop the potentialities of human resources will have a major impact in combating poverty and building the Great Society.⁵ The National Advisory Commission on Rural Poverty believes that the United States today has the economic and technical means to guarantee adequate food, clothing, shelter, health services, and education to every citizen of the Nation.⁶

Few people would suggest that even the best consumer practices would solve the problem of poverty. Many would agree, however, that good consumer practices might alleviate some of its worst aspects.

✓ Knowledge of actual practices of the poor can suggest new areas for education and action.

Louise G. Richards summarizes research findings on consumer practices of the poor. They spend most of their income on basic needs but those who buy durable goods severely handicap their incomes. Most poor do not use much deliberation, consult many sources, or shop very

⁵Ethel I. Ugelow. "Mobilizing the Potential of Home Economics for Low-Income Families," Journal of Home Economics, 57(1965), pp. 648-655.

⁶The People Left Behind, A Report by the Presidents' National Advisory Commission on Rural Poverty, (Washington, D. C., 1967), p. xiii.

widely, to get the best buys. Instead, many depend on known merchants or relatives for judgments of what to buy. Few have savings of any size and most lack insurance. It is doubtful whether many carry out home production activities to supplement cash purchases. Many probably do not make full use of the programs established to provide services and goods free or at reduced rates.

It has been shown that education definitely assists a person in his consumer planning and decisions. While Chilocco students are receiving this education it is but a beginning to break some of the consumer practices which may have been present in their home. Traits and values possessed by the poor which may explain some of their actions include an attitude of fatalism; a preference for immediate gratification of impulses; a low level of aspiration and low need to achieve; an unclear view of the higher social structure; a concrete style of thinking; and over-concern with security.⁷

Importance of Audio-Visual Materials

A vast amount of research has accumulated during the past thirty years, demonstrating conclusively that audio-visual instructional materials, properly used, can make significant contributions to learning over a wide range of conditions and subject matter content.⁸

Kinder reports that research has shown that these materials are valuable for students of all levels of ability, and of all age or grade levels.⁹

⁷Louise G. Richards. "Consumer Practices of the Poor," Low-Income Life Styles, (Washington, D.C., U.S. Dept. HEW, 1968), pp. 82-83.

⁸W. H. Allen. "Audio-Visual Materials," Review of Educational Research, 26(1956), p. 148.

⁹James S. Kinder. Audio-Visual Materials and Techniques, (New York, 1959), p. 16.

Effective communication can no longer be considered possible with words alone. The nature of our language coupled with the limited experiences of most people, often makes it difficult to convey ideas and information efficiently without resources beyond words. Kemp explains that audio-visual techniques are advancing from the incidental position of being instructional enrichment to becoming essential parts of the teaching-learning process.¹⁰

Today the American school steadily finds itself with more and more subject information to teach. The student moves in a world of communication which emphasizes objectivity, visual presentation and graphic portrayal. Audio-visual materials are being continually invented and improved to help meet needs in the modern school curriculum. Materials such as photographs, slides, filmstrips, overhead transparencies, and motion pictures which are well prepared and properly used can increase understanding of a topic, add interest to a subject, lengthen the retention time of information, teach a skill effectively, contribute to a desirable attitude, stimulate people to action, and offer experiences not easily obtained in other ways.¹¹

Because audio-visuals have these important capacities they can help solve communications problems while increasing the efficiency of both the instruction and the learning.

¹⁰Jerrold E. Kemp. Planning and Producing Audiovisual Materials, (San Francisco, 1963), pp. 3-4.

¹¹Kemp, p. 3.

Understanding Other Cultures

Ina Corinne Brown¹² in her book, Understanding Other Cultures, explains that "no custom, belief, or behavior, can be understood out of its social or cultural context." To prepare adequate teaching aids for another culture group requires that one understand the people as much as possible. To learn the culture of the students at Chilocco one must become familiar with over 80 different tribal backgrounds. Naturally it takes time to collect this vast amount of information and skill is required to coordinate it so that it serves as a useful resource when designing effective teaching materials. Despite the wide diversity of tribal backgrounds, one must strive to meet the needs of all. Because the Eskimo and Navaho students represent the largest numbers in the school population of this study, extensive review of literature was done on the economic status of these two groups. While some of their background situations reflect similarities, other parts show the diversity existing between native groups.

Economic Status of the Eskimo

In contemporary Alaska there is a blending of two worlds between which the native people find themselves living. They operate within two separate and simultaneous economic systems, a money economy and a subsistence economy. Because of their contact with American culture, the villagers have acquired wants for which a cash income is required. At the same time, the bulk of their needs is satisfied by subsistence

¹²Ina Corinne Brown. Understanding Other Cultures, (New Jersey, 1963), p. 15.

activities, and by far the greatest amount of their time is spent carrying out these activities.¹³

In their villages the Eskimos have a lesser day-to-day need for money than in places outside this region. Often, by labor, they are able to obtain their fuel for heat and cooking. They obtain their meat and other foods the same way. Generally they have no rent, no television nor car bills and less demand for cash except what is needed for clothing and goods purchased at the village store. Items most usually purchased or traded for include coffee, sugar, flour, tobacco, liquor, traps, ammunition, gasoline, clothing, and hardware. Most families share some economic benefits from fish, wildlife, timber, berries, and other indigenous plants and gardens. Water provides a major means of transportation, and air shipment is the principal means of supply and travel. Dog teams are still used for local travel, and none of the villages are connected by roads.¹⁴

Although some families live close to the subsistence level, the goal of all families is to achieve a situation where a cash income supplements a livelihood based on subsistence activities. The possession of a cash reserve made possible by seasonal employment takes some of the uncertainty out of a subsistence economy. It makes it possible to enjoy the luxuries to which they have become accustomed through white contact.

¹³George W. Rogers. The Future of Alaska, (Baltimore, 1962), p. 78.

¹⁴Rampart Project, Alaska Vol. I. Department of Interior, (Juneau, Alaska, 1965), p. 350.

An index to the degree to which the native Alaskan has shifted away from his aboriginal economy is the amount of money income received.¹⁵ As a group, the natives receive a substantially lower income than non-native persons. The 1960 census which shows personal income received (including welfare payments) by persons 14 years and over, indicates that only 67 percent of the rural natives 14 years and over received some personal income, as compared to 84 percent of the rural whites 14 and over. The median personal income for natives in rural areas was \$1,143 compared to \$3,113 for the rural white persons and \$4,793 for the urban white persons. Seventy-nine percent of the natives in rural areas either had no personal income or less than \$1,999 as compared to 49 percent of the rural and 39 percent of the urban whites.

Not only do most natives have low incomes, but they normally must pay a high price for the things they buy. Food prices in most villages are from 50 to 100 percent higher than national averages. Most other items are similarly high in price. This means that from \$1,500 to \$2,000 is required to buy a quantity of goods or services which would be purchased for \$1,000 in the lower 48 states. At least a \$5,000 annual family income is required in this environment for a minimum level of living if based on modern standards. Probably less than 25 percent of the native families in Alaska receive an annual income equal to this.¹⁶

¹⁵Rogers, p. 79.

¹⁶Rampart Project, Alaska Vol. I., pp. 337-341.

