1978

Attitude Changes Toward Educational Media of Undergraduate Students.

Jean Thibodeaux Kreamer

Louisiana State University and Agricultural & Mechanical College

Follow this and additional works at: https://digitalcommons.lsu.edu/gradschool_disstheses

Recommended Citation

https://digitalcommons.lsu.edu/gradschool_disstheses/3245

This Dissertation is brought to you for free and open access by the Graduate School at LSU Digital Commons. It has been accepted for inclusion in LSU Historical Dissertations and Theses by an authorized administrator of LSU Digital Commons. For more information, please contact gradetd@lsu.edu.
INFORMATION TO USERS

This material was produced from a microfilm copy of the original document. While the most advanced technological means to photograph and reproduce this document have been used, the quality is heavily dependent upon the quality of the original submitted.

The following explanation of techniques is provided to help you understand markings or patterns which may appear on this reproduction.

1. The sign or "target" for pages apparently lacking from the document photographed is "Missing Page(s)". If it was possible to obtain the missing page(s) or section, they are spliced into the film along with adjacent pages. This may have necessitated cutting thru an image and duplicating adjacent pages to insure you complete continuity.

2. When an image on the film is obliterated with a large round black mark, it is an indication that the photographer suspected that the copy may have moved during exposure and thus cause a blurred image. You will find a good image of the page in the adjacent frame.

3. When a map, drawing or chart, etc., was part of the material being photographed the photographer followed a definite method in "sectioning" the material. It is customary to begin photoing at the upper left hand corner of a large sheet and to continue photoing from left to right in equal sections with a small overlap. If necessary, sectioning is continued again — beginning below the first row and continuing on until complete.

4. The majority of users indicate that the textual content is of greatest value, however, a somewhat higher quality reproduction could be made from "photographs" if essential to the understanding of the dissertation. Silver prints of "photographs" may be ordered at additional charge by writing the Order Department, giving the catalog number, title, author and specific pages you wish reproduced.

5. PLEASE NOTE: Some pages may have indistinct print. Filmed as received.

University Microfilms International
300 North Zeeb Road
Ann Arbor, Michigan 48106 USA
St. John's Road, Tyler's Green
High Wycombe, Bucks, England HP10 9HR
KREAMER, JEAN THIBODEAUX
ATTITUDE CHANGES TOWARD EDUCATIONAL MEDIA
OF UNDERGRADUATE STUDENTS.
THE LOUISIANA STATE UNIVERSITY AND AGRICULTURAL
AND MECHANICAL COL., ED.D., 1978

(© 1978
JEAN THIBODEAUX KREAMER
ALL RIGHTS RESERVED
ATTITUDE CHANGES TOWARD EDUCATIONAL MEDIA
OF UNDERGRADUATE STUDENTS

A Dissertation

Submitted to the Graduate Faculty of the
Louisiana State University and
Agricultural and Mechanical College
in partial fulfillment of the
requirements for the degree of
Doctor of Education

in

The Department of Education

by

Jean Thibodeaux Kreamer
B.A. University of Southwestern Louisiana, 1967
M. Ed. University of Southwestern Louisiana, 1968
August, 1978
ACKNOWLEDGEMENTS

The writer wishes to acknowledge the contribution of those who helped make this study possible. Appreciation is extended to Dr. Charlie W. Roberts, Jr., chairman of the Advisory Committee, for guidance and advice in this study, and for the professional concern he has shown in my professional preparation. Dr. Sam Adams has consistently been very generous with his time and expertise, especially in the areas of research design and statistical analysis. Dr. Doris J. Conway, Dr. Wesley J. McJulien, Dr. Richard A. Musemeche, and Dr. Donald D. Foos, minor professor, were constantly considerate and helpful. Each committee member made a substantial contribution to the study and to my professional development.

A special word of appreciation is due to my husband, Dr. Thomas L. Kreamer, for his assistance and encouragement during the entire period of my graduate studies. Appreciation is also extended to my sons, Thomas Lawrence, Michael Wade, and Charles Martin for their patience and concern. Sincere appreciation is extended to my parents, Mrs. Lena B. Thibodeaux and the late Mr. Howard A. Thibodeaux. A word of thanks is extended to Dr. Barbara M. Strawitz, Dr. William M. Smith, Dr. Jenry W. Andrews, Dr. Charles W. Sauls, Dr. Wesley J. McJulien, Dr. Richard A. Musemeche, Mrs. Susan Bannon, Mrs. Charlene Bishop, and Mr. Joseph Hutchinson. Additional thanks are extended to Mrs. Joan A. Heine, Dr. Daniel L. Mumpower, and Mr. Samuel R. Bullard for assistance in the preparation of this dissertation.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACKNOWLEDGEMENTS</td>
<td>ii</td>
</tr>
<tr>
<td>LIST OF TABLES</td>
<td>v</td>
</tr>
<tr>
<td>ABSTRACT</td>
<td>vii</td>
</tr>
</tbody>
</table>

## Chapter

1. **INTRODUCTION**
   - ATTITUDES                                         1
   - ATTITUDES AND EDUCATIONAL MEDIA                   3
   - THE STATEMENT OF THE PROBLEM                      4
   - THE PROBLEM                                       6
   - LIMITATIONS OF THE STUDY                          7
   - DEFINITION OF TERMS                                8
   - RESEARCH DESIGN                                    12
   - STATISTICAL PROCEDURE                             13
   - TREATMENT OF THE DATA                              14

2. **REVIEW OF THE LITERATURE**
   - ATTITUDES OF UNDERGRADUATE PRE-PROFESSIONAL TEACHERS TOWARD EDUCATIONAL MEDIA 15
   - TEACHER UTILIZATION OF EDUCATIONAL MEDIA          19
   - DEVELOPMENTAL ASPECTS OF ATTITUDES                24

3. **DESIGN OF THE STUDY**
   - PROCEDURE USED                                    30
   - SOURCES OF DATA: PILOT STUDY                      30
<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>POPULATION</td>
<td>32</td>
</tr>
<tr>
<td>DESCRIPTION OF THE DATA GATHERING INSTRUMENT</td>
<td>33</td>
</tr>
<tr>
<td>MODIFICATION OF THE SURVEY INSTRUMENT</td>
<td>35</td>
</tr>
<tr>
<td>PROCEDURES FOR DATA COLLECTION</td>
<td>39</td>
</tr>
<tr>
<td>PROCEDURES FOR DATA ANALYSIS</td>
<td>42</td>
</tr>
<tr>
<td>4. PRESENTATION AND ANALYSIS OF THE DATA</td>
<td>44</td>
</tr>
<tr>
<td>SIGNIFICANCE OF THE PRE-TEST AND THE POST-TEST RESULTS</td>
<td>47</td>
</tr>
<tr>
<td>PERCENTAGE ANALYSIS OF STUDENT RESPONSES</td>
<td>49</td>
</tr>
<tr>
<td>5. SUMMARY, CONCLUSIONS AND RECOMMENDATIONS</td>
<td>58</td>
</tr>
<tr>
<td>SUMMARY</td>
<td>59</td>
</tr>
<tr>
<td>CONCLUSIONS</td>
<td>60</td>
</tr>
<tr>
<td>RECOMMENDATIONS</td>
<td>60</td>
</tr>
<tr>
<td>SELECTED BIBLIOGRAPHY</td>
<td>62</td>
</tr>
<tr>
<td>APPENDIXES</td>
<td></td>
</tr>
<tr>
<td>A. CONTROVERSY IN ACADEMICIA</td>
<td>68</td>
</tr>
<tr>
<td>B. EDUCATIONAL MEDIA ATTITUDE SCALE</td>
<td>72</td>
</tr>
<tr>
<td>C. COMMITTEE ON HUMANS AND ANIMALS AS RESEARCH SUBJECTS</td>
<td>76</td>
</tr>
<tr>
<td>D. PERMISSION SLIPS</td>
<td>79</td>
</tr>
<tr>
<td>E. LETTER FOR PRE-TEST (EXAMPLE)</td>
<td>81</td>
</tr>
<tr>
<td>F. ANSWER SHEET</td>
<td>83</td>
</tr>
<tr>
<td>G. LETTER FOR POST-TEST (EXAMPLE)</td>
<td>85</td>
</tr>
</tbody>
</table>
LIST OF TABLES

