

A COMPARISON OF FOUR METHODS OF TEACHING  
CULTURAL ASPECTS OF CLOTHING

by

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CULTURAL ASPECTS OF CLOTHING

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## CHAPTER I

### INTRODUCTION

Achievement, rather than amount of time spent in the classroom should be the criterion for educational progress. Students should be encouraged to make decisions and to develop responsibility. One way educators can encourage continuous development of responsibility among their students is to provide opportunities for individualization within the school program. In today's large classes the traditional lecture method of teaching is inadequate for fulfilling these individual student needs; thus, many colleges and universities are developing independent study programs.

Independent study is the pursuit of special subjects by individual students under limited guidance of faculty advisers (35). Independent study provides the opportunity for students to advance according to their individual abilities. Accepting responsibility for advancement helps the student to develop characteristics of a responsible citizen as well as the ability to seek and search the depths of knowledge for himself (40).

The audio-tutorial system is one type of independent study program. Currently the Clothing, Textiles, and Merchandising Department at Oklahoma State University is offering the basic clothing course, Clothing Selection, by the audio-tutorial approach. The course is presently taught using a combination of lecture, discussion, and

audio-tutorial laboratory. Currently a study is underway to determine the feasibility of developing the course into a completely self-instructional program.

### Statement of the Problem

The purpose of this study was to develop and test a one-week unit on the cultural aspects of clothing which could be used in a self-instructional program in Clothing Selection at Oklahoma State University.

#### Objectives.

1. To develop a unit on the cultural aspects of clothing which includes audio-visual materials for use in the audio-tutorial laboratory.
2. To develop a pre-post test for measuring the knowledge of information presented in the unit.
3. To compare the performance of students taught by four different methods.

Hypothesis. The hypothesis underlying the study was that there would be no significant difference in the achievement of students taught by the four different methods.

### Definition of Terms

Independent study is defined as the pursuit and acquisition of knowledge and skills by students with limited assistance from a teacher or instructor (15).

Audio-tutorial system (sometimes referred to as audio-tutorial approach) refers to a type of independent study program which includes study in an audio-tutorial laboratory with or without student-teacher

contact through lecture and/or discussion classes.

Audio-tutorial laboratory refers to a classroom furnished with study carrels containing audio-visual equipment and materials.

Study carrels are individual study booths located in an audio-tutorial laboratory.

Audio-visual materials are materials used in teaching which employ the use of sight and/or sound.

#### Limitations of the Study

The study was limited to the development and testing of a one-week unit on the cultural aspects of clothing for the basic clothing course, Clothing Selection.

Participants in the study were students enrolled in the basic clothing course during the spring semester, 1969. The students were divided into four groups. No attempt was made to randomize the sample since the students were already enrolled in particular sections.

Four methods of teaching the one-week unit were evaluated. Each of the four groups of students attended one of the following: the audio-tutorial laboratory only (AT); the audio-tutorial laboratory and the discussion session (ATD); the audio-tutorial laboratory and the lecture (ATL); or the audio-tutorial laboratory, the discussion session, and the lecture (ATDL).

Since three instructors were involved in teaching the discussion sessions their attitudes may have had some bearing on the results of the study. An attempt was made to keep the discussion classes as much alike as possible by having all three instructors use the same outline for the discussion session. Each method was used by two different instructors.



## CHAPTER II

### BACKGROUND FOR THE STUDY

Education has many purposes, and it is the responsibility of the public schools, colleges, universities, and all other educational institutions to fulfill these purposes. Not only must educators help students to gain a storehouse of knowledge, but they must also help students to appreciate the value of education and develop in them a desire for continuous learning.

Since research indicates that the learning process is reinforced by the utilization of a variety of different real and vicarious learning experiences, educators have used many different methods in attempting to help students learn (6). A common method used is the traditional lecture. This method does provide the student with facts and knowledge, but does not necessarily encourage the student to make decisions, nor impart in him a desire for continuous learning. Also when used in large classes the traditional lecture method may fail to meet individual student needs. In view of this, educators have begun placing emphasis on independent study.

#### Independent Study

In an independent study program the student accepts more responsibility for his own education. Fleck (17) sees independent study as an excellent experience for instilling in the student the desire for

learning, and as an opportunity for students to be creative. Independent study places emphasis on self-responsibility and self-regulation by the individual, thus encouraging maturity (15).

Several types of independent study programs exist. All independent study programs encourage the student to accept most of the responsibility for his learning; however, the various programs differ in many ways. In one type of program the student meets with the instructor periodically to clarify problems, but the student seeks out all of the information for himself (2). This type of independent study program may allow for a highly permissive relationship between student and instructor in which the student is expected to define and develop his own course plans (13).

Independent study may vary from individual or "lone wolf" methods to the use of team and small group approaches. It may range from students working independently over a substantial block of time with no formal classroom contact to arrangements under which students meet in regularly scheduled classes with only the number of meetings being reduced (3). Another type of independent study may simply consist of a special assignment given for the student to work out for himself.

The audio-tutorial approach places much of the responsibility for learning on the student, but this approach is still different from the types mentioned above. In the audio-tutorial approach the student is assigned to spend a certain amount of time in a study laboratory. He may or may not attend lectures and/or discussion sessions in addition to the laboratory study. This method of study is relatively new and much research is now being conducted concerning it.

Audio-tutorial system. The audio-tutorial laboratory is equipped

with individual study carrels which contain various types of audio-visual equipment. Each institution equips the laboratory as best suited for its particular use. The carrels may be equipped with tape recorders, earphones, slide projectors, closed circuit television receivers, and other audio-visual equipment, plus various booklets, manuals, and other types of learning materials. Generally the student attends the laboratory at his own convenience. The audio-tutorial laboratory is arranged so that several students may study at the same time without disturbing each other.

The audio-tutorial system of independent study is referred to by different names. It may be called an auto-tutorial system, a resource center system, or a self-instructional system, but essentially all of the programs function similarly. Audio-tutorial programs attempt to provide conditions under which a student can learn efficiently in the laboratory with little or no help rather than by attending traditional lectures (14).

The audio-tutorial concept was developed by Postlethwait at Purdue University for a freshmen botany course in an attempt to adjust to the diverse backgrounds of students (6). Postlethwait (30) sees "true education as self-education," and he revised his botany course to meet this end. Postlethwait set up the course in four study sessions: (1) a general assembly, one hour per week; (2) supervised study with audio tape and laboratory materials; (3) independent home study; and (4) a small group assembly of approximately thirty students for one hour per week.

This system of independent study is now being used in elementary schools and secondary schools as well as colleges. In an elementary

school, especially designed for individualized instruction, the physical plan consists of three separate rooms arranged around a central room which is called the instructional materials center. Before the school opened the teachers spent six months in training, planning, and developing materials for the center because this type of system changes the role of the teacher as well as the student. While the student is listening to a tape recorder, record player, viewing a single concept film or working with a language master, the teacher can be working with individual students or small groups of students. In addition, the teacher has a responsibility in planning, selecting, and screening materials for use with the audio-visual equipment (27).

In Cathedral High School for Girls in New York City the Principal, Sister Marita Anna (40), has found that independent study provides an opportunity for the brighter and more ambitious student to advance according to her ability. The faculty also found that study carrels were ideal because the numerous distractions from the outside environment could be eliminated. They also found that when the girls were isolated from their friends, there was a noticeable rise in comprehension.

Another high school program using the audio-tutorial approach is in the experimental stage. This program offers students from small high schools, which are not large enough to hire physics teachers, an opportunity to take physics by independent study. In order to offer this audio-tutorial physics course, the school must provide the necessary materials for instruction: textbook, laboratory manual, laboratory equipment, films, and audio-instructional materials and equipment. The program is set up for regular class periods. Students may be supervised by someone having no science background because the supervisor does no

teaching. Results of analysis indicate that for comparable levels of I.Q. the students using the audio-instructional materials demonstrated a reliably higher level of achievement than did those students attending traditional lecture and laboratory sessions (11).