No native village, regardless of similarities in location, size, or past history, can safely be compared economically or socially with another. Each has evolved separately and uniquely in the environment under varying degrees of contact with white culture and values. Some of the variables affecting a native economy are availability and extent of the wildlife resource; availability and extent of local and outside employment; and the degree of dependence upon government aid for the relief of children, the aged, and the unemployed. Geographic location, tribal customs, length of association with whites, education advancement, and general health also influence village economy.¹⁷

Cultural Traits of the Eskimo

There are fundamental differences between the Eskimo way of life and the non-native way. Teachers must know and understand cultural traits, environmental influences, and effective methods in order to plan and develop a consumer education curriculum.

Eskimos have a different sense of time than non-natives. Work in a hunting economy cannot be planned or scheduled as a wage economy, nor can a routine manner of living be established.¹⁸ Within the classroom students may exhibit leisurely work habits and tardiness. In relation to money, they may not see the value of paying at a specified time. Teachers must give students a sense of time responsibility and promptness.¹⁹

¹⁷David L. Chesemore. "Ecology of the Arctic Fox in Northern and Western Alaska," (Unpub. M.S. Thesis, Univ. of Alaska, 1967), p. 47.

¹⁸Eunice Logan and D. N. Johnson. We Teach in Alaska, (Juneau, 1965), p. 40.

¹⁹Warren I. Tiffany. Old Ways for New, (Juneau, 1966), pp. 57-68.

In the American way of life most people are future-oriented. In contrast, the Eskimo's life is oriented to the present. Another way of comparison is to describe an American as existing in a state of anticipation while the Eskimo finds satisfaction in the present timeliness.²⁰ Lack of planning for the future often results in poor spending habits and no concept of budgeting. The mechanics of banking, budgeting, taxes, and mail order buying need to be taught. Making short-term plans first with a gradual build-up to long-term planning will be most easily understood by the Eskimo.

Saving as a means of achieving economic development has not been a part of the economic life of the Eskimo. Saving is necessary as a resource in developing human opportunities. Wealth is created through physical and mental efforts. If part of the income is saved, it can be used to develop more things. Examples of this kind of saving are highways, factories, railroads, and airlines which give jobs and goods and services to people. In the Eskimo migratory manner of living an accumulation of possessions was a handicap. The man who gave away the most won prestige and honor for himself and his descendants. Eskimos apply this concept to money, indulging in lavish spending while it lasts. When there is no more, they become candidates for welfare assistance.²¹ Saving must be taught to the Eskimo who are partially acculturated to living in our way of life if we are to share in developing a strong community of Americans.

There is often a reluctance to volunteer information. This ✓

²⁰ Rampart Project, Alaska Vol. I, p. 356.

²¹ Tiffany, pp. 57-68.

cultural trait which may make teaching difficult, stems from Eskimo politeness which forbids quick conversational responses and raised voices. Particular attention must be devoted to creating ease in the classroom. It may take place through discussions, role playing, dramatizations or puppet shows.²²

Eskimo students will seldom indicate they do not understand concepts being presented.²³ After a lesson in measuring cloth, a student may imply he understands, only for the teacher to discover that the student does not know his numbers. This is all the more reason for trying to present material by the methods which will be most easily understood by the students.

Eskimos will seldom volunteer information. Description of his values is difficult because of the Eskimo's tendency to keep his thoughts and feelings to himself.²⁴ In working with the Eskimo one should listen carefully to find out what his problems really are. Often, they may not be what an outsider thinks they are.²⁵

There is effort to keep all members of the Eskimo group on the same level and natural resources are shared on a communal basis. Under such circumstances competitive spirit is not characteristic of the Eskimo culture. To be an outstanding individual may invite scornful ridicule from classmates.²⁶ Related to this trait is the Eskimo

²²Tiffany, pp. 57-68.

²³Logan, p. 43.

²⁴Norman A. Chance. The Eskimo of North Alaska, (New York, 1966), p. 71.

²⁵Peterson, p. 143.

²⁶Tiffany, pp. 57-68.

reluctance to assume leadership. Skill is necessary to develop natural leadership which their peers will accept. There is great importance upon "saving face," another factor in keeping all members at the same level. Teachers need to be particularly careful whom they criticize and whom they praise.

Eskimos like simple uncomplicated games.²⁷ Practical application of decision making in a buying situation may be presented in game form to teach management of financial problems.

Because Eskimos are easily discouraged²⁸ every effort must be made to give them immediate opportunities to achieve some success.²⁹ They respond best to reward with immediate and practical utility.

Eskimos' thought processes are most often dependent on the concrete versus the abstract and systematized.³⁰ The part of the school curriculum which is most difficult to impart is arithmetic. Inability to deal with numbers is connected with the difficulty of Eskimos to work with abstract notions. They also find difficulty in making a comparison among several possibilities.³¹ Therefore, the study of money management can be made meaningful if they are given the chance to apply their classroom knowledge to familiar situations or to a situation they will soon face.³²

²⁷ Logan, p. 45.

²⁸ Logan, p. 47.

²⁹ Peterson, p. 145.

³⁰ Tiffany, pp. 57-68.

³¹ Kaj Birket-Smith. The Eskimos, (London, 1959), p. 151.

³² Peterson, p. 150.

There is often an uncritical acceptance of forms of imposed institutions such as the government, education, and church. To make wise use of one's money, consumers must learn to critically compare products before they purchase them.

Last but not least of the Eskimo cultural traits to be mentioned is that they are likely to be "socially and economically disadvantaged." Because of varying degrees of acculturation, Eskimo students at Chilocco may have their sights set somewhat higher than those of their families. Nevertheless, the teacher's job remains to help these people break the cycle of poverty in which they have grown up. Credit is one of the most vital problems meriting attention. They need help to understand credit and how to use it wisely. They need to be helped to see the connection between some of their present shopping practices and the fact that they are not always getting the most for their money. They need to see how comparing prices may save them money and to understand that high prices do not always mean best quality. They need to learn to judge quality to help to obtain the best values. They must learn how to manage their money to do the most for them.³³

Economic Status of the Navaho

An average individual or family income figure has little value as an indicator of the actual economic level of the reservation beyond the fact that it offers basis for comparison with other states or between time periods. Income estimates indicate the low Navaho standard of living. The 1940 Navaho per capita income of \$81.89 is compared to

³³Peterson, p. 150.

the \$579 per capita income for the United States citizen. In 1942 about one percent of all Navaho families had incomes of \$2,000 or over, about 16 percent had incomes over \$1,000, and one-half the families received less than \$400 a year.³⁴ One must remember that in 1940 Navahos were still on a subsistence rather than commercial basis. This gives reason to believe that barter, irregular wages, and gifts may not enter sufficiently into computations on which these estimates are based. For example, the contributions to Navaho income of hunting and plant collecting are not easily converted to money terms without danger of distortion due to inevitable guesswork. Allowances also must be made for "indirect income" in the form of health, educational, and other aids which are supplied by the government to the Navahos in greater degree than among whites in many areas. On the Reservation no land-taxes are paid but income and sales taxes are paid.³⁵ Today it is estimated that about 22 percent of the Navaho families earn from \$1,200 to \$15,000 per year, with median income about \$4,000. Kelly states that this median income was only \$526 in 1950.³⁶ About 10 percent of the population is principally or entirely dependent upon welfare for subsistence.³⁷

Navaho family income in 1960 reveals an increased dependence upon wage work and the comparative unimportance of agriculture. When only

³⁴Clyde Kluckhohn and Dorothea Leighton. The Navaho, (Cambridge, 1958), p. 21.