1. Total Educational Media Courses Taught at Institutions of Higher Learning Throughout the U.S. .......... 2

2. Distribution of Total Population in Study .......................... 46

3. Total Numbers of Survey Instruments Distributed ............. 46

4. Distribution and Comparison of the Pre-Test and Post-test Results in the Control Group and the Experimental Group .................................................. 48

5. Distribution and Comparison of Pre-Test Results and of the Post-Test Results of the Control Group and Experimental Group ........................................... 49

6. Distribution of Students in the Control Group and the Experimental Group ........................................ 50

7. Distribution of Students in the Control Group and the Experimental Group by Grade Classification 50

8. Percentage, Analysis of Distribution and Comparison of Students' Pre-Test Results of the Control Group and Experimental Group by Academic Classification ...... 51

9. Percentage, Analysis of the Distribution and Comparison of Students' Post-Test Results of the Control Group and the Experimental Group by Academic Classification .............................................. 52

10. Distribution of the Pre-test Results of Numbers of Students in the Control Group and the Experimental Group by Major ...................................................... 54

11. Distribution of the Post-Test Results of Numbers of Students in the Control Group and the Experimental Group by Major ...................................................... 55

12. Distribution of Students in the Control Group and Experimental Group by Prior Course in Educational Media ................................................................. 56
13. Distribution of Students in the Control Group and the Experimental Group by Sex .......................... 57
ABSTRACT

The purpose of this study was to determine the attitudinal change of undergraduate students as a result of a course in educational media. Subjects for this study were divided into two groups, an experimental group comprised of students enrolled in the junior level course, Education 3500, Utilization of Instructional Materials, and a control group comprised of two sections each of Education 3025, Principles of Teaching in the Elementary School, and Education 3040, Principles and Practices in Secondary Education.

Students in both groups were pre-tested and post-tested using a modification of the attitude scale entitled, Controversy in Academia. All students were pre-tested during the first week of the Fall, 1977 semester. All students were post-tested during the two weeks period prior to the final examination period of that same semester. The treatment for the experimental group was the course in educational media, Education 3500, Utilization of Instructional Materials.

To accomplish the purpose of this study, a t test was used to determine the significance between the means of the pre-test scores and the post-test scores of the control group and the experimental group. A percentage analysis was used to determine any significance of differences in the responses of the students with respect to their sex, academic classification, present major, and prior enrollment in a media course.
The following conclusions were made on the basis of the findings of this study:

1. There was no significant difference in comparison of the mean scores of the pre-test and the post-test of the experimental group. This indicated that there was no significant change in the attitudes of students in the educational media course at the end of that course.

2. There was no significant difference in a comparison of the mean scores of the control group and the experimental group. Therefore, students in the educational media course, when compared to students not in an educational media course, did not indicate a significant change in attitudes toward educational media.

3. A percentage analysis of the following student factors: sex, academic classification, present major, and prior enrollment, indicated no significant differences relative to any of the above factors.
Chapter 1

INTRODUCTION

There has been an assumption in the field of educational media that a course in this area will bring about changes of a positive nature toward the field (Cole, 1964).

...a course in audiovisual communication might bring about considerable changes in attitudes toward the use of audiovisual materials. Such a change in attitudes might well be reflected not only in the frequency with which a teacher uses audiovisual materials, but also in the effectiveness of that use.

This implication has been accepted but not questioned. This is a concept that may well need to be examined for educators do not, in fact, know if a course in educational media will bring about such positive changes. In this undergraduate course the "things of learning" (Gagne, 1974), i.e. educational media, were examined as aids to instruction to promote learning. This same thought was expressed by Torkelson (1972):

In my estimation, a central issue is the need to conceptualize the relationship of instructional technology to the teaching learning process in such a way as to minimize teacher resistance.

Traditionally, undergraduate students in teacher training programs have been exposed to educational media in courses which were part of the teacher training curriculum. There was solid growth in the number of educational media courses taught nationally in four year institutions of higher learning. The following Table, by Bell
(1975), indicated this.

Table 1

Total Educational Media Courses Taught at Institutions of Higher Learning Throughout the United States

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Courses in Media</th>
</tr>
</thead>
<tbody>
<tr>
<td>1947</td>
<td>107</td>
</tr>
<tr>
<td>1957</td>
<td>1652</td>
</tr>
<tr>
<td>1967</td>
<td>2184</td>
</tr>
</tbody>
</table>

Yet there existed in the literature no studies which examined the attitudes of undergraduate college students at the beginning and at the end of a course in educational media. No studies existed in the literature which examined the significance of any changes whether positive or negative in the attitudes of these students while enrolled in a course in educational media. Our nation's teachers have come and will continue to come from the ranks of undergraduate students in teacher education programs. Perhaps, with knowledge gained from such a study, instructors in the field of educational media may increase their insight into the acquisition and development of those attitudes which form the behavioral pre-disposition of future teachers toward educational media.
ATTITUDES

According to Ramsey (1961) teacher reluctance to use educational media was part of attitude structure. Ramsey stated that:

Although it is almost impossible to establish a direct relationship between what one says one believes and observable behavior, most of the research related to attitude development and expression actually relates to attitudes as measured by some sort of verbal or expressed opinion.