The audio-tutorial system is being used in colleges and universities in many subject matter areas. In Jefferson College, English composition is being offered by the audio-tutorial method. Harold McAninch (23), Dean of Administration at Jefferson College, found that the audio-tutorial laboratory could be provided with little or no additional cost to the school by adapting the language laboratory for the audio-tutorial English course.

Carroll College is currently offering a geography course by the "audio-visual-tutorial" system. At Carroll College the laboratory is equipped with study booths having tape players and slide projectors, plus several demonstration tables which are used for displays and experiments which are too large to be contained in the booths. The students work independently in the study booths on an unscheduled basis. They spend approximately four hours a week in the laboratory (33).

Self-instructional courses are also being offered in home economics. The College of Home Economics at Syracuse University has recently developed an audio-tutorial laboratory for a beginning foods course, "Nutrition and Food Science--Food for the Modern Family." The course arrangement calls for students to attend the laboratory individually at a previously assigned time. Here the student receives a flow chart which indicates the procedure to be followed that day. The flow chart contains a list of the equipment (tapes, slides, etc.) to be used and directs the student's attention to any displays or wall charts that

are to be observed. After the self-instruction sequence students take a ten point test. Students who answer correctly eight of the ten questions proceed to the foods laboratory to prepare a product. Those students who fail to answer eight questions correctly must return to the audio-tutorial laboratory to review the lesson (39).

The foods instructors at Syracuse University found that students watch and listen more intently and quietly in the audio-tutorial laboratory than in a lecture situation. They also found that students could proceed to the foods laboratory with fewer questions and appeared to be more sure of what they were doing. In general, the instructors believe the program is a success (39).

Even though audio-tutorial systems are relatively new, this type of independent study has many advantages as compared with conventional classroom study. Some of the advantages stated by Brown and Thornton (9) are:

- (1) This procedure places special emphasis on student learning rather than on teaching.
- (2) Students adapt the pace of study to their own ability to assimilate the information involved. Exposure to difficult subjects may be repeated as often as necessary.
- (3) The better students are not a "captive audience;" rather they may use their time independently and effectively.
- (4) Students may select listening and study time to conform to their individual efficiency peaks.
- (5) Distractions are minimized because tapes concentrate student attention.
- (6) Scheduling is simplified. The hours of scheduled time from which the students are now relieved are distributed throughout the week to adjust to student activities.
- (7) More students are accommodated in less laboratory space and with less staff.

- (8) Make-up laboratory and review sessions are accommodated with minimal effort.
- (9) Students feel keenly a responsibility for their own learning.
- (10) Students indicate they like this experimental procedure as a way of learning.

In addition to these advantages, Postlethwait (31) found students learn more in less time under the audio-tutorial system, achieve better grades than formerly, and retain the information learned. Postlethwait also found that students prefer the botany course under the audio-tutorial system to the older traditional type, even though the new system contains fifty percent more information.

Results of a study at Antioch College showed that students learned equally well whether they had studied under the regular method of instruction or under the method of independent study. A follow-up study of this same group of students two years later showed there was no significant difference in the retention of learning between the two groups (3).

A disadvantage to the audio-tutorial approach is a possible negative attitude toward automation by the teacher. Teachers who dislike certain kinds of materials are likely to affect the achievement of their pupils by use of some materials in a negative way. Studies have shown some teachers have less favorable attitudes toward terminology which directly connotes automation than to comparable terms which are not identified with automation (44). These considerations imply that attention should be given to the terms used when the teacher first comes into contact with newer media before the attitudes become permanent.

Another disadvantage is that all students may not be ready for independent study. If unsuited students participate, it could lead to

loss of time, day dreaming, and perhaps frustration if the student does not possess the stability necessary to seek and to find for himself (40).

Although independent study by the audio-tutorial approach has both advantages and disadvantages, enough evidence is present to suggest that when properly used the audio-tutorial approach can be very effective in helping students to achieve.

Audio-tutorial systems at Oklahoma State University. The audio-tutorial system in the College of Home Economics at Oklahoma State University was first used in the spring of 1968. The audio-tutorial laboratory was patterned after Postlethwait's laboratory at Purdue University (6). The basic clothing course, Clothing Selection, was selected as the course to be taught by this method.

The course organization required students to attend a one hour lecture per week, a one hour discussion session per week, and a two to three hour period in the audio-tutorial laboratory at their convenience. Results of a pilot study encouraged continued development of the audio-tutorial system in this area.

The course is structured into weekly units. Recently the study of international cultures has gained importance in educational institutions. Educators want to help students develop international attitudes and an appreciation of other cultures. Because of this development in education recent revision of the course included addition of a one week unit on the cultural aspects of clothing. This unit was selected as the subject matter area for this study.

#### The Study of International Cultures

More emphasis is being placed on the study of international



cultures at all levels of education in the United States today.

Educators are realizing the importance of encouraging students to attempt to understand their own and other cultures. One educator speaks of the study of world cultures in this way:

If the ubiquitous upheaval of the 20th century has taught us nothing else, it has explicitly demonstrated that understanding and tolerance among the men of this earth will never flourish unless ignorance of one society about another is eliminated.

As teachers, therefore, one of our chief concerns should be to give our students insight into the various cultures. We can help them to meet the challenges of this ambiguous age (19).

Government officials and legislators also realize the importance of all citizens possessing a knowledge of other cultures. On October 21, 1966, Congress passed the International Education Act of 1966. The Act emphasizes that:

- (1) A knowledge of other countries is of the utmost importance in promoting mutual understanding and cooperation between nations.
- (2) Strong American educational resources are a necessary base for strengthening our relations with other countries.
- (3) This and future generations of Americans should be assured ample opportunity to develop to the fullest extent possible their intellectual capacities in all areas of knowledge pertaining to other countries, peoples, and cultures.
- (4) It is therefore both necessary and appropriate for the federal government to assist in the development of resources for international study, research, and trained personnel, and to coordinate the future U.S. programs in international education to meet the requirements of world leadership (32).

Colleges and universities are accepting the challenge to help students gain a knowledge and understanding of other cultures. Recently a special one year program entitled "Intercultural-International Focus

on Home Economics" was offered at the University of Minnesota. The purpose of the program was to increase the ability of faculty and students to understand and to work with people from differing cultural backgrounds in this country and in other countries. The faculty believed this program to be a success. Student comments on the program strongly supported increasing intercultural focus, but from the point of view of increased general education rather than from professional specialization. (16).

Another program including studies aimed toward cultural understanding was initiated in Indiana. The Intercollege Coordinating Graduate Committee of Indiana, a group consisting of representatives from four state-supported universities in Indiana, arranged a series of programs for graduate students. The purpose of the series was to strengthen the graduate programs at each of the state universities participating. The first course in the series was entitled "Cultural Factors in the Introduction of Change" and was taught by anthropologist Dorothy Lee at the Indiana University campus. This course offered an experience for the students to learn "what gives meaning to the lives of other individuals in other cultures" (46). Favorable comments were given by many of the students after completion of the course.

Oklahoma State University involvement in the study of world cultures. Oklahoma State University is also interested in developing international-intercultural programs. Dr. Lela O'Toole (29), Dean of the Division of Home Economics at Oklahoma State University, presented six objectives which the faculty had defined as necessary in order to establish an effective program:

One objective is to help students, both undergraduate

and graduate, develop international attitudes and to understand and appreciate their own and other cultures and their heritage.

A second objective is to enrich and make effective the services and curricula for students from other countries.

A third objective is to develop a curriculum for students preparing for international service in other countries.

The fourth objective is to provide leadership in the development of home economics in other countries as an important contribution to the education of women and the economic development of the country.

The fifth objective is for the faculty to develop international attitudes, to become world citizens, to become sensitized to their own cultural beliefs, to come to think and feel interculturally, to cooperate with faculty and administrators in other fields on international education at Oklahoma State University and to be able to make a significant contribution to the intercultural-international dimension.

The sixth objective calls for research in the area of the international-intercultural dimension.

Recognizing that students who may wish to study abroad have a great need for background in language and culture of the country of their choice, the College of Arts and Sciences has been planning a special program. This program concentrates on the geographical and cultural aspects of various countries and is aimed at preparing students for their learning experiences abroad.