³⁵Ibid., p. 20.

³⁶William H. Kelly. "Socioeconomic Conditions of Contemporary American Indians," The North American Indians, ed. Owen, Roger C. and James J. F. Deetz and Anthony D. Fisher, (New York, 1967), pp. 611-621.

³⁷Robert W. Young. The Navajo Yearbook, (Window Rock, Arizona, 1961), pp. 231-232.

cash income is considered, the average annual family income is estimated at \$2,000. It is important to note that more than half of the family income on the Navaho Reservation in 1940 was from farming and livestock and that this had dropped to about 8 percent in 1960.³⁸

How income is used among Navahos sometimes varies from the way "white-man" spends his money. A great deal of gift giving, barter, and exchange account for large percentages of income which are sometimes difficult to calculate in dollars and cents. The sharing process remains a feature of Navaho culture today. The lower economic groups look to their more fortunate kinsmen who receive regular salaries or welfare payments, or to kinsmen with other types of resources, for assistance in times of need.³⁹

Today 75 to 80 percent of the population in the Reservation area derives its livelihood from a combination of resources, including off-reservation seasonal employment, railroad maintenance, part-time or temporary jobs on the Reservation, stockraising, agriculture and welfare, including surplus commodities.⁴⁰ Some of the most common types of non-agricultural work in which Navahos are employed include: carpentry, mining, painting, auto-mechanics, sawmill work, welding, dishwashing, laundry work, movie extras, fire fighting, and waiting on tables.

With the discovery of oil, coal, natural gas, helium, and uranium on native lands came the need for tribal organization to negotiate

³⁸Kelly, pp. 613-615.

³⁹Young, p. 220.

⁴⁰Ibid.

leases for its development. Over 200 million dollars in royalties and bonuses has become available in tribal money since 1950. These funds have been used to finance hiring of outside experts and the start of tribal projects such as trades, small industries, a tribal newspaper, and to finance college scholarships for qualified Navahos.⁴¹

During the 1950's three uranium mills were constructed on the Navaho Reservation which continue today to contribute to Navaho economy. The El Paso Natural Gas Company on the Reservation has a strong potential for increasing the financial assets of the Navahos. In 1957 the opening of the Four Corners oil field greatly increased Tribal funds. The total amount was not sufficient to provide direct benefits to each member of the Tribe on a per capita or dividend basis, but it was invested in developmental programs to provide jobs, services, welfare assistance not available from other sources and benefits to Navahos. The Tribe itself became an employer on the Reservation and in 1960 employed about 900 persons in jobs paying over \$1,000 per year and an additional 4,900 persons in part-time or occasional work capacities.⁴²

The Glen Canyon Dam constructed in the northwest corner of the Reservation contributes to the Tribal economy as well as supplying power for the Tribal Utility Authority.⁴³ Coal reserves, though low in quality, are estimated at 758 million tons and are just beginning to be tapped because before it has been uneconomical to ship the low-grade

⁴¹ Jack Schaeffer. "Navajoland," Holiday, February, 1968, pp. 46-55.

⁴² Young, p. 217.

⁴³ Young, p. 269.

coal to market. Now with long-distance transmission of electricity possible through new technology, steam gathering sites are being built at the mine sites. While railroad employment dropped off in the 1950's it is expected it will maintain a level of employment in the future approximating the 1960 level when weekly earnings of employees averaged \$80.

Surplus commodities, secured from the United States Department of Agriculture, have assumed a position of importance in the Navaho economy. It is estimated that 80,000 Navaho are partially or wholly dependent on some kind of economic assistance for their livelihood.⁴⁴

Education makes a direct as well as indirect contribution to the economy of the Navaho people - immediate as well as deferred - in terms of its benefits.⁴⁵ School children receive payments from the Federal Government for food and free medical services by the United States Public Health Service and the Navaho Tribe gives them free clothing, eye glasses, and hearing aids.

One of the most hopeful omens for the future has been the success of self-help projects. Among these is a sawmill of the Navaho Forest Products Industries, two restaurants, a gift shop, and one-third interest in a Window Rock bank. The Tribe also receives a share of the profits from several motels in Arizona and New Mexico. Other projects which are possible economic projects for the future include tanneries to produce leather locally and the development of a pinon nut industry. But these plans can only be successful if the human factor is dealt with as skillfully as the technical factor.⁴⁶

⁴⁴Young, p. 227.

⁴⁵Young, p. 221.

⁴⁶Kluckhohn and Leighton, p. 40.

Navahos vary today in their outlook for the future: some feel traditional ways can continue indefinitely, if incomes are augmented by wage labor. Others think that gradual conversion to the "white way" in livelihood, medicine, and religion will occur. But they do not envisage becoming just "Indians."

Education for Transitional Cultures

Most Indians and Eskimos live in a world which is neither white nor native in the traditional sense; a world where values are shifting and where rules of conduct are in a state of flux. If education is to meet the obligations of equipping these peoples for functional citizenship, the curriculum must be designed for teaching those understandings which will make cultural adjustment and transitions possible.

These people should be made self-sustaining. The substitution of government sources of relief and free medical services, disproportional of the expenditures of public money, are in the long run artificial, fallacious, and disastrous.⁴⁷

What the future holds for these students at Chilocco depends on their own desires and goals and the opportunities for attainment, on their ability to better understand the world of which they are becoming a part through improved and advanced education and increased intercultural contact, and on their ability to maintain a sense of self-respect in their new world.

Today Americans are placing great emphasis on the importance of consumer education, particularly among the poor. To effectively reach

⁴⁷The Navajo Indian Problem. (New York, 1939), p. 86.

the poor, teachers must understand their audience and start where the people are. Properly designed audio-visual materials can make significant contributions in teaching consumer information to people having various cultural backgrounds.

CHAPTER III

PROCEDURE

Choice of the Sample

Former work with Indian and Eskimo students in Alaska while a home economics agent interested me in pursuing educational research with a minority cultural group. The population at Chilocco Indian School consists of approximately 300 Alaskan Indian and Eskimo students and more than 700 Indians from other states. This concentration of ethnic groups within commuting distance of Oklahoma State University made work with a wide variety of Indian and Eskimo students feasible.

Chilocco Indian Agricultural School is a non-reservation boarding school operated by the Bureau of Indian Affairs for Indian students. It is located on highway 77 near the northern border of Oklahoma, 7 miles from Arkansas City, Kansas. It was established in 1884 and for many years has provided students with the training necessary to secure employment and to prepare them for successful living. In addition to regular academic studies, vocational training is provided in agriculture, home economics, and trades and vocations for both boys and girls.