Rokeach (1961) suggested that attitude and behavior were part of a consistent psychological system with the individual. Newcomb (1964) in the Dictionary of Social Sciences, indicated that "...the ultimate referent of attitudes is behavior." Other authors, who were directly involved with research in attitudes, notably Thurston (1928), Likert (1932), Guttman (1944, 1945, 1947), agreed that attitudes were an attribute of behavioral predisposition. More explicitly stated Good (1973), Hildgard (1962), and Lindgren (1971), agreed that attitudes represented an enduring predisposition to react to or behave in reference to objects, persons, and concepts. Attitudes seemed to be developed through many learning experiences related to other people (Allport, 1935). In his research, Allport indicated that "sometimes a single experience may have a lasting influence and many generalize to related stimuli." Hildgard (1962) indicated that how one perceives something will influence his interaction with that person or object. One of the very early uses of attitude scales was in testing the effect of a motion picture on changing attitudes in children (Peterson and Thurstone, 1932).
ATTITUDES AND EDUCATIONAL MEDIA

Since the passage of the National Defense Education Act of 1958, much money has been spent on media in the nation's schools. However, administrators felt that educational media had not been utilized commensurate with their capabilities (Mulvin, 1974). Growth has occurred in the development and use of educational media in the past few decades (Bell, 1975, Gray, 1971). In studies of utilization of educational media, teachers expressed fear of these media (Tobias, 1963; Handleman, 1960; Knowlton and Hawes, 1962). These studies revealed that the attitudes of these teachers toward educational media had a significant influence upon media utilization.

The more years a person taught, the more likely he may have been to resist educational media. Tickton (1971) and Lasher (1971) concluded that the beginning teacher was more positive toward the field of educational media than the teacher who had taught many years. This research indicated that the more years a teacher taught, the more negative his attitudes would be expected to be in relation to educational media.

Bell (1975) in his research showed that the literature in the field of educational media was primarily concerned with the utilization of educational media, especially at the elementary and secondary school levels. "Most of the literature and research have been performed at the elementary and secondary levels, giving the latter level greater visibility." (Bell, 1975).
Educational media, according to the existing literature represented an enormous financial investment, but an investment which had not realized full potential. The literature further indicated that attitudes toward educational media influenced utilization of educational media. Few inquiries were made relative to the development of attitudes toward educational media. A review of Dissertation Abstracts International revealed only one doctoral dissertation dealing with college students enrolled in a teacher training curriculum and their attitudes toward educational media (Cole, 1964). This study, conducted by Cole, attempted to compare the effect of a course in educational media taught after student teaching. Cole's research was primarily concerned with teacher preparation courses and student teaching in relation to the order in which the courses were taken by students, rather than the actual attitudinal development of these students toward educational media.

Colton and Noble (1974), at the University of Kentucky, postulated that if students showed positive attitudes toward utilization of educational media while enrolled in a college teacher curriculum, they would be expected to demonstrate successful application of educational media once they began teaching. Torkelson (1972), maintained that conceptualization of the teacher-learner process and its relationship to educational media would reduce fear of media.

In summary, the literature showed that attitudes did seem to affect the utilization of educational media. A review of the present literature in the area of attitudes toward educational media indicated
the importance of positive development of these attitudes. To date, only Colton and Noble (1974) had investigated the attitudinal change which might occur during that training period. However, their research was a comparison of attitudes toward educational media while in an educational methods course. Research in attitude change, whether positive or negative, toward the field of educational media at the teacher training undergraduate level, was indicated from an investigation of the literature in this area.

As indicated in this research, Acquino concluded that professional educators would better train future teachers in more effective utilization of educational media if the development of attitudes toward these media were more carefully studied. A determination of what these attitudes were before and after exposure to educational media during undergraduate training in teacher preparation was not studied. An examination of attitudes was not to be minimized (Acquino, 1970). Acquino concluded:

Improved attitudes imply a desire on the part of the user which not only leads to increased utilization, but also to more effective utilization of educational media.

Such an examination of these attitudes, at the point where they were expected to initially develop, the undergraduate level in an educational media course, was the basis for this study.

THE STATEMENT OF THE PROBLEM

The Problem

The purpose of this study was to determine the attitudinal change of undergraduate students as a result of a course in
educational media. This study attempted to answer the following questions:

1. Was there a significant difference in the mean scores of a measurement of attitude toward educational media of undergraduate students at the beginning and end of the undergraduate educational media course, Education 3500, Utilization of Instructional Materials, at Louisiana State University?

2. Was there a significant difference in the mean scores of a measurement of attitude toward educational media of undergraduate students at the beginning and end of the undergraduate educational media course, Education 3500, Utilization of Instructional Materials, as compared to the mean scores of the same measurement of attitude toward educational media of undergraduate students at the beginning and at the end of two junior level courses entitled, Education 3025, Principles of Teaching in the Elementary Schools; and Education 3040, Principles and Practices in Secondary Education?

3. Was there a significant difference in a comparison of the scores of the attitude survey between the experimental group, Education 3500, and the control group, two sections of Education 3025 and two sections of Education 3040?

In answering these questions information was gained which would contribute to planning for the development of positive attitudes toward these media and their more effective utilization.

LIMITATIONS OF THE STUDY

The study was limited to a survey of the attitudes of students...
enrolled in all sections of the Education 3500, **Utilization of Instructional Materials**, and all students enrolled in two sections each of the courses entitled Education 3025, **Principles of Teaching in the Elementary Schools**; and Education 3040, **Principles and Practices in Secondary Education**, during the Fall, 1977 semester at Louisiana State University.

To survey these students' attitudes a modification of the survey instrument entitled, **Controversy in Academia**, was utilized. Survey procedures included a pre-test and a post-test using this instrument. During the Spring 1976-77 semester at Louisiana State University the researcher conducted a trial study of all sections of Education 3500, **Utilization of Instructional Materials**. As a result of that study, certain modifications were made in the terminology of the survey instrument used, **Controversy in Academia**. These modifications included changing certain words used in reference to the field of educational media, such as audio visual to educational media. Also, six survey items were deleted. To respond to the six deleted items, prior knowledge of the field of educational media would be needed.

The survey was further limited in that only attitudes, as perceived by the results of the survey instrument, were studied. Those changes in the mean scores of the pre-test, as compared to the mean scores of the post-test, were studied in this investigation.

**DEFINITION OF TERMS**

For the purposes of this study, the following definitions were used throughout the research.
Attitudes

The predisposition or tendency to react specifically toward an object, situation, or value (Good, 1973).

Attitude Survey

Any fact-finding, fact-collecting, and analytical technique that obtains and evaluates information concerning the attitudes of individuals and groups (Good, 1973).

Educational Media

... The systematic way of designing, carrying out, and evaluating the total process of learning and teaching in terms of specific objectives, based upon research in human learning and communication, and employing a combination of human and non-human resources to bring about more effective instruction (Tickton, 1972).

Medium of Instruction

The principal mode by which the plan of instruction is presented to the learner including face-to-face instruction by a live teacher (in or out of school) or mediated teaching via pre-recorded tapes or records, books, instruction sheets, correspondence or computer assisted instruction, television, or some other educational media, or a combination of means (Good; 1973).

Education 3500, Utilization of Instructional Materials

This was a course, at the undergraduate level, in the use of educational media in the classroom. Prerequisites include completion of or enrollment in a methods course appropriate for the desired
The course was an introduction to the utilization of educational media. The objectives were as follows:

1. To impress upon the students the importance of using educational media in teaching;
2. To make the students aware of the vast array of educational media which may be used to enhance their teaching;
3. To become efficient in the use of the various educational media available.