The College of Home Economics is working cooperatively with the College of Arts and Sciences in developing a curriculum leading to a program in international service. Also, the International Education Committee is developing a ten-year plan for International Education in Home Economics. The Clothing Selection unit entitled "Cultural Aspects of Clothing" is part of the study of world cultures. This unit is aimed at fulfilling the first of the six objectives stated by Dean O'Toole.

Cultural Aspects of Clothing. The clothes people wear give information to those who wish to understand them. By studying the dress of a group of people one can gain a knowledge of their culture as well as many facts about the country itself--the geographical and climatic conditions, the government and the general standard of living of the population. Clothes reflect the values and customs of a group of people. One can often tell why people act as they do by studying their clothing habits (20).

The "Cultural Aspects of Clothing" unit presents dress customs of three different cultures: the Chinese, the Indian, and the Pueblo Indian. One purpose of the unit is to acquaint students with these particular cultures and to help them realize the reasons why various groups of people dress as they do. The second purpose is to help students develop an appreciation of other cultures and cross-cultural influences. No attempt is made to present a detailed study of any of these cultures. In-depth study is reserved for advanced courses.

#### Summary

One of the many duties of educators is helping students develop responsibility. Many instructors have found the independent study method of teaching effective for this purpose. When studying and learning independently the student learns subject matter and develops responsibility for his learning as well. Independent study programs vary from those in which the student receives very little assistance from a teacher to those in which a student attends regularly scheduled classes and does a special project on his own.

The audio-tutorial system of independent study is relatively new

and much research is being conducted in this area. The audio-tutorial approach, developed by Postlethwait at Purdue University, is being used in elementary and secondary schools, as well as in universities.

Research has proven the audio-tutorial approach effective in allowing students to advance at their own rate and to gain a higher level of achievement than when taught by traditional methods.

The audio-tutorial system is now being used in home economics classes in many colleges and universities including Oklahoma State University.

## CHAPTER III

### PROCEDURE AND ANALYSIS OF DATA

The problems undertaken in this study were: (1) development of a unit on the cultural aspects of clothing for use in teaching the Clothing Selection class at Oklahoma State University, (2) presentation of the unit using four different teaching methods, and (3) comparison of the achievement of students taught by the four different methods. Chapter III describes the procedures used and presents the analysis of the data.

#### Development of the Unit

The first step in the development of the one-week unit on the cultural aspects of clothing was to determine appropriate objectives for the unit (Appendix A, page 34) and to research the subject matter area. Three different cultures were selected for the unit: the Chinese, the Indian, and the Pueblo Indian, an American Indian tribe. Because these cultures differ in many ways such a study should offer a variety of cultural learning experiences.

Preparing the materials for use in the audio-tutorial laboratory was the second step. The materials developed included magnetic tapes and slides for the twelve study carrels, study sheets, and a laboratory display. After the script for the tape (Appendix A, page 35) was written, pictures for the slides were selected to clarify the

descriptions and symbolic meanings of the garments mentioned on the tape. A description of each slide may be found in Appendix A, page 46.

The study sheets (Appendix A, page 47) were developed to help direct students' attention to important points presented on the tape. The sheets were made available to the students as they entered the audio-tutorial laboratory.

The display included a world map with markings indicating the locations of the various cultures discussed on the tape. Actual saris, traditional garments worn by Indian women, were displayed on life-sized mannequins. A cabinet containing dolls dressed in national costumes of several cultures was also on display.

Development of the pre-post test. The pre-post test (Appendix B, page 50) consisted of fifty multiple choice questions which tested knowledge of the subject matter presented in the unit. The unit objectives served as the basis for developing this instrument. After the test items were chosen the order of the questions and answers was determined by random selection for the pre-test. The same questions and answers were then randomly rearranged for the post-test. The purpose of the pre-test was to determine students' knowledge of the subject matter prior to presentation of the unit, and the purpose of the post-test was to determine the increase in knowledge of the subject matter after presentation of the unit.

#### Presentation of the Unit

Selection of the sample. The sample for the study consisted of one hundred sixteen students enrolled in eight sections of the Clothing Selection course at Oklahoma State University during the spring of

1969. Students in the course were enrolled in one of twelve discussion sections. The study required that the unit be presented by four different methods. Eight discussion sections were selected for inclusion in the study, so that each method could be tested by two sections.

Organization of the presentation. During the one-week unit on the cultural aspects of clothing two sections of students attended the audio-tutorial laboratory only. This group will be referred to as the AT group. Two other sections attended the audio-tutorial laboratory and the discussion session (the ATD group). The third pair of sections attended the audio-tutorial laboratory and the lecture (the ATL group). The remaining two sections attended the audio-tutorial laboratory, the discussion session, and the lecture (the ATDL group).

All groups attended the audio-tutorial laboratory and received the same information, i.e. the tapes, slides, and display. The AT group, however, received only the instruction which was provided in the audio-tutorial laboratory. In addition to the laboratory the ATD group attended a discussion session on the cultural aspects of clothing; the ATL group attended a lecture on the cultural aspects of clothing; and the ATDL group attended both a discussion session and a lecture on the cultural aspects of clothing.

Administration of the study. The pre-test was administered to all participants during their regularly scheduled discussion sections at the beginning of the presentation of the unit on the cultural aspects of clothing. The unit was presented during the following week and the post-test was administered to all participants in their regularly scheduled lecture sections following the presentation of the unit.



Figure 1 illustrates the scheduling of the pre-test and post-test, and presentation of the unit. The scores of students who were absent from a scheduled class session were eliminated from the study.

	<u>Discussion</u>	<u>Lecture</u>
First Week	All groups were administered the pre-test.	The ADL and ATDL groups attended a lecture on the cultural aspects of clothing.
Second Week	The ATD and ATDL groups attended a discussion session on the cultural aspects of clothing	All groups were administered the post-test.

Figure 1. Schedule of the presentation of the unit, pre-test, and post-test.

### Statistical Analysis

The data used to test the hypothesis were pre-test scores, post-test scores, and mid-semester grades of students in the Clothing Selection course. Means for each group of data appear in TABLE I.

Random assignment of students to one of the teaching methods was not possible in this study; therefore, the analysis of covariance was employed. This statistical test allowed for adjustments in the mean scores due to differences in pre-test scores and mid-semester grades in the course. Garrett (18) explains the use of analysis of covariance:

Analysis of covariance represents an extension of the analysis of variance to allow for the correlation between initial and final scores. Covariance analysis is especially useful for experiments in the behavioral sciences where for various reasons it is impossible or quite difficult to equate control and experimental groups at the start: a

situation which often obtains in actual experiments. Through covariance analysis one is able to affect adjustments in final or terminal scores which will allow for differences in some initial variable.

TABLE I  
PRE-TEST AND POST-TEST MEAN SCORES AND  
MID-SEMESTER GRADES FOR FOUR GROUPS

Group	Number of Students	Pre-test	Post-test	Adjusted Post-test	Mid-semester Grades
AT	29	22.5172	37.4483	38.2070	81.9655
ATD	31	23.5484	41.8064	41.7718	83.9355
ATL	31	22.9355	39.0968	38.7270	84.8064
ATDL	25	22.6400	41.4000	41.0213	84.8400

Results of the analysis of covariance which were produced by computer appear in TABLE II. The analysis of covariance was used to indicate whether there were differences in the mean post-test scores of the four groups. The critical F-value for the given degrees of freedom at the .01 level of confidence was 3.95 (41). The analysis of covariance yielded an F-value of 4.464 which was greater than the critical value, 3.95. This indicates a significant difference among the adjusted mean post-test scores of the AT, ATD, ATL, and ATDL groups at the .01 level of confidence; therefore, the null hypothesis was rejected.

Since a significant difference was found among the adjusted mean

TABLE II  
ANALYSIS OF COVARIANCE--FOUR GROUPS

Source	df	YY	Sum-squares (Due)	Sum-squares (About)	df	Mean-square	F
Treatment (Between)	3	363.3125					
Error (Within)	112	2848.7500	683.0037	2165.7463	110	19.6886	4.464
Treatment + Error (Total)	115	3212.0625	782.6382	2429.4243	113		
Difference for testing adjusted treatment means . . . .				263.6780	3	87.8927	

Tabulated  $F_{3,110}$  df = 3.95 at .01 level.

post-test scores for the four groups, an exploratory t-test was used to compare each possible group combination. TABLE III shows the results of the t-test.