Development of the Audio-Visual

The money management slide-tape recording device in this study was developed to help meet the needs of 9th through 12th grade Indian and

Eskimo home economics students attending Chilocco Indian Boarding School in Oklahoma. These students come from a wide geographical region of the United States and there is a greater age range within classes than in public schools. The California National Achievement test results indicate that the majority of these students score considerably lower than national percentile ratings for their grade levels. A large percentage of these students come from low-income homes and speak English only as a second language. General characteristics of the group as stated by their teachers are a failure to plan very far ahead, lack of consumer education, lack of parental guidance in money management, and a desire to dress like their peers. Individuals within the group have a wide variety of economic resources available for clothing as well as diversity of goals and values for their individual wardrobes.

With these considerations of the audience in mind, the following purposes of this audio-visual were developed:

1. To assist the student in understanding that clothing expenditures should be planned in relation to his needs and available resources.
2. To help students increase their management abilities in handling their clothing dollar.
3. To develop abilities of students to recognize good quality fabric and workmanship in clothing.

Various media for teaching managing money for clothing to this audience were investigated. The picture medium using 35 mm colored slides was chosen because of its great versatility. Pictures can arouse interest, stimulate discussion, raise questions, and supply

information and ideas. They are particularly valuable in increasing communication where language presents difficulty to students.

The flexibility of slides gives them advantages for teaching as slide sets may be tailored to fit individual school situations. They may be projected in sequence, shown individually, or used in combination with slides from other sets. Slide sets can be easily revised by simply adding or subtracting slides from the series.⁴⁸ Color slides, especially the slower speed color slide films such as Kodak's Kodachrome II or Ektachrome X, have little "grain" and therefore can be projected to considerable size without loss of picture quality. Slides are easy to handle and store, and are relatively economical to produce. Slides were also chosen because this audience enjoys seeing visual presentations and the subject matter of clothing can be interestingly portrayed.

Wittich states that there is a 100 percent increase in the effectiveness of picture communication when verbal explanation is added.⁴⁹ It is a valuable supplement to reinforce the learning effect of the pictures. Verbal explanation for this lesson was tape recorded on magnetic tape which offers the widest and most flexible medium for audio-learning materials. Tape-recorded material can be replayed for an indefinite time with little decrease in efficiency.⁵⁰ Tapes are not

⁴⁸Grovalynn Foreman Gould. "Guidelines for Development and Use of Selected Types of Audiovisual Materials in Home Economics," (Unpub. Ed.D. Dissertation, Oklahoma State University, 1968), p. 14.

⁴⁹Walter Arno Wittich and Charles Francis Schuller. Audiovisual Materials, (New York, 1967), p. 95.

⁵⁰Wittich, p. 310.

easily damaged and can be easily stored in a minimum of space. Through the use of tape-recording a uniform presentation was developed to eliminate the variable of different voices reading a script during evaluation of this device.

Preparatory to writing the script a review of clothing money management literature was made. While sources were abundant, few were directed toward teaching this subject to an audience such as Chilocco students represent. Notes were taken on information which would be possible material for preparation of this audio-visual lesson. When the review of literature was completed notes were divided into five general categories:

1. making a wardrobe plan
2. fitting your plan to your budget
3. planning for wise shopping
4. recognizing good quality workmanship
5. knowing the correct size

From this basic outline areas of emphasis were chosen and a rough draft was written. Roach and Eicker write that "Style is the permanent element in fashion. It is the characteristic mode of expression that reflects the outlook either of some person or group of persons."⁵¹ Efforts were made in the script to emphasize "style within your income" attempting to provide encouragement to students to buy wisely. To meet a need of the students, planning was explained in detail. Because this area of study was comparatively new to this audience emphasis was upon short-term planning rather than long-term planning. Simplicity of language with light humor was sought and efforts were made to omit

⁵¹Mary Ellen Roach and Joanne Bubolz Eicker. Dress, Adornment, and the Social Order, (New York, 1965), p. 332.

value judgments except where they seemed necessary for teaching wise money management.

Pencil sketches were drawn illustrating the script. These and the script were reviewed by a money management specialist of the Cooperative Extension Service, a University clothing teacher specializing in audio-visuals, and individuals who had no professional background in home economics. Using these suggestions additional revision of the visuals and script was made by the author and artist. The script was divided into two parts at a natural division of subject matter. It was divided to offer a more acceptable length of lesson to this audience as well as to provide for a versatility in use of the materials.

A test sample of sketches was painted with various color media and photographed. This determined the final choice of animated art style and the use of acrylic paints. Forty-six pictures were composed in animated form to appeal to this audience who may relate to them more easily than to pictures showing other races of real-life people. These pictures will become less outdated than another style of picture in time and add humor to the lesson. Deca-Dry black transfer lettering manufactured by Chart-Pak, Incorporated, was used on the pictures with only a few exceptions where larger print was required.

Photography was done using a 35 mm Pentax Spotmatic Camera and its 50 mm lens on a tripod. An electronic flash provided the proper light source. Pictures were taken at two different exposures dependent on the darkness of the individual picture.

Preview of the developed slides showed some reflections present from black lettering due to the use of the electronic flash. White, matte lettering was pasted directly over the black letters. These

slides were rephotographed. No further reflection problems developed.

Narration of the two, 12 minute scripts was tape recorded at the Oklahoma State University Audio-Visual Studio. Two narrators provide variety in voice to the text as does the musical introduction and conclusion. A studio technician recorded slide-change signals on the tapes. These, recorded on an Ampex 440 AG studio tape recorder costing approximately \$3,000, proved to be at too high a frequency sound range to hear when played on recording equipment such as a high school would be likely to use. The signals were rerecorded at lower frequencies suitable for less expensive tape recorders. The total cost of this teaching device is \$60 including artist's fee, art supplies, film, tapes, and use of recording studio.

The overall lesson stresses helping you to choose clothing wisely with an eye to attractiveness within your personal income. Within Part I the difference between "needs" and "wants" is illustrated; methods for determining your clothing requirements are shown; and finally your total wardrobe plan is explained. Things to consider when deciding your clothing needs are shown such as planning a basic color scheme. The final section in Part I illustrates fitting wardrobe plans to your income. Points covered include figuring out how much money you have; deciding price limits before shopping, and doing comparative and sale shopping.

Part II begins with the shopper at the store. Information to look for on a clothing label is explained. The primary portion of this section illustrates how to recognize quality of clothing. Roadsigns called fiber content, yarn construction, fabric construction, color-fastness, and finish illustrate directing a shopper to "Know-How" in

judging fabric. Before the shopper ends his trip he must understand the keys to good workmanship. The keys of cut of fabric, seams and stitching, closures, linings and interfacings, hems, reinforcements, and trimmings are each illustrated. The section is coordinated with the idea that an understanding of these keys will help you fit them to the keyhole of style within your income.

A final quality factor, correct fit, is illustrated by a "stylish" girl who knows how to plan and shop wisely just as you can do if you follow suggestions in this lesson. The lesson concludes with a picture of a music man directing his dollars toward style within his budget.

Plan for Evaluation of the Audio-Visual

Conferences with the Head of the Home Economics Department at Chilocco Indian School and clothing teachers there were held to determine the most suitable student group to assist in evaluation of the clothing money management audio-visual. Because of the subject of the audio-visual it was decided to choose the sample to include students in all clothing classes. In the case of conflicting schedules, the 9th and 10th grades were chosen to provide the majority of the students in the lower grade levels.