Taught from a practical standpoint, the use of the following educational media were presented:

- Overhead projectors
- Screens
- Sixteen millimeter projectors
- Eight millimeter projectors
- Tape recorders
- Filmstrip projectors
- Slide projectors
- Opaque projectors

Students were taught the production of the following:

- Transparencies
- Mountings
  - Wet
  - Dry
- Laminations
Posters

Bulletin Boards

Students in the course were made aware of sources of free curricular materials as well as free and commercial sources of filmstrips and films.

**Education 3025, Principles of Teaching in the Elementary School**

Prerequisites for this course were completion of Education 2000, and Psychology 2060; completion of or enrollment in Psychology 2076; completion of or enrollment in courses which provided, semester-hour credits as follows: music, art, or industrial art, 3; English 12; mathematics, science, 11; Speech 3; and Social Studies, 12. *(Louisiana State University General Catalog, 1977-78)*

The content of this course included a survey of the historical and philosophical development of the elementary school. Emphasis was placed on various organizational patterns in use for teaching in various areas, the nature of the learner, and some selected aspects of current theories of learning at the elementary school level. The course also required that students compose a unit of instruction as well as daily lesson plans.

**Education 3040, Principles and Practices in Secondary Education**

Prerequisites for this course include completion of Education 2000 and Psychology 2060; and completion of all courses of the student's major field included in the freshman and sophomore years of the curriculum listed for preparation in the major field. *(Louisiana State University General Catalog, 1977-78)*
This course emphasized the organization of the secondary school. The course was a survey of the historical development and philosophical nature of the secondary school. Organizational patterns, the nature of the learner, various academic disciplines represented at that learner level, as well as selected theories of learning were presented. The unit of instruction and the daily lesson plan were also introduced.

RESEARCH DESIGN

Subjects for this study were comprised of mostly junior and senior level students, enrolled at Louisiana State University. Subjects were divided into two groups, an experimental group and a control group.

Subjects for the experimental group were comprised of students enrolled in the junior level course, Education 3500, Utilization of Instructional Materials, during the Fall, 1977 semester.

Subjects for the control group were comprised of two sections of Education 3025, Principles of Teaching in the Elementary Schools, and two sections of Education 3040, Principles and Practices in Secondary Education, junior level courses, during the Fall, 1977 semester. All possible precautions were taken to choose sections of Education 3025 and Education 3040 to equate the class sizes and scheduled class times with the class sizes and scheduled class times of sections of Education 3500.

Students in both the experimental and control groups were pre-tested and post-tested using a modification of the attitude
scale entitled Controversy in Academicia. All students in the study were pre-tested during the first week of the Fall, 1977 semester. All students were post-tested during the two weeks prior to the final examination period in the semester.

The treatment for the experimental group was the course in educational media, Education 3500, Utilization of Instructional Materials.

Students in all sections surveyed were asked to identify themselves by name and social security numbers for both the pre-test and post-test. Only those students' surveys for which there was both a pre-test and post-test were used in this study. Students enrolled in both Education 3500 and Education 3025 or Education 3040 the Fall, 1977 semester were not considered for this study.

STATISTICAL PROCEDURE

The following statistical procedures were utilized in the investigation of the problem:

1. To determine the change in attitude toward educational media, the significance of the difference in the means between the pre-test and post-test scores was examined using a $t$ test of significance at the .05 level of significance. A comparison was made of the scores of the attitude survey between the experimental group, Education 3500, and the control group, two sections each of Education 3025 and Education 3040.

2. A percentage analysis was used in an attempt to determine whether there was any significant difference in the responses
of the students with respect to their sex, academic classification, present major, and prior enrollment in media courses.

TREATMENT OF THE DATA

All questionnaire pre-test and post-test scores were machine tabulated. Means for the pre-test and the post-test scores were tabulated using a mechanical calculator. The researcher applied the statistical formula for the t test of significance at the .05 level of confidence in order to determine the significance of the difference in the means between the pre-test and the post-test score of the questionnaire. The researcher also computed the percentage analysis in an attempt to determine the significance of the differences, if any, with respect to sex, academic classification, present major, and prior enrollment in media courses.
Chapter 2

REVIEW OF THE LITERATURE

The objective of this chapter was to review the existing literature in the following areas: (a) attitudes of undergraduate pre-professional teachers toward educational media; (b) teacher utilization of educational media; and (c) selected developmental aspects of attitudes.

ATTITUDES OF UNDERGRADUATE PRE-PROFESSIONAL TEACHERS TOWARD EDUCATIONAL MEDIA

Educational media represent an enormous financial investment, but an investment which has not realized full potential (Gray, 1971). The literature further indicated that attitudes toward educational media have influenced utilization of educational media. However, few inquiries have been made relative to the development of attitudes toward educational media. A review of Dissertation Abstracts International revealed only one doctoral dissertation investigating college students and their attitudes toward educational media while enrolled in a teacher training curriculum (Cole, 1964). Cole's study attempted to compare the effect of a course in educational media completed by students before student teaching and the effect of a course in educational media completed by students after student teaching. Cole's research was primarily concerned with teacher preparation courses.
and student teaching in relation to the order in which they were taken by students, rather than the actual attitudinal development of these students toward educational media.

Ford (1974) concluded that those teachers who had a formal media course as part of their teacher education program, had a significantly higher level of media competency than those who did not have this training. Ford's research was a comparison of the level of training in media competency which a selected group of Oklahoma public school teachers received through their teacher education programs with the level of competency they perceived to possess after they had been teaching for a short period of time, one half year to one year.

In an investigation of student-teacher attitudes toward educational media, Jenkins (1972) posed this question:

Do prospective teachers enrolled in the basic course in educational media, experience an attitudinal change, toward the use of educational media, when compared with prospective teachers not enrolled in the basic course?

An analysis of his findings indicated a positively significant relationship between student-teacher attitude and completion of a basic course in educational media. He further concluded that a basic course in educational media was the most effective means of improving attitude.

Various researchers have concluded that attitudes toward a field of study may be expected to improve with formal studies within that area (Acquino, 1970; Jones, 1963; Munger, 1963). Specifically, Acquino studied selected factors within a teaching environment and found that attitudes toward educational media improved during a course of study in educational media. Munger's investigation
revealed that during a National Defense Education Act Guidance Institute, if attitude changes initiated were relevant to the trainee's occupation, some persistent of these attitude changes might be expected, whereas if these attitude changes were not relevant to the trainee's occupation, persistent of these attitudinal changes would not be as lasting (Munger, 1963). Jones, whose results were in agreement with Munger's study, concluded that a changed and improved attitude of self-confidence was found on the part of guidance counselors for certain professional techniques during a seven week National Defense Education Act Institute. "It is possible," he concluded, "that this increased confidence favorably affected the counselor's self-concepts and efficiency with his clients and fellow educators" (Jones, 1963).