TABLE III  
EXPLORATORY t-TEST COMPARISON BETWEEN GROUPS

Groups	Number of Students	Confidence Limits	Meaningful Difference at 95% level of confidence
ATD - ATL	62	+ .7999 +5.2896	Yes
ATD - AT	60	+5.8375 +1.2921	Yes
ATD - ATDL	56	+3.1321 -1.6311	No
ATL - AT	60	+2.8058 -1.7858	No
AT - ATDL	54	- .3759 -5.2527	Yes
ATL - ATDL	56	+ .0792 -4.6678	No

A significant difference was found to exist at the 95 percent level of confidence for these groups: (1) ATD - ATL, (2) ATD - AT, (3) AT - ATDL. No significant difference was found to exist at the 95 percent level of confidence for these groups: (1) ATD - ATDL, (2) ATL - AT, (3) ATL - ATDL.

When significant differences, determined by the t-test, were observed a comparison was made of group adjusted post-test scores to determine which method of instruction produced higher mean scores. TABLE IV shows these group comparisons including the adjusted post-test

scores for each group and indications of where significant differences occurred.

TABLE IV  
GROUP COMPARISON OF ADJUSTED POST-TEST SCORES\*

Group	Number of Students	Adjusted Post-Test Scores				Significant Differences
		ATD	ATL	AT	ATDL	
ATD - ATL	62	41.77	38.73			Yes
ATD - AT	60	41.77		38.21		Yes
AT - ATDL	54			38.21	41.02	Yes
ATD - ATDL	56	41.77			41.02	No
ATL - AT	60		38.73	38.21		No
ATL - ATDL	56		38.73		41.02	No

\*All adjusted post-test scores have been rounded to two decimal places.

There was a significant difference in the following group comparisons: (1) the ATD - ATL groups, (2) the ATD - AT groups, and (3) the AT - ATDL groups. Since the adjusted post-test mean score was higher for the ATD group than either the ATL or AT groups it was concluded that the ATD method of instruction was more effective than either the ATL or AT methods. The score for the ATDL group was higher than the AT group; therefore, it was concluded that the ATDL method was more effective than the AT group in producing higher scoring students.

No significant difference was found in the following group comparisons: (1) the ATD - ATDL groups, (2) the ATL - AT groups, and (3) the ATD - ATDL groups. Data was insufficient to indicate that any one of the four methods of instruction was most effective in producing higher achieving students.

## CHAPTER IV

### SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

The purpose of this study was to develop and test a unit on the cultural aspects of clothing to be used in the Clothing Selection course at Oklahoma State University. Objectives of the study were: (1) to develop a unit on the cultural aspects of clothing which includes audio-visual materials for use in the audio-tutorial laboratory, (2) to develop a pre-post test for measuring the knowledge of information presented in the unit, and (3) to compare the performance of students taught by four different methods.

The hypothesis tested was that there would be no significant differences in achievement of students taught by the four different methods.

A background study of related literature showed a lack of this type of research in home economics. Objectives were established and an investigation was conducted in preparation for writing the unit. After the unit was completed and audio-visual materials were developed, a pre-post test was constructed.

The pre-test was administered to eight discussion sections of the Clothing Selection course; the unit was presented to the eight sections by four different methods of instruction; and the post-test was given upon completion of the one-week unit.

Analysis of the data included: (1) an analysis of covariance

which showed a significant difference in the adjusted post-test mean scores for the four groups at the .01 level of significance, and (2) an exploratory t-test which revealed where the differences were located. Conclusions were drawn and recommendations for further study were made.

### Conclusions

The following conclusions were drawn from the study.

1. A significant difference in the effectiveness of the four methods of instruction was indicated.
2. Results of the t-test indicated significant differences between certain groups, but data were insufficient to predict which of the four teaching methods was most effective.
3. The AT group had the lowest adjusted mean post-test score, and significant differences were found between the AT and ATD groups and the AT and ATDL groups. These results indicated that the audio-tutorial laboratory alone was not as effective as when the audio-tutorial laboratory was combined with the discussion session or with the discussion session and lecture.

### Recommendations

The following recommendations for further study appear justified:

1. Replicate this study using groups which were randomized according to known student abilities.
2. Conduct a similar study using a different subject matter area or more than one area for the unit of instruction.
3. Conduct further studies allowing a longer period of time for presentation of the unit.



4. Conduct correlation studies to determine whether the amount of time spent in the audio-tutorial laboratory affects achievement scores.

5. Investigate attitudes of students toward the four methods of instruction to determine whether attitude toward the method affected their achievement scores.

6. Expand the study by having the same group of students receive instruction in all four methods and allow at least a week for each presentation.

### SELECTED BIBLIOGRAPHY

1. Ahmann, J. Stanley and Marvin D. Glock. Evaluating Pupil Growth. Boston: Allyn and Bacon, Inc., 1959.
2. Allen, Dewight. "Individualized Instruction," California Teacher's Association Journal, LXI (October, 1965), 27, 44, 47.
3. Baskin, Samuel. "Experiment in Independent Study," The Journal of Experimental Education, XXXI (December, 1962), 183-185.
4. Baskin, Samuel. (Editor). Newer Developments in Higher Education. New York: McGraw-Hill Book Company, 1965.
5. Bean, Kenneth L. Construction of Educational and Personnel Tests. New York: McGraw-Hill Book Company, Inc., 1953.
6. Beckman, Richard, Robert Janke, and Gilbert Tanner. "Utilizing the Audio-Tutorial Approach," The Journal of Geography, LXVI (May, 1967), 241-245.
7. Benedict, Ruth. Patterns of Culture. New York: The New American Library of World Literature, Inc., 1934.
8. Bhushan, Jamila Briy. Costumes and Textiles of India. India: D. B. Teraporevalu Sons and Company, 1958.
9. Brown, James and James Thornton, Jr. New Media in Higher Education. Washington, D. C.: Association for Higher Education and the Division of Audiovisual Instructional Service of the National Education Association, 1963.
10. Cammann, Schuyler. China's Dragon Robes. New York: Ronald Press Company, 1952.
11. Cowan, Paul. "Autoinstructional Materials in Teaching Physics in Small High Schools," The Journal of Experimental Education, XXXVI (Fall, 1967), 46-50.
12. Craig, Hazel Thompson. Clothing; A Comprehensive Study. New York: J. B. Lippincott Company, 1968.
13. Dearing, Bruce. "The Student on His Own: Independent Study." In Newer Developments in Higher Education Samuel Baskin (Editor). New York: McGraw-Hill Book Company, 1965. Chapter 3.

14. DeCecco, John, Readings in Programmed Instruction. New York: Holt, Rinehart, and Winston, Inc., 1964.
15. Empey, Donald. "What is Independent Study All About?" Journal of Secondary Education, XLIII (March, 1968), 104-108.
- ✓ 16. Esteros, Gertrude. "Developing Intercultural Understandings: Intercultural-International Focus on Home Economics," Journal of Home Economics, CXI (April, 1969), 258-261.
17. Fleck, Henrietta. "Independent Study," Forecast for Home Economics, XII (December, 1966), F-7 - F-8.
18. Garrett, Henry E. Statistics in Psychology and Education. New York: Longmans, Green and Company, 1958.
- ✓ 19. Goodman, Mary Ellen. The Individual and Culture. Homewood, Illinois: The Dorsey Press, 1957.
- ✓ 20. Holtzclaw, Katharine. "Costume and Culture," Journal of Home Economics, XCVII (June, 1956), 401-404.
- ✓ 21. Horn, Marilyn J. The Second Skin. Boston: Houghton Mifflin Company, 1968.
- ✓ 22. Latzke, Alpha and Helen P. Hostetter. The Wide World of Clothing. New York: The Ronald Press Company, 1968.
23. McAninch, Harold, "An Audio-Tutorial Approach to Remedial English," School and Community, LIV (October, 1967), 23, 31.
24. Medvey-Lepage and André Varagnac. National Costumes. Paris: The Huperion Press, 1939.
- ✓ 25. Minnich, Helen Benton. Japanese Costume and the Makers of Its Elegant Tradition. Tokyo, Japan: Charles E. Tuttle Company, Inc., 1963.
- ✓ 26. Nystrom, Paul. Economics of Fashion. New York: The Ronald Press Company, 1928.
27. Ogston, Thomas. "Individualized Instruction: Changing Role of the Teacher," Audio-Visual Instruction, XIII (March, 1968), 243-248.
28. Orleans, Jacob S. and Glenn A. Sealy. Objective Tests. New York: World Book Company, 1928.
- ✓ 29. O'Toole, Lela. "Intercultural-International Dimension of Home Economics in Higher Education," Journal of Home Economics, CIX (October, 1967), 650-654.
30. Postlethwait, S. N. "A Systems Approach to Botany," Audio-Visual Instruction, VIII (April, 1963), 243-244.