Students from a 12th grade money management class were included because their subject related closely to the topic of the audio-visual. Some students from this class were already included in other clothing classes included in the sample. In all, 11 classes were selected representing 50 students in the 9th grade class, 54 in the 10th, 26 in 11th, and 3 in 12th. Within this group 37 tribes were represented. These classes had 4 different teachers.

The author was able to work at the school on Tuesdays and Thursdays. A schedule was made for testing which was acceptable to the teachers involved. It was decided to meet with each individual class on 2 days during the same week whenever possible. On Tuesday a 15 minute pre-test would be given followed by presentation of Part I of the audio-visual after which students took a post-test on that material. On the following Thursday the same procedure would be followed for Part II. Four days were scheduled for the evaluation procedure. Due to an assembly program one alteration in the calendar of testing was made. During free periods special arrangements were made and make-up tests were given to students requiring them.

Administration of the Audio-Visual and Pre- and Post-Tests

Administration of the tests and presentation of the audio-visual by this author were made as similar as possible for each class. Students were informed they would have a lesson via slide-tape recording on how to manage their clothing dollar. After the pre-test was distributed to each student they were instructed to write their name and class on the test, read each question carefully, not be overly concerned about being unsure of answers, and to do their best. General directions in the tests were briefly explained. During the test, efforts were made to answer questions of students as consistently as possible. Questions were not answered if it was felt they might provide advantages or handicaps to other students taking the test. Students were allowed 15 minutes to write the test, however most completed it in approximately 10 minutes.

Students were told they would see and hear Part I or Part II of the lesson and were urged to pay close attention so that they could do well on the post-test. They were allowed to take notes if they so desired and instructed not to discuss the lesson material with their classmates until after they had taken the post-test.

Because the post-test was the same test previously taken as the pre-test, verbal review of directions was brief. Students were told they were being individually evaluated rather than compared to their classmates. They were urged to try to improve upon their pre-test score. Fifteen minutes were allowed for the test and the majority completed the test in less than 10 minutes.

CHAPTER IV

FINDINGS

The slide and tape recording lesson is divided into Part I and Part II. A test was written for each part and used as both a pre-test and post-test for that part (Appendix A and B). Within each test there are three major questions which are referred to as sections. Each major question has subsidiary parts.

Analysis of Pre-Test and Post-Test Results

The difference between an individual's pre- and post-test scores was the primary factor considered in evaluating effectiveness of the slide-tape recording lesson. Scores from Part I and Part II of the lesson were analyzed individually and in combination (Table I).

In Part I, 66 percent of the students gained points between the pre-test and post-test; 12 percent of the students maintained an identical score on each test and 22 percent of the students scored lower on the post-test than on the pre-test. They gained 1 to 9 points with 30 percent of the sample adding 2 points to their score and 27 percent gaining 1 point. Thirty-eight percent of the group, whose scores decreased between the pre-test and post-test, lost 1 point.

For Part II, 71 percent of the students gained points, 19 percent of the students maintained an identical score on the two tests and

TABLE I
 PERCENTAGE OF STUDENTS GAINING OR LOSING POINTS
 BETWEEN THE PRE-TEST AND POST-TEST
 ON "STYLE WITHIN YOUR INCOME"

<u>Points</u>	<u>Gain</u>			<u>Loss</u>		
	Part I pre-post	Part II pre-post	Combined pre-post	Part I pre-post	Part II pre-post	Combined pre-post
1	27	13	9	38	14	40
2	30	22	13	24	36	27
3	17	15	14	24	36	—
4	9	12	14	10	—	20
5	5	12	11	—	7	13
6	5	11	9	3	—	—
7	1	5	9	—	7	—
8	2	5	5	—	—	—
9	3	3	5	—	—	—
10	—	—	3	—	—	—
11	—	2	6	—	—	—
12	—	—	T*	—	—	—
13	—	—	T	—	—	—
14	—	—	—	—	—	—
15	—	—	T	—	—	—
16	—	—	T	—	—	—
27	—	—	T	—	—	—

*Score less than 1 percent of total

10 percent of the students lost points between the pre-test and post-test. On this portion of the test students gained from 1 to 11 points with the largest percentage of the students (22 percent) adding 2 points to their score.

In Part I, 42 percent of the sample gained 3 or more points on the test while in Part II, 65 percent of the sample gained 3 or more points on the test. This shows that students had overall higher achievement on Part II. The total percentage of students who lost points on Part II is less than one-half the amount who lost points on Part I. However, the largest percentage of students lost 2 or 3 points in Part II compared to losing only 1 point on Part I.

The combination of Part I pre-test and post-test data and Part II pre-test and post-test data shows 84 percent of the students gained points between the pre-test and post-test; 5 percent of the students maintained identical scores; and 11 percent lost points. Students who gained points ranged in scoring 1 to 27 points with 98 percent gaining between 1 and 12 points. Most of the students gained 3 or 4 points and were closely followed by others who gained 2 points. Forty percent of the students lost 1 point with the remainder of the group losing from 2 to 5 points.

The pre- and post-test scores were tested statistically to determine if a real difference existed between the two values. Using a t-test designed for comparison of the averages of two samples of unequal size, a significant difference at the 95 percent confidence level was indicated between these two means.⁵²

⁵²David V. Huntsberger. Elements of Statistical Inference, (Boston, 1961), pp. 152-158.

Analysis of Questions on Post-Test
for Part I (Appendix A)

Individual sections of the test were analyzed to determine the questions on which students scored highest, where they most frequently had difficulty, and the possible explanations for the results.

Nine percent of the 133 students obtained the highest percentage score on Section I of the test while 30 percent did most poorly on this section. This question involved choosing a wardrobe for a specific situation. Seventy-five percent of the students obtained the highest percentage score for Section II about planning a wardrobe, while 2 percent obtained the lowest score on this section. Fifteen percent of the students scored highest on Section III concerning kinds of sales; 68 percent did most poorly.

Section I presented a difficult question for the girls to understand because it involved problem solving relative to choosing a wardrobe for a specific situation. Many girls failed to relate their answers to the total situation which was described and during administration of the test several girls indicated they did not understand the question. Within the audio-visual answers to this problem question are dealt with abstractly. While these students had some difficulty applying their knowledge to this kind of question it is a worthwhile type of question because of the girl's needs to solve problems in everyday life. Perhaps more examples within the lesson could assist students in learning to apply knowledge to everyday problem situations such as this question illustrates.

The question in Section II involves some information about planning their wardrobe that students were likely to have known previously.

It is a concisely written and easily read question which students appeared to understand. Within the audio-visual correct answers to these questions are stated or suggested quite clearly.

Section III presents an easily understood question concerning kinds of sales but to learn its answer required careful listening to the tape recording because it was a fact repeated only once in the lesson. Studies on consumer practices of the poor suggest that it was something that the girls seldom knew the answer to beforehand. Further explanation of the facts involved in the answer to this question is necessary if this question is to serve as a useful indicator of what students learn from this audio-visual device.

Navaho and Alaskan student scores were viewed in relation to the total group results. In Part I Navahos and Alaskans scored lowest on Section III concerning the topic of sales, as had the largest percentage of the total group. Likewise, they obtained the highest scores on Section II relating to planning a wardrobe as had the total group.