Neidt and Sjogren (1968) emphasized the importance of teachers having positive attitudes toward educational media. They found that student attitudes toward a course could be expected to decline during the time span of that course when only one method of instruction was used. The actual effectiveness of instruction could be minimized through lack of redundant use of a medium of instruction. Negative attitudes toward educational media, according to these researchers, were among the contributing factors to such minimal effectiveness. "A decline in attitudes toward a course can be expected over a time span of the course when only one method of instruction is used" (Neidt and Sjogren, 1968). In support of this research Meirhenry (1962) reviewed studies in the field.
of educational media which were, themselves, reviewed by the Research Committee of the Association for Educational Communications and Technology, formerly the Department of Audiovisual Instruction, National Education Association. In one such study, it was concluded that

...the skillful use of any type of audiovisual material will improve instruction. There is also reason to suspect that for many purposes the appropriate use of a combination of media will facilitate learning more than the use of only one type.

Colton and Noble (1974) sought to determine the attitudes toward educational media of undergraduate education students enrolled in educational media course, education students in a secondary methods course at the undergraduate level, in-service teachers in a media course, and attitudes toward educational media of selected College of Education faculty members. The investigation sought to answer the question:

...whether equipment training only in a required secondary methods course would produce media attitudes similar to those of students who took a full fledged media utilization course as an elective?

Concluding data indicated that students who were enrolled in the educational media course and were presented with a conceptual rationale and instructed in the actual operation and practice of educational media hardware held higher attitudes than those who did not receive this extensive instruction.

Godfry concurred with this assumption that course work in educational media, when providing exposure to the equipment, while important, was not enough. He found that persons were not likely to want to use a technique about which they were unconvinced.
"There must be persuasive evidence that a machine can be used to instructional advantage" (Godfry, 1967).

According to Kelley, significant factors in the formation of attitudes were college course work in educational media and training in production of these media (Kelley, 1960). His study indicated that teachers who had either formal course work in educational media or training in the production of these media tended to have better attitudes toward their usage.

Therefore, in summarizing this section relating to the attitudes of undergraduate pre-professional teachers toward educational media, the review of the existing literature showed the importance of the development of positive attitudes. A determination of what these attitudes were before and after exposure to educational media during the undergraduate teacher training period was not studied in its entirety. Such an examination of these attitudes was urged (Acquino, 1970).

Improved attitudes imply a desire on the part of the user which not only leads to increased utilization, but also to more effective utilization of educational media.

TEACHER UTILIZATION OF EDUCATIONAL MEDIA

Since the passage of the National Defense Education Act of 1958, phenomenal growth has occurred in the development and use of educational media (Bell, 1975; Gray, 1971).

The National Defense Education Act provided funds for audiovisual equipment and materials and for advanced training of teachers in the fields of science, mathematics, and modern foreign languages.... In addition, it included funds for much needed audiovisual research.
However, many administrators felt that these educational media were not utilized commensurate with their capabilities (Mulvin, 1974). Research showed that many teachers feared both the educational media or its utilization (Tobias, 1963; Knowlton and Hawes, 1962). In a study which examined factors affecting students' performance in an educational media course, Hill (1961) concluded that the students' sex was significantly related to their over-all performance in the educational media course. Female students specifically did significantly better on all measures of course performance with the exception of equipment operation. In a review of the two volume work, To Improve Learning, Gerald Torkelson (1972) indicated that there was a suspicion of educational media on the part of some educators. The relationship of these media to the teaching and learning processes, according to Torkelson, needed to be conceptualized in such a way as to minimize teacher resistance.

The attitudes of the teacher toward educational media seemed to have a significant influence upon media utilization. Personal reluctance to the utilization of educational media was part of attitude structure (Ramsey, 1961).

The more years a person taught, the more likely he might be to resist educational technology (Tickton, 1971). The beginning teacher was far more positive toward the field of educational media than the teacher who had taught many years (Lasher, 1971). In addition, Lasher found the more years a teacher had taught, the more negative his attitudes would be expected to be in relation to
educational media, "There is no substitute for the live, effective teacher" (Smith, 1972). These researchers further indicated that educational media presented no threat to the job of the teacher, but media did threaten her traditional role as information giver. Through more positive attitudes toward educational media, teachers might have more effectively become facilitators of learning maximizing those conditions most conducive to student learning through careful teacher planning.

Knowlton and Hawes (1962) concluded that in an information campaign such as an institute, workshop, or class in educational media, more effort should always have been expanded to change the teacher's perception of these media, making barriers restricting utilization less insurmountable. With regard to barriers to educational media usage, evidence from this research showed that the perception of barriers was often faulty due to a lack of relevant information. This study suggested that the perception of barriers to educational media might be changed so that they would be seen as less impermeable.

This sort of change would operate in the same way that more favorable attitudes toward the field of audiovisuals, per se, would operate, both would have the effect of increasing audiovisual usage.

Lewis (1970) concluded that there did seem to exist an important relationship between a teacher's perceptions of educational media and utilization of media, in agreement with the research of Knowlton and Hawes. The degree to which a teacher's cognitive domain interacted with his affective domain when educational media were involved in a teaching-learning situation
was studied by Lewis (1970). He also concluded that more utilization might have been made of available educational media through careful study of teacher and pre-teacher perceptions toward educational media.

Camp (1957) in an analysis of factors related to the utilization of educational media, found that there appeared to be a significant positive relationship between the extent of training in educational media and utilization of media. Both administrators and teachers queried in his studies believed that a basic pre-service educational media course was necessary and should be required for all teachers.

Norsted (1970) in his search of the literature, found evidence from empirical research which showed that introducing educational media into the instructional program was effective when student achievement was used as the criterion. His research revealed that a strong in-service training program emphasizing integrated utilization of educational media would appear to contribute to greater utilization through expanded familiarity and would capitalize on the personality factors of adaptability and group dependency which were related to educational media utilization.

The literature dealing with teacher utilization of educational media indicated that although a great deal of money had been spent for implementing educational media in schools, utilization of media had not been as extensive as was possible. Many factors seemed to contribute to this failure of complete utilization. Attitudes toward these media had a significant influence on this
lack of usage, as shown in studies cited. In order to improve these negative attitudes which seemed to impede utilization of media, educators indicated the need for investigation into the formation of these attitudes to determine where they were conceived, and to act upon how they may be improved.

King's (1967) conclusions substantiated Camp's analysis. According to King, teachers having had an undergraduate course in educational media had a positive significant relationship with the teachers' frequency of media utilization, especially if the college instructor utilized educational media effectively during the course.

In a study of six Louisiana parish school systems conducted by Guedry (1972) the following conclusions were reached:

1. Female teachers made more regular use of media than did male teachers.

2. Teachers of special education classes used media most frequently; elementary teachers used media somewhat less than did special education teachers; and junior high and senior high teachers used media the least, of the groups examined.

Christopher (1969) indicated that training in computer assisted instruction had a significantly positive effect on the attitudes of school personnel toward computer assisted instruction. He concluded that the more knowledgeable an individual was concerning computer applications in education the more favorable his attitudes might be expected to be relative to computer assisted instruction.
DEVELOPMENTAL ASPECTS OF ATTITUDES

Attitudes, as this section of the Review of the Literature revealed, influenced the behavior of individuals. Previous sections of this chapter indicated that educational media had not been utilized to their fullest potential, to some degree due to teacher reluctance, fear, and negative attitudes toward these media. Kevin Ryan (1971) stressed the importance of attitudes toward technology, indicating that understanding alone of these technologies was not enough.