31. Postlethwait, S. N. "Audio-Tutoring a Practical Solution for Independent Study," Medical and Biological Illustration, (July, 1965), 187.
32. Poyner, Edna. "Washington News," Journal of Home Economics, CIX (October, 1967), 260.
33. Richason, Benjamin F. "The Audio-Visual-Tutorial Method," Journal of Geography, CXVI (April, 1967), 155.
- ✓ 34. Roach, M. C. and J. B. Eicher. Dress, Adornment, and the Social Order. New York: John Wiley Company, 1965.
35. Robinson, Edgar Eugene. Independent Study at Stanford. Stanford: Stanford University Press, 1937.
36. Roediger, Virginia M. Ceremonial Costumes of the Pueblo Indians. Berkeley, California: University of California Press, 1941.
37. Runyon, Richard P. and Audrey Haber. Fundamentals of Behavioral Statistics. Reading, Massachusetts: Addison-Wesley Publishing Company, 1967.
- ✓ 38. Scott, A. C. Chinese Costume in Transition. New York: Theatre Arts Books, 1960.
39. Short, Sarah H., Olga Hough, Marjorie V. Dibble, and Dennis Sarenpa. "Development and Utilization of a Self-Instruction Laboratory," Journal of Home Economics, CXI (January, 1969), 40-44.
40. Sister Marita Anna. "Independent Study: The Use of Carrels," Catholic School Journal, LXVI (November, 1966), 56-57.
41. Steel, Robert and James Torrie. Principles and Procedures of Statistics. New York: McGraw-Hill Company, Inc., 1960.
- ✓ 42. Thrush, Virginia G. "World Cultures--For World Understanding," Pennsylvania School Journal, LXV (September, 1966), 15-16.
- ✓ 43. Tilke, Max. Oriental Costume. Berlin: Ernst Wasmuth, 1923.
44. Tobias, Sigmund. "Dimensions of Teacher's Attitudes Toward Instructional Media," American Educational Research Journal, V (January, 1968), 81-98.
45. Tyler, E. B. Primitive Culture. London: John Murray Publishers, 1871.
- ✓ 46. Vanderhoff, Margil, "Developing Intercultural Understandings: Cultural Factors in the Introduction of Change," Journal of Home Economics, CXI (April, 1969), 261-264.

47. Yen, Maria. "Red China Recognizes the Skirt," The New York Times Magazine, CXVII (November 27, 1955), 14.
48. Wood, Dorothy Adkins. Test Construction. Columbus, Ohio: Charles E. Merrill Books, Inc., 1960.

APPENDIX A

MATERIALS DEVELOPED FOR THE UNIT ON  
THE CULTURAL ASPECTS OF CLOTHING

## UNIT OBJECTIVES

## THE CULTURAL ASPECTS OF CLOTHING

1. To help students understand and appreciate other cultures.
2. To help students gain a knowledge of the customs of other cultures.
3. To help students recognize and appreciate the symbolism reflected by the dress of other cultures.
4. To help students realize that the dress of a group of people reflects their culture.
5. To make students aware that cultures other than their own are in existence in the United States today.

## SCRIPT FOR TAPE

## CULTURAL ASPECTS OF CLOTHING

Our dress reflects our culture. When we speak of culture we are referring to the entire set of customs practiced by the members of a society. It is the particular way of life learned, shared, and transmitted by members of the society bearing that culture. Tyler's classic definition of culture is "that complex whole which includes knowledge, belief, art, morals, law, custom, and any other habits acquired by man as a member of society." Cultural patterns are transmitted from one generation to another.

Man's ability to transmit behavior patterns from generation to generation gives him an overwhelming advantage in the struggle for existence. It also distinguishes him from animals.

Dress is a key to a culture. By studying the dress of a particular culture we can better understand the way of life and socio-economic progress of that culture.

Because our cultural practices are so much a part of our existence, we scarcely ever question their logic or rationality. They are "right" simply because they are familiar to us. However, if we are aware that upon entering a place of worship the Jew puts on his hat, the Christian takes off his hat, and the Moslem removes his shoes, it becomes clear that one ritual of dress is no more "right" than the others. A particular type of dress is proper only within a particular cultural setting.



Custom in dress should be differentiated from fashion in dress.

Customs in dress are established through periods of relatively long usage; whereas, fashion is constantly changing. Nystrom differentiates between custom and fashion by explaining that in fashion people imitate their contemporaries, while in custom they imitate their elders.

Customs change, but they change more slowly than fashions-- particularly with respect to ceremonies that have strong emotional or spiritual content. For example, the traditional dress for weddings, funerals, and graduations changes little over time. Details of custom are spelled out in etiquette books for traditional occasions such as these.

While the long white dress and transparent veil are not customary in all societies, special or distinctive garb for the bridal couple is a common characteristic of most cultures. White has been worn for centuries by English and Hebrew brides as a symbol of their innocence and purity. This custom can be traced back to the ancient Greeks. The Romans added a red veil, and until the time of the Renaissance, most European brides wore red. Red is the color which was thought to have the power of repelling demons and it is still the traditional color for weddings in India and China.

Probably more deeply ingrained than any other clothing customs are those habits which serve to distinguish between the sexes. Extreme differences between the dress of the two sexes have no compelling physiological reason; instead, such differences have evolved because men like to have sexual differences emphasized.

For centuries, our code has decreed pants for men and skirts for women. The growing influence of sports and functionalism have resulted

in an increasing relaxation of the code as far as women are concerned, but in American society at least, men have not yet taken up wearing skirts. However, this distinction is far from universal. Many traditional costumes for women include some type of trousered garment, and many a male has been proud of his skirts. In fact, skirts have been worn by men and trousers by women probably longer than the reverse has been true. Even today, men as well as women in some parts of Hungary and Greece and in South and Central America wear skirts. Look at slide #1. This Hungarian boy is dressed in a Hungarian national costume. These costumes are worn only on special occasions.

The Scots cling to their kilts, at least for ceremonial occasions. In some countries the two sexes dress alike. In Red China men, women, and children all wear a jacket and trousers of drab blue or gray cotton. Their austere dress symbolizes the leveling of classes in Red China. <sup>maintain</sup>of

In the United States and other Western countries today, women's dress is becoming more masculine and men's dress is becoming more feminine. This current trend can be seen in pant suits for women and jewelry and ruffled shirts for men. This new fashion trend is called Unisex.

When customs are strong, group disapproval is correspondingly strong. The man in our <sup>American</sup> culture who wears a skirt rather than trousers is subject to social ostracism, while the man who fails to wear a tie with a business suit elicits only a minor form of disapproval. Some customs may be persistent without ever being strong. On men's clothing, for example, buttons are always placed on the right side of the garment whereas on women's clothing the buttons are always on the left.

Different cultures have different ideas about dress. For example

{ some island peoples still wear grass skirts, which hang from the hips. The Yapese wear nothing above the hips and are completely unself-conscious about showing the upper part of the body. In contrast the Eskimos completely cover their bodies. In eastern Burma some women indicate their wealth by the number of rings they wear around their necks.