Analysis of Questions on Post-Test for Part II (Appendix B)

Sixty-one percent of the students obtained the highest score on Section I concerning facts found on clothing labels while 10 percent of the students had the most difficulty with this section. In Section II 9 percent of the students received their highest score and 52 percent got the lowest score. This question considers judging the quality of fabric. Thirty percent of the students did best on Section III concerning judging quality of workmanship; 38 percent did most poorly.

Navahos and Alaskans obtained their highest score in Section II

about judging quality of fabric, while the total sample had scored lowest in this section. They obtained their lowest score on Section III concerning judging quality of workmanship, while the total group did most poorly in Section II. No explanation is offered as to why Navahos and Alaskans differed from the group average. It may suggest that their background is significantly different than the rest of the group influencing their different choice of answers.

Section I is a concisely written easily understood question about facts found on clothing labels. Information is provided in the audio-visual just as precisely as the question is worded. This may account for the high achievement of students on this section.

Students appeared to have little difficulty in reading the question on quality of fabric in Section II; nevertheless, the highest degree of errors was made here. It appears that students did not differentiate facts in the audio-visual concerning quality of the fabric and quality of construction. This may be clarified in the device with charts and/or audio explanation.

Pictures in Section III concerning judging quality of workmanship were enjoyed by students and helpful to those having reading problems. The word "inconspicuous" was too difficult for many students to understand. Part of the answers in this section involved application of general knowledge provided in the audio-visual. This problem solving was difficult for many students, however, this type of test question is useful in providing information of how well the knowledge has been assimilated by those tested.

Correlation Between Pre- and Post-Test Scores and Semester Grades

An effort was made to determine if there was any correlation between the pre- and post-test scores to the record students had made in previous home economics work. The semester home economics grade was chosen as a comparative measure because it represented a grade inclusive of all home economics subjects taken during the previous semester period. Semester grades were available for 117 of the students. Because 3 different teachers had taught and graded the students this study was treated in these three separate groups to eliminate the variable of personal differences in grading systems. In each group, the student who had received an "average" semester home economics grade made the greatest numerical gain between the audio-visual pre-test and post-test. This "average" semester letter grade varied according to the teacher but consistently showed approximately one-half the class above and below where the largest numerical gains were scored on the audio-visual test.

Correlation Between Pre- and Post-Test Scores and California National Achievement Test Scores

California National Achievement test results for a group of 36 students of the sample who had taken the test during their 9th year, 8th month of schooling, were analyzed to determine if there was any correlation between these national test scores and the audio-visual pre- and post-test scores.

Particular attention was paid to the language scores. This group of students ranged in national percentile ranking from 01 to 73 with

the median at 21. Scores obtained on the audio-visual were randomly scattered throughout the scale.

National percentile of the group on the total test ranged from 01 to 62 with the median at 05. This is indicative of the achievement of this sample of students compared to national averages. Achievement on the audio-visual showed no correlation to the total test scores with high and low scores randomly scattered throughout the range of percentile rankings on this national test.

The lack of correlation between achievements on either the California National Achievement test or the home economics semester grade to achievements on the audio-visual pre- and post-test may indicate the difficulty teachers of these students have in predicting who will gain the most from various types of teaching aids. This lack of correlation may suggest this particular teaching aid met its purpose in serving the group as a whole, not just the high, average, or low achiever.

Achievement Relative to Class Rank

Coomb's study of Indian scholastic achievement shows that children fall farther below the published norms of the California Achievement test with each successive grade.⁵³ The scores from the audio-visual pre- and post-tests were compared relative to class rank. Any points lost between the pre-test and post-test were subtracted from the points gained. This total was divided by the total number of students in each grade level. Some students had made no gain or loss between the pre- and post-test; there were 2 of these students in the 9th class; 3 in

⁵³Madison Coombs et al. The Indian Child Goes to School, (Kansas, 1958), p. 35.

the 10th class, and 2 in the 11th class. Computation shows the 10th graders to average the greatest numerical gain of 5.1 points. Ninth graders averaged a 3.4 point gain; 11th graders averaged a 3.9 gain, and 12th graders averaged a 4.3 point gain. The points lost for each class level averaged: 2.8 for 9th; 2.2 for 10th; 2. for 11th; and 0 for the 12th class.

Achievement Relative to Tribal Background

Results of the pre- and post-test achievement on this audio-visual were viewed relative to tribal background. Any points lost between the pre- and post-test were subtracted from the points gained and the total was divided by the number of students represented in each tribe. Because of the small number tested among most of the tribes the averages may not be as meaningful as those figures given for the larger sized Eskimo and Navaho groups (Table II). There is no significant statistical difference in achievement between the Eskimo and Navaho groups.

Student Evaluation of the Audio-Visual

Students checked a rating scale (Appendix C) to assist the author in evaluating this audio-visual. The Navahos were slightly more critical of the value the pictures had in helping them understand the lesson. They also indicated that they had more trouble understanding the voices on the tape than did the rest of the group. They indicated that they might follow suggestions of the lesson to a lesser degree than the rest of the students.

Feelings were divided in the degree to which students felt the

TABLE II

AVERAGE NUMBER OF POINTS GAINED BY INDIVIDUAL TRIBES BETWEEN
THE PRE-TEST AND POST-TEST ON "STYLE WITHIN YOUR INCOME"

Tribe	Number Tested	Avg Gain	Tribe	Number Tested	Avg Gain
Absentee-Shawnee	1	27	Kiowa-Wichita	1	3
Aleut	4	3	Kootenai	1	3
Apache-Caddo	1	5	Muckleshoot	1	1
Arapaho	1	-2	Navaho	17	5
Athabaskan	5	5	Pawnee	1	9
Blackfeet	3	5	Ponca	4	4
Blackfeet-Cree	2	.5	Quileute	1	5
Cherokee	1	8	Quileute-Makah	1	8
Cheyenne	2	8	Red Lake Chippewa	2	3
Cheyenne-Arapaho	1	4	Sac-Fox	1	7
Clallam	1	4	Seminole	2	7
Colville	2	8	Shoshone	2	10
Comanche-Kiowa-Apache	1	2	Shoshone-Bannock	1	2
Creek	1	5	Sioux	2	4
Crow	1	7	Thlinget	2	4
Eskimo	55	4	Tsimshian	1	11
Flathead	1	4	Wichita	1	5
Kickapoo	1	0	Yakima	4	2
Kiowa	4	5			

pictures helped them to visualize themselves in similar situations. Students other than Navahos and Alaskans more often could imagine themselves doing something like the picture showed. Eskimos indicated that they desired more examples (both visual and auditory) to aid in their understanding of the lesson than did the rest of the group. Navahos and Eskimos stated that they enjoyed learning about clothing more than the other students.

The majority of the students appeared to have maintained interest in the lesson and felt the length was desirable for them. Approximately one-half of the students indicated that they felt a need for improvement in the organization of the lesson, in the coordination of the pictures to the lesson, in the clarity of tape recorded voices, and of additional examples to illustrate the lesson.