Although it is crucial that the teacher understand the role of technology and its relationship to instructional technology, understanding alone is not enough. Change is needed in the attitudes and behavioral repertoires of individual educators.

In considering attitudes, Lindgren indicated that these were relatively enduring, acquired predispositions to behave in a particular way, either positively or negatively toward certain objects, persons, or situations. Lindgren considered attitudes as the result of what an individual learned about various aspects of his world. Hildgard (1962) in his discussion of attitudes, showed agreement with Lindgren.

An attitude represents both an orientation toward or away from some object, concept or situation and a readiness to respond in a predetermined manner to these or related objects, concepts, or situations.

This explanation combined features of older and more established definitions of attitudes as stated by Allport and Hoveland, Janis, and Kelley. Notably, Allport, in 1935, offered that attitudes developed via one or all of four common conditions:
1. The accretion and integration of responses learned in the course of maturing.

2. Individualization, differentiation or segregation of experiences.

3. The influence of some dramatic experience or trauma. A single experience may have a lasting influence and may generalize to related stimuli.

4. The adoption of ready made attitudes, sometimes picked up through imitation of the attitudes of others, parents, teachers, and so forth (Allport, 1935).

Hovland, Janis, and Kelley held some of Allport’s tenents relative to attitudes, but showed the close relationship between attitudes and opinions. "Attitudes grade into opinions and there is no sharp difference between them. However, an attitude represents an orientation or preference and may be in part unconscious" (Hoveland, 1958).

More recently, Freedman (1974) indicated that attitudes might have had three distinct components, namely the cognitive component, a feeling component, and an action component. The first or cognitive component consisted of beliefs about the attitude component; the feeling component was synonymous with emotional feelings connected with the beliefs; readiness to respond in a particular way constituted the action component.

Rokeach (1960) suggested that attitude and behavior were part of a consistent psychological system with the individual.
Newcomb (1964) in the Dictionary of Social Sciences, indicated that the "...ultimate referent of attitudes is behavior." Other authors, who were directly involved with research in attitudes, notably Thurstone (1928), Likert (1932), and Guttman (1944, 1945, 1947) agreed that attitudes were an attribute of behavioral predisposition.

There were five major headings into which attitude measurement was classified (Cook and Selltiz, 1964). These were (1) self report measures, (2) responses to partially structural materials, (3) measures of psychological reactions to the attitude object, (4) measures of responses to an objective task or other behavior in a situation thought by the experimenter to be influenced by particular attitudes, (5) measures of observed overt behavior towards the attitude object. According to these researchers an attitude scale of the self report type was developed allowing that the experimenter would assume that the subject was both willing and able to provide an accurate representation of his attitudes. According to Cook and Selltiz (1964) the self report measure usually took the form of open ended or fixed alternative questions. A more detailed discussion of this particular attitude scale may be found in Chapter Three.

In general, once an attitude scale was prepared, those who took it as a test were scored for the degree to which they held favorable or unfavorable attitude; changes in attitude showed in their scores on repeated tests (Hildgard, 1962). One of the most widely used means of assessing employee morale used by management was the attitude scale or survey (Foegen, 1963). One of the very early
uses of attitude scales was in testing the effect of a motion picture in changing attitudes in children (Peterson and Thurstone, 1932).

The degree to which an attitude was retained was determined by the strength of the original attitude. "A critical factor in attitude change is the subject's commitment to his initial attitude" (Hovland, 1958). There were certain factors which did seem to affect change in attitude. According to Freedman, Carlsmith and Sears (1974) the two factors which most dramatically affected attitude change were trust in the persuasive message and strength of the message itself. Their research further indicated that the persuasive message had to be powerful to be trusted. Freedman, Carlsmith, and Sears (1974) noted that from the vantage point of the listener, the sources of the communication which determined the effectiveness included:

- Prestige of the communicator;
- Intentions of the communicator;
- The extent to which the communicator is liked;
- The amount of similarities between the communicator and the listener;
- And the reference group of the communicator in relation to the listener.

The preceding discussion supported the contentions of Wittich and Schuller (1973) authors in the field of educational media.

...the learner acquires attitudes toward his perceptions at the same time that he acquires concepts of them; and just as one's further cognition of the world, so do previously acquired attitudes provide the basis for acquiring additional attitudes or changing old ones.

This acquisition and development of attitudes, especially toward educational media, may have been expected to transpire during an undergraduate course in educational media. If this did indeed take place at this junction of the pre-professional and the field of
educational media, then Wittich and Schuller's statement was crucial for the college professor instructing those students. "These attitudes can even serve to influence what aspects of his perceivable world the learner will select to include in his further perceptions and learning" (Wittich and Schuller, 1973).

In view of the research presented, attitudes, once developed, seem to remain unchanged. "Attitudes, once established, tend to be most resistant to change" (Freedman, Carlsmith, and Sears, 1974). According to Wittich and Schuller (1973) attitudes and their study have been carefully considered, in view of their resistance to change and by the long term and far reaching effects of them. They have exerted a strong influence on future learning.

Thus attitudes can strongly color what the learner comes to know, the thinking process by which he comes to know it, and any further learning that is based on his acquired knowledge. Indeed, the attitudes one acquires along with facts and concepts can exercise a strong influence on one's orientations.

Attitudes, themselves very complex, tended to be interwoven with affective and highly motivated experiences, and seemed to become abiding personality characteristics (Hilgard, 1962). In considering the affect of attitudes on behavior, Leonard Berkowitz concluded, after careful analysis of existing studies concerned with this area, that in consideration of the numerous conditions which may interfere with attitude expression and behavior, "...it is surprising that attitude indicators predict action successfully as often as they do" (Berkowitz, 1968).

In summary, attitudes seemed to show a certain consistency among the feelings, beliefs and overt actions called forth by the
objects of these attitudes. From the literature concerned with attitudes, one might have concluded that if the object of the attitude, such as educational media, evoked pleasant feelings it was also likely to elicit beliefs about its effectiveness in promoting the value and use of these media. These same attitudes might have led one to action consonant with these beliefs. As Colton and Noble (1974) indicated in the conclusions of their study of student attitudes toward the field of educational media:

Given the notion that teacher fear and distrust of educational media might be present in some individuals entering and in others already in the teaching profession and that resistance leads to ineffective and minimal utilization, it is important that educators examine the reasons behind negative attitudes and that some broad strategy be developed to remedy the situation.

The purpose of this research was to examine these attitudes.
Chapter 3

DESIGN OF THE STUDY

PROCEDURES USED

To determine the attitude changes toward educational media of undergraduate students an experimental design was used. The population used in this study included 149 students, enrolled at Louisiana State University during the Fall, 1977 semester. The students were divided into two groups, an experimental and a control group. Each group was pre-tested and post-tested using the same survey instrument, a modification of Controversy in Academia which was a media attitude scale. Comparisons were made of the mean scores of the pre-test and post-test scores of both the experimental and control groups. A t test was applied to the results at the .05 level of significance. A percentage analysis was used to determine any significant differences in the responses of students with respect to sex, academic classification, present major, and prior enrollment in educational media classes.