Let's look more closely at the dress of three cultures, Chinese, Indian and <sup>Southern tribes in Africa</sup> American Indian. The Chinese culture is very rich in symbolism. From very early times symbolic motifs in the shape of animals, birds, flowers and more abstract forms have been used to adorn costume. The primary reason behind the use of such symbols was to confirm the virtues or good omens they represented upon the wearers. The symbols served a second purpose, which was to designate the official position of the person wearing them in the Hierarchy of Chinese society.

One of the best known and most important motifs is the dragon. The dragon was regarded as a symbol of Imperial power, an emblem of happiness. The number of dragons which might be worn on a person's clothing depended on the rank of the wearer. The emperor wore the largest number and those under him wore fewer and fewer as their ranks became lower. Different types of dragons also indicated rank distinction.

China was ruled by dynasties for hundreds of years. When we speak of dynasties we mean a succession of rulers from the same line of descent. The dragon symbol became so significant in Chinese culture that robes with dragon patterns on them became a tradition. Dragon robes were long garments worn by courtiers and officials of the

later dynasties in China. The dragon robe was especially popular in the Ch'ing Dynasty (1644-1911) when the dragon became practically the symbol of China. It eventually appeared on most Chinese coins and medals, and even on the national flag. Look at slide #2 which is an illustration of a Chinese dragon robe. Notice the dragon patterns on this robe.

History of the dragon robe in China covers nearly one thousand years. This is an indication of the strength and continuity of the dragon robe tradition within the Chinese culture. Whether the dynasties that ruled during this period were native or foreign, they all used dragon robes, even though these did not become part of the Chinese official costume until the seventeenth century. The dragon robes made deep impressions on people beyond China's borders such as the Koreans and the Japanese.

The progress of each dynasty may be traced by studying the quality of construction of the dragon robes. For example, the early Ch'ing dragon robes show strength rather than complexity, with simple patterns strongly woven in bright colors. By contrast, the robes of the following dynasty were meticulously embroidered in subtle shades revealing more progress and technical improvements. In the later nineteenth century, robes show a rapid deterioration in weaving, embroidery, coloring, and design. This reveals a period of little progress in the Chinese culture.

In no other nation have clothes so definitely indicated social rank as in China. Dress was prescribed by law and custom, not only for the emperor, princes of all ranks, and the Chinese officials, but also for the husbands of the late emperor's daughter. Certain types of dress were also designated for nobles, servants, merchants, coolies,

actors, and prostitutes.

Various colors also have symbolism in Chinese culture. In the Sui dynasty the Emperor Wen selected yellow, symbolic of the earth, as the color reserved for the emperor alone, both for dress and for the tiled roofs of his palaces. In general the reds, oranges, and purples were also reserved for the imperial household but there were exceptions. For weddings, all people could wear red, the symbol of joy. Look at slide #3. This is an illustration of a 19th century bridal coat. Today, red is still used in the bridal dress and the candles at weddings. Red banners, embroidered or painted with good luck characters, are also a part of the decorations.

A study of Chinese clothing throughout history reveals that the Chinese were sensitive to beauty and had a remarkable degree of skill and artistry in their handicrafts. It also shows that the society was stratified and that among the upper classes formality ruled in social contacts.

Just as the dragon robe is a symbol of Chinese dress the sari is a symbol of the dress of women in India. The sari, which dates back to 2000 B.C. is a piece of fabric five to nine yards long. The way it is draped and fastened about the body has changed as have the garments worn beneath it, but the beauty and versatility of the sari have given it a permanent place in the wardrobe of Indian women of all classes. The sari indicates that Indian people are very aware of tradition. In India the sari is worn by all: the secretary in a modern office building, the saleswoman in the store, the wife of a high government official, and the mother. Look at slide #4. <sup>This woman is</sup> These women are wearing the sari. { The American woman in the picture is no doubt developing an

appreciation for the Indian culture by wearing the sari. }

Changing fashions are an index of the pace of social change within a society. The fact that the sari has been worn for 2000 years indicates Indian culture has changed very little. With the thought in mind that customs in dress reflect social change, how would you compare our culture with that of India?

Another traditional type of garment worn by some Indian women is the burka. The burka is a hood or face covering which allows only the eyes to be seen. This garment is worn by Moslems in India and in surrounding countries. The burka is sometimes worn over the sari and sometimes over a type of long trousers and a blouse. The Moslem religion is one of the main religions of India. In orthodox Moslem families girls begin wearing this costume when they reach puberty. The burka is worn in public, especially in the presence of men. Today, among the well-educated and the well-to-do, the burka is being gradually abandoned. This indicates a change in tradition. Look at slide #5. The white and brown garments in this picture are burkas. It is difficult to see the lace insets which are located in the hood. These insets allow the ladies to see.

Luncheons, dinners and tea parties of the modern kind were unknown in India until recent times. Women visited the homes of relatives and friends rarely and mostly on occasions of either rejoicing or mourning. Since visiting was a rare event it called for formal attire. The Indian woman would put on her best clothes and wear them until she returned home in the evening.

Color and combinations of colors in the Indian wardrobe are quite different from the color principles we practice in the United States.

Indian women have always been noted for their keen color sense and no matter how many colors have been used to form a traditional design they always blend smoothly. The traditional Indian idea was never to match colors. For example, a village girl would wear pink with green or purple, or she would wear yellow with green, or purple with red. The modern Indian woman however, has incorporated Western ideas of matching colors to a remarkable degree.

Western influence can also be seen in the Indian woman's practice of wearing different colors during different times of the day. Today no fashionable woman would dream of turning up at noon in the scarlet sari trimmed with heavy gold lace that she once wore proudly regardless of the time of day. Also, today's summer bride wears white, a color that once indicated mourning. These are examples of gradual changes in clothing customs.

Modesty and protection have been more important as motives behind Indian dress than a desire for adornment. Only in recent years have young Hindu women accepted Western dress. The people of the Hindu religion accept change more rapidly than those of the Moslem religion. Hindus have adopted Western dress such as slacks and sweaters for street wear and brief bathing suits for beach wear. Shorts and sleeveless dresses, however, are still generally looked upon with disfavor even among the Hindu women.

The motives for wearing clothes in India are quite different from the motives of dress for the Pueblo Indians of North America. People in India dress primarily for modesty and protection, while the Pueblo Indians dress primarily for adornment.

The Pueblo Indians of the southwestern United States are one of

the most widely known primitive peoples in Western civilization. They live in the midst of America, within reach of any transcontinental traveler. Their culture has not disintegrated like that of other Indian communities. Month by month and year by year, the old dances of the gods are danced in their stone villages, and life follows essentially the traditional routines.

The Pueblos are ceremonious people. This ceremonial life not only demands their time; it preoccupies their attention. Religious dances and observances are a very important part of their lives. The costumes worn by those participating in the religious dances are rich with tradition. The costume of the masked god must be correct to the last detail.

Body paint is also very significant in adornment for the ceremonial dances. Today, the Pueblo Indian colors his body in patterns which he believes were dictated by his supernatural powers. These pigments are supposed to set him apart from his ordinary, human self and give to him the immortality of the gods as long as he wears them in ceremony. He associates colors with good and evil spirits, and he attributes special power to certain hues and pigments. To the Pueblo these pigments have special power for two reasons. One - they are hard to obtain in his limited world of natural resources, and two - he believes they act favorably upon the supernatural powers. The colored pigments are considered the most sacred part of a dancer's regalia, and their power is superseded only by the masks of the god impersonators. With the colored pigments on his body, the man is charmed as he goes through the ritual. At the end of the performance he must be discharmed and his human self returned to him by the ceremonial washing of his hair



and body.

Generally, the upper torso and arms and legs of men are nude. This provides space and form for a variety of designs. The most frequently used colors are pink, red, and black. Other colors seen occasionally are white, blue, purple, and yellow. Colors are combined in patterns which are significant for a particular impersonation or ritual. Certain color combinations and patterns also represent a certain group or pueblo. For example, orange represents the Summer People and blue represents the Winter People. Every color and pattern has special significance. For example, dots painted on the dancer may represent drops of rain, while a dancer's red painted knees suggest speed.