Students had great difficulty in expressing themselves in writing on what was least and most helpful to them regarding the lesson. In general, they gained an awareness of the various factors to consider when selecting clothing. Several mentioned never having understood the value of reading labels before. Usually students mentioned areas of the lesson as being least helpful because they felt they already knew the material. Several students commented that they would have preferred pictures of real people instead of the animated form.

Teacher Evaluation of the Audio-Visual

Three clothing teachers each saw the device from 4 to 8 times. This background assisted them in completing a formal written evaluation of the device. They also offered their informal opinions concerning the effectiveness of the device for their students.

They all believed this teaching aid could serve effectively as an introductory aid to teaching clothing money management to these students. These teachers thought it could be used in a variety of ways. The device could be shown and then reviewed again after additional lecture and practical experience were given. Individual slides or the tape could be used separately to illustrate various sections of a lecture. The device could be complimented with the use of actual clothing to illustrate the points. It could be used before a field trip which served to teach good buymanship techniques. All of the evaluators believed the length of the lesson (12 minutes) was very good for the majority of the students.

In general, the evaluators believed the technical quality of the slides and tape recording were acceptable for the group and that the media assisted in stimulating the interest of the students in the study of clothing money management. One teacher mentioned that film could convince these students of the importance of this subject matter which a teacher's lecture alone could not do as effectively.

One teacher believed the length of dialogue for each slide should be decreased and that additional slides illustrating the topics could assist students in understanding the lesson. Another teacher questioned whether students always differentiated between the good and poor examples of quality of workmanship which various slides represented. She suggested labeling of these slides to clarify this point. These teachers believed the more advanced students (academically ranked and class ranked) might gain the most from this device. However, evaluation of the lesson via the pre- and post-tests showed the

"average" academically ranked students and the 10th grade students obtained the highest scores.

CHAPTER IV

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Based upon a vital need for consumer education among Indian and Eskimo students, a clothing money management teaching aid was developed for this audience.

The audio-visual, "Style Within Your Income", consists of 46 colored slides with tape recorded narration illustrating how to choose clothing wisely within one's personal income. Effectiveness of the lesson was evaluated with a selected group of home economics students attending Chilocco Indian School, Chilocco, Oklahoma.

This study indicates that this lesson contributed in broadening the concepts of clothing money management among these Indian and Eskimo students. Comments from them and their teachers and results of the pre- and post-test showing a statistically significant average gain of 4.1 points indicate that students learned considerably but that they still need additional consumer education.

The media appeared suitable for teaching clothing money management to this group and the technical quality of the device proved acceptable to the audience.

The diversity of the group contributed many variables to this study. There was a great variation between the size of student incomes and wardrobes which affected student attitudes and values in the study of consumer education. The girls who saw this audio-visual represented

37 different tribes each differing in historical background, community mores and attitudes, geographic location, and degree of assimilation into non-Indian culture. Ages of girls in the sample varied from 15 to 23 years and ages were not always similar within the different grade levels. Students had attended Chilocco from as few as 2 months to as many as 5 years while grade levels often did not correlate with the number of years in attendance at the school. The group varied considerably in proficiency of English which affected their degree of understanding and the reliability of the responses they provided. All of these individual differences must be recognized when developing audio-visual teaching aids.

Navaho and Alaskan students were found to differ from the rest of the group in their answers in the Part II post-test. Further study is recommended to discover the reasons for this group variation. No correlations were found between the pre- and post-test scores and the semester grades or California National Achievement test scores. Navaho and Alaskan students tested similarly in overall scores in the pre- and post-test. Testing of additional members of other tribes would be helpful in determining if any differences exist in learning achievement between other tribal groups.

There is a definite lack of teaching aids designed for the Indian student. Because of this, there is need for additional experimentation with other devices to determine which methods reach the students best. It is recommended that home economics teaching aids be developed which teach the same material by different methods so that effectiveness of devices can be compared among Indian students. Visual and auditory illustrations from native history can be used in developing teaching

materials to provide interest and build pride of heritage. Study of the ways students interpret these illustrations is necessary to discover if one's goals are accomplished.

Since many classrooms have students from a variety of cultural backgrounds it would be useful to test the audio-visual on pupils other than Indians. Information concerning how pupils may interpret the device differently would assist a teacher in meeting the needs of every individual.

Information relative to effective design of audio-visuals could be obtained by testing the device, revising it, and then retesting it. Experimentations could be made on the usefulness of the audio-visual by repeated exposures to students over differing amounts of time and measured by subsequent testing and evaluation of the impact of the device over prolonged periods of time.

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APPENDIX A

PART I PRE- AND POST-TEST

Part I

Name _____

STYLE WITHIN YOUR INCOME

1. What are Sally's clothing needs? She lives in a rainy climate. Her main activities include school, church, a horseback riding club and a part-time job as a waitress in a restaurant. Her wardrobe includes:

<u>Good Condition</u>	<u>Needs Repair</u>	<u>Not Wearable</u>
6 skirts	1 skirt	
1 blouse		6 blouses
4 sweaters	1 sweater	1 sweater
	1 raincoat	
		1 spring coat
		1 pr. rubber boots
	1 set underwear	
	2 pr. school shoes	
1 waitress uniform	1 waitress uniform	
2 pr. slacks		
1 dressy dress		

Based on her activities and her wardrobe check () the clothing she needs.

- _____ 1. skirt
- _____ 2. blouse
- _____ 3. sweater
- _____ 4. raincoat
- _____ 5. rubber boots
- _____ 6. underwear
- _____ 7. school shoes
- _____ 8. waitress uniform
- _____ 9. slacks
- _____ 10. dressy dress
- _____ 11. fur coat

Name _____

II. Sally is planning her wardrobe. In some ways she plans very well. In other ways she plans poorly. Check () the items which show good planning.

- _____ 12. She decides she needs a new skirt because her girlfriend just got a new one.
- _____ 13. She decides she needs a new green blouse because it will match two of her skirts.
- _____ 14. She writes down her interests and activities to help her decide what she needs.
- _____ 15. She hides the clothes she doesn't like to make her feel she needs new ones.
- _____ 16. She needs a new coat because her old one is worn beyond repair.
- _____ 17. She does her planning in the kitchen where she can dream best about what clothing she already owns.
- _____ 18. She feels price is the most important aspect in deciding what she will buy.
- _____ 19. She figures out as closely as possible how much money she can spend on clothing.
- _____ 20. Before she goes shopping, she sets a price limit for what she plans to buy.
- _____ 21. She only shops at the discount stores because she is sure they will always provide the best bargains.

III. Place the letter of the description from the right hand column next to the sale in the left hand column which it best describes.

- | | |
|---------------------------------|--|
| _____ 22. Clearance Sale | A. Regular stock on sale to make room for new stock. |
| _____ 23. Annual Sale | B. Storewide sales to stimulate business. |
| _____ 24. Special Purchase Sale | C. Offers biggest price reductions. |
| _____ 25. Anniversary Sale | D. Reduction on a particular item. |

APPENDIX B

PART II PRE- AND POST-TEST

Part II

Name _____

STYLE WITHIN YOUR INCOME

I. Check (✓) the facts which you should find on a clothing label.

- _____ 1. what the product is made of
- _____ 2. price
- _____ 3. when the product was made
- _____ 4. how the product is made
- _____ 5. how the product will perform
- _____ 6. cleaning instructions

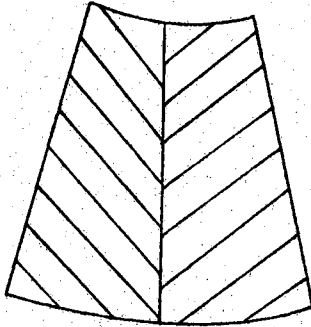
II. Check (✓) every item you should consider when you judge the quality of fabric.