SOURCES OF DATA:

PILOT STUDY

During the Spring, 1977 semester, a pilot study was conducted at Louisiana State University using all six sections of the course entitled Education 3500, Utilization of Instructional Materials.
The pilot study did not include a control group. A pre-test and a post-test were used for all six sections.

The original survey instrument, *Controversy in Academicia*, was used for both the pre-test and post-test. Although no statistical treatment was applied to the results of the pilot survey, the pilot survey did reveal certain data which were used in the design of this study.

Because of the nature of some items of the survey instrument, certain modifications were made in some of these items. (A thorough discussion of these modifications is presented in this chapter in the section entitled *Description of the Data Gathering Instrument*.)

To determine if there were any significant differences in the responses of students with respect to their sex, academic classifications, present major, and prior enrollment in a class in educational media, four additional items were added to the survey instrument. (A discussion of these items may be found in the section of this chapter entitled *Description of the Data Gathering Instrument*).

As a result of the pilot study, the decision was made that the most appropriate statistical treatment to be used was the \( t \) test at the .05 level of significance. To determine if there was a change in attitude toward educational media, the decision was made based on the results of the pilot study that respondents were to be asked to identify themselves by name on both the pre-test and post-test, in order to pair the results of these two surveys. (The statistical methodology is discussed in the section entitled
Methods of Gathering Data in this chapter.)

A change in the actual design of the study was the last result of the pilot study. The pilot study was a survey of the classes in educational media. The study was altered to include a control group of students at a comparable level of academic classification, incorporating an experimental design.

POPULATION

Subjects for the study were, for the most part, undergraduates at the junior and senior levels of study enrolled at Louisiana State University. Most of these students were enrolled in the College of Education, majoring in various fields of education. Some, however, were not majoring in a field of teaching in the College of Education, taking the courses surveyed in this study, as electives.

For this study, students were divided into two groups, an experimental group and a control group. The experimental group was comprised of students enrolled in the course, Education 3500, Utilization of Instructional Materials, during the Fall, 1977 semester. The control group was made up of students enrolled in two sections each of the courses entitled, Education 3025, Principles of Teaching in the Elementary Schools, and Education 3040, Principles and Practices in Secondary Education. Sections to be included in control group were chosen.

One survey instrument was applied, a modified version of the questionnaire, Controversy in Academia. The sequence for measuring
the changes in attitudes toward educational media was a pre-test administered to both experimental and control groups during the first week of the Fall, 1977 semester, using the modified questionnaire. All students in the study were post-tested during the last two weeks prior to final examination week of the Fall, 1977 semester, using the same survey instrument used for the pre-test.

The treatment used with the experimental group was the actual course content presented throughout the Fall, 1977 semester of Education 3500, Utilization of Instructional Materials. This course content, according to the Louisiana State University General Catalog, 1977-1978, included instruction in the classroom use of educational media.

DESCRIPTION OF THE DATA-GATHERING INSTRUMENT

The survey instrument used for measuring attitudes toward educational media was a modification of the instrument developed by Curtis Ramsey at George Peabody College for Teachers, Nashville, Tennessee, 1961. The instrument was originally entitled Controversy in Academia. (See Appendix A) However, throughout the questionnaire brochure accompanying the survey instrument, the author referred to the survey instrument as the NMAS-II (Ramsey, 1961). In one study significant to the research represented in this study, Ramsey's survey instrument was referred to as the New Media Attitude Scale or NMAS (Acquino, 1970). Cleveland and Krahmer (1965) used the same attitude inventory by Ramsey for an analysis of teachers
in sixty-one schools in non-metropolitan Colorado to investigate
the differences in educational media attitudes, opinions, and prac­
tices as reflected by the inventory. Acquino (1970) used Ramsey's
inventory to investigate:

...teacher attitudes toward audiovisual instruction as they
were related to eight factors within the teaching environments
experienced by a teacher population during the first semester
of teaching following study in audiovisual education.

Colton and Noble (1974) in making reference to Acquino's use of the
survey instrument by Ramsey, indicated that the survey instrument
was suitable as a general scale of attitude toward educational media.

The actual survey instrument, Controversy in Academia,
was developed and tested in 1961, and was a questionnaire scale which
uses characteristics of the Likert type arrangement. According to
Hildgard (1962), "Likert's method measures responses by having sub­
jects answer along a five point scale: strongly approve, approve,
undecided, disapprove, strongly disapprove." Acquino (1970) further
indicated that

The form of the NMAS [Controversy in Academia] used in
this research was developed from the responses to items
which indicated sympathy with or hostility toward educa­
tional media by a population of more than 1100 members of
the Department of Audiovisual Instruction and the Associa­
tion for Supervision and Curriculum Development. Item
analysis and analysis of variance procedures allowed Ramsey
to identify 39 items, at the .01 level of confidence, which
discriminated between hostility and sympathy in regard to
newer educational media. Those items made up the final
attitude measurement scale.

Although the literature accompanying the survey instrument used for
this study referred to the actual instrument as both Controversy in
Academia and NMAS or New Media Attitude Survey, the subsequent
research conducted using this same survey instrument referred to Ramsey's survey instrument as the New Media Attitude Survey. In this study all reference made to the title of survey instrument, in its original form, were made using the original title, Controversy in Academicia. A copy of the instrument is contained in Appendix A.

MODIFICATION OF THE SURVEY INSTRUMENT

For purposes of this research, modifications were made to the survey instrument. The modifications were of three kinds. The first was a change of title, the second modification was a change of certain out-dated terminology used throughout the original survey instrument, and the third modification was a deletion of six items which were considered by the researcher as inappropriate for the groups surveyed.

The first modification made was a change in the title of the actual survey instrument from Controversy in Academicia to Educational Media Attitude Scale. (See Appendix B) The title change was made to indicate that the survey instrument used in this study was a modification of the original version of Controversy in Academicia.

The second modification was a change in some of the terminology used throughout the original survey instrument which was considered by the researcher as somewhat outdated. In the original survey instrument reference was made to educational media using descriptive terms such as audio visual or AV. In reviewing the more current literature for this study, the researcher noted that the terms audio visual or AV appeared less frequently than other terms
such as educational media. Therefore, in modifying the original survey instrument, *Controversy in Academia*, terminology such as audio visual or AV was deleted and replaced by more current terminology such as educational media. Specifically, the following changes were made. In the original survey instrument, in items two, three, four, five, six, eight, eleven, twelve, fourteen, sixteen, eighteen, nineteen, twenty, twenty-one, twenty-three, twenty-four, twenty-five, twenty-seven, twenty-eight, thirty-two, thirty-four, thirty-six, and thirty-eight, all outdated descriptive terminology such as audio visual or AV was deleted and replaced with more currently used terminology such as educational media. For example, item number two in the original survey instrument appeared as the following:

2. All teachers in training should take a course in the use of A-V aids.

In the modified survey instrument used in this study, the item appeared as the following:

2. All teachers in training should take a course in the use of educational media.

Additional modifications made to the original survey instrument were more extensive. Somewhat more extensive modifications were made for items one, seventeen, thirty-five and thirty-seven. Each of these modifications appears in the following discussion.