The breechclout is one of the garments worn in the dances. This is the only undergarment worn by the men, both in everyday life and in ceremonies. It is used to protect the person even when trousers are worn. The size of the breechclout varies. It may be long and hanging to the ground or short and narrow with the ends merely folded over the belt in front and back. Look at slide #6. The arrow points to the dark blue breechclout worn by this man.

The most characteristic ceremonial garment worn by the Pueblo Indian is the kilt. Most frequently the kilt is made of white homespun cotton cloth. It is about fifty inches long and twenty inches wide and is wrapped around the loins and held in place at the waist by a belt. One group of the Pueblo Indians, the Hopi, decorate the kilts with two embroidered panels symbolizing rain, clouds, and life. This is a characteristic design which always follows the same pattern, in black, green, and red. Other pueblos often purchase from the Hopi the kilt lengths of the white cloth and embroider or paint their own designs on

them. Look at slide #7. The orange arrow points to the kilt. Notice the design in black, green, and red.

Because of his love for ornament the American Indian wears above his elbow decorative bands in which he can place pieces of evergreen or tie soft, bright feathers or tassels of yarn. These ornaments represent the sacred butterfly, a love charm which is supposed to have the power to make people crazy. Look at slide #7 again. The black arrow points to the arm band. Notice the evergreen placed in the band.

Strands of colored yarns are used to decorate the wrists. Wrist guards are worn on the left arm during the Hunt Dances, because originally this guard was a leather band worn to protect the wrist from the sharp impact of the bowstring when an arrow was released from the bow.

These are examples of how dress reflects people's culture. Studies such as this will help you develop an appreciation for the dress of other cultures.

## DESCRIPTIONS OF SLIDES

## CULTURAL ASPECTS OF CLOTHING

<u>Slide No.</u>	<u>Description</u>
1.	Hungarian boy dressed in a Hungarian national costume
2.	Chinese dragon robe
3.	Nineteenth Century Chinese bridal coat
4.	Three women dressed in saris
5.	Women dressed in <u>burkas</u>
6.	Pueblo Indian man dressed in a dance costume--an arrow draws attention to the breechclout he is wearing
7.	Pueblo Indian man dressed in a dance costume--an arrow draws attention to the kilt he is wearing

## STUDY QUESTIONS

## CULTURAL ASPECTS OF CLOTHING

1. What do we refer to when we speak of culture?
2. What is Tyler's definition of culture?
3. Why is dress the key to any people's culture?
4. Should certain cultural practices be accepted by all cultures? Why or why not?
5. What is the difference in fashion in dress and custom in dress?
6. What is the traditional wedding color in India and China?
7. Why do we have differences in dress for men and women?
8. Have skirts or trousers been worn longer by women? by men?
9. In what countries do men wear skirts today?
10. How is the dress different in Red China than in most cultures?
11. What is significant about the rings worn around the neck of a Burmese woman?
12. What is the primary reason behind the use of symbols in Chinese culture? the secondary reason?
13. What is the significance of the dragon symbol in Chinese culture?
14. In Chinese culture what does the color yellow symbolize?
15. What does a study of Chinese clothing indicate about their culture?
16. What does the sari indicate about Indian culture?
17. Describe the burka costume of India telling who wears it.
18. Which groups are abandoning the traditional burka?
19. What is the traditional idea for combining colors in India?

20. How has Western dress affected dress in India?
21. What are the most important motives for wearing clothes in India?
22. What is the motive of the Pueblo Indians for wearing clothes?
23. How do the Pueblo Indians believe that color pigments affect their wearer?
24. What colors are used for body paint for the Pueblo Indian ceremonial dances?
25. What do "painted dots" and "red knees" represent when worn in the Pueblo ceremonial dances?
26. Why does the Pueblo Indian wear arm bands?
27. What do wrist bands represent when worn in ceremonial costume?

APPENDIX A

APPENDIX B

APPENDIX B

PRE-POST TEST

## PRE-POST-TEST\*

## CULTURAL ASPECTS OF CLOTHING

Select the best answer.

NOTE: When the word Indian is used alone reference is made to the people of India.

When reference is made to American Indians, the term Pueblo Indians is used.

1. What is the primary purpose of studying the dress of other cultures?
  1. to develop a desire to dress as people of other cultures do.
  2. to avoid dressing as people of other cultures do.
  3. to develop an appreciation for the culture.
  4. to learn how dress of people affects their culture.
  
2. The principle behind the first use of symbols in Chinese culture was:
  1. to differentiate between the Chinese and Indian cultures.
  2. to make the people who wore the symbols God-like.
  3. to differentiate between the dress of Chinese men and women.
  4. to confirm good omens on the people who wore the symbols.
  
3. The Pueblo Indians decorate their ceremonial kilts with two embroidered panels symbolizing:
  1. birth, life, and death
  2. day and night
  3. rain, clouds, and life
  4. food, clothing, and shelter

\*Both the pre-test and post-test consisted of the same questions and answers; however, the arrangement of the questions and answers was different in the two tests.

4. Special or distinctive garb for the bridal couple:

- 1. is a common characteristic of Western cultures only
- 2. is a common characteristic of most cultures
- 3. is similar for all cultures
- 4. always includes white for the bridal gown.

5. The breechclout is worn by which of the following groups of people?

- 1. Chinese
- 2. Indian
- 3. Yapese
- 4. Pueblo Indians
- 5. Burmese

6. Which of the following garments has been worn more by men throughout recorded history?

- 1. skirts
- 2. knickers
- 3. long trousers
- 4. 1 and 2 above
- 5. all of the above

7. What color is the symbol of joy in China?

- 1. yellow
- 2. red
- 3. white
- 4. green
- 5. orange

8. The sari is worn by:

- 1. middle class Indian women
- 2. middle class Chinese women
- 3. middle class American women
- 4. 1 and 2 above
- 5. all of the above

9. Culture is defined as:

- 1. the morals of a society
- 2. the beliefs of a society
- 3. the knowledge of a society
- 4. 1 and 2 only
- 5. 1, 2, and 3 above

10. In Chinese culture the dragon is the symbol of:

- 1. the Hindu religion
- 2. Imperial power
- 3. the wedding ceremony
- 4. the father of the family



11. The kilts worn by the Pueblo Indians are made from:

- 1. hides
- 2. grass
- 3. cotton cloth
- 4. 1 and 2 above
- 5. all of the above

12. In which of the following countries do men wear skirts today?

- 1. Hungary
- 2. Greece
- 3. India
- 4. 1 and 2 above
- 5. all of the above

13. When entering a place of worship the Moslem:

- 1. puts on his hat
- 2. removes his shoes
- 3. takes off his hat
- 4. puts on his shoes

14. Which of the following groups in India wear(s) the sari?

- 1. lower class
- 2. middle class
- 3. upper middle class
- 4. 1 and 2 above
- 5. all of the above

15. The Pueblo Indian ceremonial kilt is frequently made of:

- 1. unbleached muslin
- 2. burlap
- 3. white homespun cloth
- 4. deer hides
- 5. woven grass

16. White has been worn for centuries by:

- 1. English brides
- 2. Hebrew brides
- 3. Chinese brides
- 4. 1 and 2 above
- 5. all of the above

17. The factor which determines the number of dragon symbols a Chinese person may wear is:

- 1. his religion
- 2. his rank in the government
- 3. the number of members in his family
- 4. his age

18. Which of the following is the undergarment worn in ceremonies and in everyday life by the Pueblo Indian male?

- 1. sari
- 2. kilt
- 3. burka
- 4. breechclout
- 5. dragon robe

19. Which of the following groups of people wear no clothing above their hips and are completely unself-conscious about showing the upper part of the body?

- 1. Indians
- 2. Pueblo Indians
- 3. Chinese
- 4. Burmese
- 5. Yapese

20. Which of the following color combinations would most likely be selected by a village girl in India, who has not been influenced by Western ideas?