- _____ 7. seams
- _____ 8. yarn construction
- _____ 9. finish
- _____ 10. how it will wash
- _____ 11. hems
- _____ 12. style
- _____ 13. trimmings
- _____ 14. woven, knitted, or bonded
- _____ 15. fiber content
- _____ 16. wrinkle resistant, water repellent, or glazed
- _____ 17. cut of the material
- _____ 18. stitching
- _____ 19. colorfastness
- _____ 20. how it will wear

Name _____

III. Place at the left the letter of the picture which shows the best quality of workmanship for the characteristic noted.

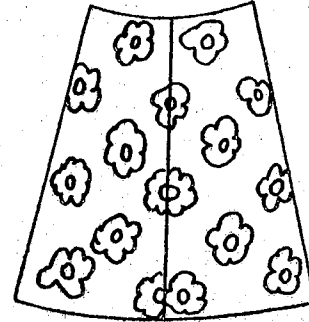
_____ 21. Cut of the Fabric



A.

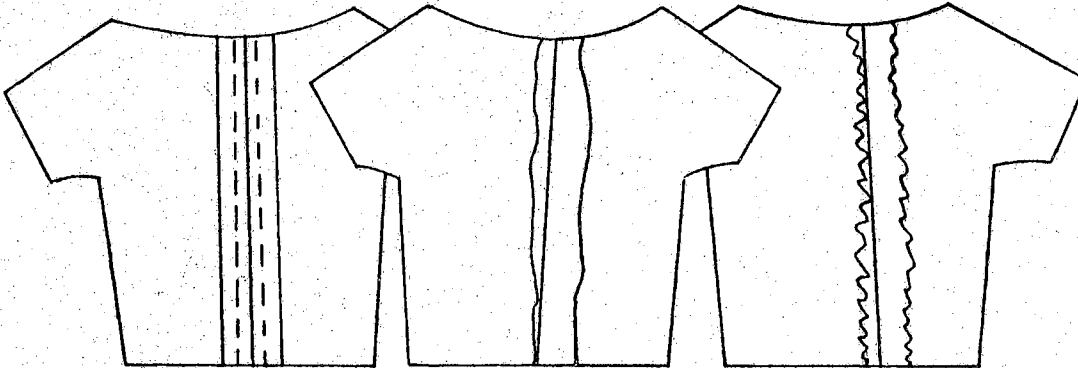


B.



C.

_____ 22. Seams



A.

B.

C.

Place at the left the letter of the item which best completes the sentence concerning quality of workmanship.

_____ 23. Closures (zippers, hooks & eyes, snaps, buttons & button-holes) should usually be:

- A. very noticeable.
- B. flat, inconspicuous and durable.
- C. beautiful.

_____ 24. Linings should fit

- A. exactly like the outer layer.
- B. less closely than the outer layer.
- C. more closely than the outer layer.

_____ 25. A generous hem usually

- A. is a waste of fabric.
- B. hangs unevenly.
- C. hangs better than a narrow one.

APPENDIX C
STUDENT RATING SCALE

Student Rating Scale

Tribe _____

TELL IT LIKE IT WAS!

This is not a test, but a means of gathering information about the audio-visual lesson, "Style Within Your Income," which you have heard and seen.

The purpose of this rating scale is to help the author of this audio-visual to:

1. find strengths and weaknesses of this device.
2. identify needs which this device did not serve.
3. identify parts of this lesson which were not helpful to you in learning about clothing money management.

Directions: Read each question carefully and then check () the blank before the answer that best describes the way you feel about the audio-visual, "Style Within Your Income."

1. Did the audio-visual lesson jump from one subject to another?
14* Yes, one minute I was learning about one thing and then without warning I was learning about something else.
49 Sometimes I thought the materials were hard to follow.
73 No, I thought the materials moved smoothly from one subject to another.
2. Did you lose interest while listening and watching the lesson?
12 Yes, there was too much repetition in the materials. I got tired of them.
19 Sometimes I got tired of the lesson. It was all so new to me.
102 No, I thought it was interesting most of the time. Some of the lesson was review and some of it was new for me.
3. Did you understand the meanings of the words used on the tape recording?
4 No, there were too many words I did not know.
47 Sometimes I did not understand the words.
82 I understood most of the words.
4. Did the pictures help you to understand what you were learning?
8 Not generally, I could not tell what some of them were.
56 Sometimes they helped me understand the lesson.
68 Yes, the pictures helped make the lesson clear.
5. Did the pictures sometimes help you see yourself in the same situation?
18 No, I never felt the same way.
61 Sometimes I could see myself doing something like the picture showed.
51 Yes, I usually could imagine myself doing something like the picture showed.

6. Did the lesson help you understand why planning is important to spending your clothing money?
3 No, I don't think people need to plan very far ahead.
32 Sometimes I think I will plan better.
98 Yes, I will always try to plan better when spending my clothing dollar.
7. Was the voice on the tape recording clear and easy to listen to?
10 No, the volume and accents of the speakers bothered me.
56 Sometimes I had a little trouble understanding the voices.
67 Yes, the voices on the tape were clear and easy to listen to.
8. Was the length of the lesson comfortable for you?
16 No, I got tired of sitting so long.
26 I would have liked it longer. Just as I got interested it ended.
90 It was a good length.
9. Did this lesson change any of your previous beliefs?
4 No, I knew everything before.
86 Sometimes it did. I am still thinking over some of the information.
42 Yes, I changed some of my beliefs.
10. Would you personally follow some of the suggestions given for planning your wardrobe?
4 No, I think the ideas are for girls who have more money than I do.
51 I would follow part of the suggestions but not in such detail as the lesson described.
76 I would try to do just as the lesson suggested.
11. Would part of this lesson be useful to your family at home?
8 No, they know it all already.
62 Some of it would be as helpful to them as to me.
62 I hope to tell my family about some parts of this lesson.
12. Could you have understood the audio-visual better if more examples had been given?
46 Yes, I think more examples would have helped me.
63 Sometimes an example might have helped me to better understand the materials.
26 No, there were enough examples.
13. Did you enjoy learning about clothing?
2 No, it does not interest me.
50 It is fairly interesting.
70 I really enjoy talking and learning about clothing.

14. Did you enjoy learning about money management?
2
29 No, I think the subject is boring.
It is sort of interesting. I will study it if it is presented
in a fun sort of way.
102 Yes, very much. No matter how much money we have it is impor-
tant to learn how to spend it wisely.

15. What information in this audio-visual was least helpful to
you and why?

16. What information in this audio-visual was most helpful to you
and why?

Thanks for your help.

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*Number of responses in the sample

VITA

Janice Smith Chesemore

Candidate for the Degree of

Master of Science

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