- 1. navy with green
- 2. pink with white
- 3. purple with red
- 4. yellow with gray
- 5. gray with red

21. Which of the following is the most deeply ingrained (deep-seated) clothing custom?

- 1. dress worn to differentiate between the sexes
- 2. skirts worn by women
- 3. skirts worn by men
- 4. styles worn to flatter the figure

22. Which of the following is the correct association between dress and culture?

- 1. the type of garment one wears determines his culture
- 2. the type of garment one wears reflects his culture
- 3. the culture of a group of people does not affect its dress
- 4. one can always determine the country a person is from by his dress

23. The Pueblo Indians began wearing clothes primarily for:

- 1. modesty
- 2. protection
- 3. adornment
- 4. 1 and 2 above
- 5. 2 and 3 above

24. The traditional color for Chinese weddings is:

- 1. red
- 2. yellow
- 3. green
- 4. white
- 5. pink

25. Which of the following groups in India wears the burka?

- 1. Jew
- 2. Hindu
- 3. Hopi
- 4. Yapese
- 5. Moslem

26. The Pueblo Indian believes one of the following symbols has the power to make people crazy. Which one is it?

- 1. butterfly
- 2. evergreen
- 3. dragon
- 4. red banner

27. Which of the following would be considered the best example of "a cultural aspect of clothing?"

- 1. The young lady who wears a red dress because she has an outgoing personality and likes bright colors.
- 2. The young lady who is first in her group to wear the latest fashions.
- 3. The young lady who wears a very expensive dress because it is prettier than her neighbors.
- 4. The young lady who wears a white dress to her graduation exercises.

28. According to the information presented, on the tape, in which country (or countries) do men and women dress alike?

- 1. China
- 2. Scotland
- 3. Greece
- 4. 1 and 2 above
- 5. all of the above

29. Which of the following colors is used most often in Chinese weddings for the bridal dress and for the candles?

- 1. yellow
- 2. green
- 3. red
- 4. white
- 5. orange

30. Which of the following best differentiates between "custom" in dress and "fashion" in dress?
- 1. Fashion is constantly changing whereas custom always remains the same.
  - 2. Custom is constantly changing whereas fashion always remains the same.
  - 3. Fashions and custom both change, but fashions change much more slowly.
  - 4. Fashions and custom both change, but customs change much more slowly.
31. The Pueblo Indian wears body paint during religious ceremonies because he believes
- 1. the colored paint gives him the immortality of the Gods.
  - 2. the colored paint keeps him from growing old.
  - 3. the colored paint will shield him from physical pain.
  - 4. 1 and 2 above
  - 5. all of the above.
32. The most important motive (or motives) for dress of the people of India is (are):
- 1. modesty
  - 2. protection
  - 3. adornment
  - 4. 1 and 2 above
  - 5. 2 and 3 above
33. The Pueblo Indian wears a wrist band during ceremonial dances because it:
- 1. represents love and has supernatural power
  - 2. represents the wrist guard worn by the hunter
  - 3. identifies him as being married
  - 4. identifies him as a perfect marksman with his bow and arrow
34. Which of the following is an example of a garment which carries with it strong emotional feelings?
- 1. a wedding dress
  - 2. a dress worn to class
  - 3. a dress worn to church
  - 4. a green dress because green looks good on you
35. In which of the following cultures was the dragon robe worn?
- 1. Indian
  - 2. Yapese
  - 3. Chinese
  - 4. Pueblo Indian
  - 5. Burmese

36. The burka can best be described as:

- 1. a skirt worn by Hungarian men
- 2. a hood or face covering
- 3. a Chinese wedding robe
- 4. a strip of material about 45 inches wide and 5 to 9 yards long

37. In which of the following cultures is modesty an important reason for wearing clothes?

- 1. Pueblo Indian culture
- 2. Indian culture
- 3. Chinese culture
- 4. Yapanese culture
- 5. Burmese culture

38. The most frequently used colors in the Pueblo Indian ceremonies are:

- 1. red, green, orange
- 2. black, red, orange
- 3. pink, red, black
- 4. pink, orange, green
- 5. pink, green, red

39. The people of the Hindu religion in India:

- 1. accept change more rapidly than the people of the Moslem religion
- 2. accept change less rapidly than the people of the Moslem religion
- 3. do not accept change at all
- 4. accept some change, but do not accept any changes in their dress

40. In the Pueblo Indian ceremonial dances orange represents:

- 1. the Winter People
- 2. the Summer People
- 3. the Spring People
- 4. the Autumn People

41. Our cultural practices are "right" for us because:

- 1. they are always logical
- 2. they are accepted by all cultures
- 3. they are familiar to us
- 4. they are practiced by all cultures

42. In which of the following cultures is adornment the primary reason for wearing clothes?

- 1. Indian
- 2. Pueblo Indian
- 3. Eskimo
- 4. Chinese

43. Which of the following colors did the Chinese Emperor Wen reserve for the emperor alone?

- 1. red
- 2. green
- 3. yellow
- 4. white
- 5. orange

44. The sari has been worn in India for 2000 years. What does this indicate about the Indian culture?

- 1. there is no difference in the Indian and the Chinese culture
- 2. the culture has never changed
- 3. the culture is constantly changing
- 4. the culture has changed very little

45. When entering a place of worship the Jew:

- 1. puts on his shoes
- 2. removes his shoes
- 3. takes off his hat
- 4. puts on his hat

46. Which parts of their bodies do the Pueblo Indians paint?

- 1. upper torso
- 2. arms
- 3. legs
- 4. 1 and 2 above
- 5. all of the above

47. The tape mentions one culture in which dress was prescribed by law. Which culture is this?

- 1. Burmese
- 2. Japanese
- 3. Chinese
- 4. Indian
- 5. Pueblo Indian

48. The symbol of Imperial power in China is:

- 1. a red banner
- 2. a dragon robe
- 3. a dragon symbol
- 4. a burka
- 5. a kilt

49. The traditional color for weddings in India is:

- 1. red
- 2. white
- 3. yellow
- 4. green
- 5. pink

50. The Burmese women wear a number of rings around their necks to indicate:

- 1. marital status
- 2. wealth
- 3. a particular religious preference
- 4. social standing

APPENDIX C

PRE-TEST SCORES, POST-TEST SCORES, AND MID-SEMESTER GRADES  
OF INDIVIDUAL STUDENTS WHO PARTICIPATED  
IN THE STUDY



PRE-TEST SCORES, POST-TEST SCORES, AND MID-SEMESTER GRADES  
OF INDIVIDUAL STUDENTS WHO PARTICIPATED  
IN THE STUDY

AT			ATD			ATL			ATDL		
Test			Test			Test			Test		
Pre	Post	Grade	Pre	Post	Grade	Pre	Post	Grade	Pre	Post	Grade
28	36	82	29	38	89	21	40	83	28	44	89
20	42	78	24	40	87	19	45	82	24	39	93
24	38	81	27	46	92	23	40	86	21	41	93
23	45	92	20	49	89	28	32	85	22	40	88
23	28	85	22	46	88	21	39	79	21	44	92
20	38	90	20	35	80	26	47	92	17	41	84
31	39	78	20	41	87	24	33	88	29	48	94
23	38	85	23	39	77	23	37	91	17	44	68
22	41	81	25	44	81	22	34	79	22	28	78
15	32	77	31	40	90	20	31	77	25	42	88
28	42	89	30	47	87	24	42	86	26	43	81
22	44	80	29	43	87	23	38	89	23	42	75
22	42	86	19	38	78	18	32	72	20	43	74
24	43	93	28	44	84	25	41	93	15	40	79
19	32	82	19	33	84	16	38	77	27	45	87
23	37	79	29	38	85	28	40	84	26	39	80
26	38	81	17	49	85	24	43	88	21	45	94
19	37	91	21	43	85	24	40	91	21	34	83
18	34	83	17	42	75	21	38	82	22	46	82
26	41	91	25	41	78	23	38	92	26	40	81
21	42	79	20	45	87	22	42	86	30	44	85
18	18	58	24	41	80	25	47	81	21	47	91
27	40	83	26	48	88	23	43	89	16	38	88
20	30	73	16	33	77	12	43	88	27	39	84
20	43	81	27	44	90	30	45	92	19	39	90
24	37	87	25	33	71	23	38	82			
20	31	69	24	45	82	27	21	79			
27	37	85	19	40	82	21	36	80			
22	41	78	31	44	90	27	44	91			
			24	45	88	24	42	86			
			19	42	81	24	43	88			

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