Item number one formerly appeared as:

1. The widespread use of teaching machines will revolutionize the process of instruction as we know it now.
The words teaching machines were deleted and replaced with the words educational media. This change was made to indicate all forms of mediated instruction rather than one medium, teaching machines. The modified item then appeared as:

1. The widespread use of educational media will revolutionize the process of instruction as we know it now.

Item number seventeen was modified in a somewhat different manner and originally read:

17. The creative student is apt to be stifled by the extensive use of AV instructional media.

The terms AV instructional media were deleted and replaced with the more current terminology, educational media.

17. The creative student is apt to be stifled by the extensive use of educational media.

Item thirty-five was re-worded to read somewhat differently and originally appeared:

35. Teaching machines' utility cannot be evaluated solely on the basis of standardized scholastic achievement of students using them.

Item thirty-five was slightly altered to read:

35. The utility of teaching machines cannot be evaluated solely on the basis of standardized scholastic achievement of students using them.

A similar modification was made in the wording of item thirty-seven originally appearing in the following form:

37. These newer educational media tend to subordinate the teacher's relationship with students.
The item was changed to read as follows:

37. The use of educational media tend to subordinate the teacher's relationship with students.

Six items of the original survey instrument were not modified in any way. These unchanged items were numbers ten, thirteen, twenty-two, thirty-one, thirty-three, and thirty-nine.

Of the thirty-nine original items in the survey instrument, *Controversy in Academia*, six items were totally deleted. These were items seven, nine, fifteen, twenty-six, twenty-nine, and thirty. Response to the six items would require knowledge of educational media not available to the control groups, students in Education 3025 and Education 3040, for the pre-test and post-test, as well as all students in the experimental group, Education 3500, for the pre-test only. The type of question asked in this group of deleted items required specialized knowledge gained through exposure in a course in educational media. Item number twenty-nine was such a deleted item and showed that special knowledge was required for response:

29. Most innovations in newer educational media have been well validated in research studies to substantiate their utility.

Therefore, in the modified version of the survey instrument used in this study a total of thirty-six items were included. Six items were deleted, twenty-three items were slightly modified using more current terminology, four items were somewhat reworded, and six items were not changed.

To determine if there were any significant differences in the respondents with respect to their sex, academic classification, present major, and prior enrollment in media course, four items, numbers
thirty-four through thirty-seven were added. Each of these items asked the respondent to indicate information in each of these four areas.

34. Please do not mark on this paper. On the sheet provided, please mark your classification using the following examples as a guide:
FRESH.........SOPH..........JR.........SR........OTHER.....

35. On the sheet provided, please indicate your present major, using the following example as a guide:
Elementary Education ______________
Secondary Education ______________ Other__________

36. On the sheet provided, please indicate your sex using the following example as a guide:
MALE___________________ FEMALE____________________

37. On the sheet provided, please indicate if you have had a course in educational media, prior to this semester. Use the example, following, as a guide. YES____ NO____

A copy of the revised survey instrument, entitled for use in this study: **Educational Media Attitude Scale**, may be found in Appendix B.

**PROCEDURES FOR DATA COLLECTION**

In advance of any research to be conducted involving students enrolled at Louisiana State University, approval had to be obtained from the Committee on Humans and Animals as Research Subjects. A copy of the research proposal for this study with an accompanying letter of request for permission to conduct the research were
submitted to the Committee. The committee recommended that the study be approved, with approval contingent upon assurances to the committee that the written consent of all subjects participating would be obtained. (See Appendix C) Written consent was obtained from all subjects participating in the study, prior to the pre-test. Copies of the permission slips were supplied to the committee, as requested. A copy of the permission slip may be found in Appendix D.

Initially, the researcher personally contacted each instructor during the Summer, 1977 semester, to introduce herself, explain the nature of the project and to ask the permission of each instructor to allow his or her class to participate in the study. Instructors for all of the courses to be used in the study were then contacted by personal letter to establish a mutually convenient time for administering the pre-test survey instrument to students in each respective section. Included with the letter was a stamped, self-addressed envelope asking that each instructor return the letter indicating the suitability of the date and class time suggested. A copy of this letter may be found in Appendix E.

The Educational Media Attitude Survey, an answer sheet, and number two lead pencils designed for mechanical scoring were distributed and used for both the pre-test and post-test activities. A permission slip, a copy of which may be found in Appendix D, was distributed and collected prior to the pre-test only.

The pre-tests were administered during the first week of classes, August 29 through September 2 of the Fall, 1977 semester
and the following activities were accomplished:

1. Distributed the permission slips and collected them.
2. Distributed the pre-test survey instrument answer sheets and pencils to both the control group and the experimental group during the regular meeting time for each class.
3. Gave instructions and limited information regarding the completion of the survey instrument.
4. Remained with each group while the survey instruments were being completed.
5. Collected the completed survey instruments, answer sheets and pencils thanking both the instructors and students for their cooperation.

A similar data gathering procedure was used for the post-test which was during the two weeks prior to final examinations. Participating instructors were again contacted by letter, indicating that the post-test period was approaching and again attempting to establish a mutually convenient time for administering the survey instrument. Again, included with each letter was a stamped, self-addressed envelope for the instructors' reply, indicating the suitability of the date and class time suggested. Appendix F contains a copy of this letter.

Essentially the same procedure was followed for the administration of the post-test as was followed for the pre-test with three notable exceptions:

1. Permission slips, having been completed prior to the pre-test, were not distributed again.
2. Students who did not take the pre-test were not allowed to participate in the post-test.

3. After the collection of the completed survey instruments, students were allowed to ask the researcher questions about the study.

Those students participating were not made aware of the nature of the research project until the completion of the post-test, due to the possible biases in their responses which might have occurred knowing this information. Students were informed, however, that their participation in the study was needed and appreciated. Instructors and students were cooperative in all phases of the data collection for this investigation.

Students responded to the survey instrument using a separate answer sheet. An example of the answer sheet appears in Appendix G. Responses to the survey instrument were mechanically scored using a Honeywell 68/80 computer at the University of Southwestern Louisiana Computer Center, Lafayette, Louisiana.

PROCEDURES FOR DATA ANALYSIS

Completed answer sheets were examined for legibility and accuracy before being subjected to analysis. The collected data were then organized into groups by course and by section number. These data were scored using a Honeywell 68/80 computer at the University of Southwestern Louisiana Computer Center. The significance of the difference in the means between the pre-test and the post-test scores using a t-test significance at the .05 level of significance was
computed. A comparison was then made of the scores of the survey instruments between the experimental group, all sections of Education 3500, and the control group, two sections each of Education 3025 and Education 3040. To determine whether there was any significant difference in the respondents with respect to their sex, academic classification, present, major and prior enrollment in media courses, a percentage analysis was used.
Chapter 4

PRESENTATION AND ANALYSIS OF THE DATA

The purpose of this study was to determine the attitudinal change of undergraduate students as a result of a course in educational media. The study was limited to a survey of the attitudes of only those students enrolled in all sections of Education 3500, Utilization of Instructional Materials, and all students enrolled in two sections each of Education 3025, Principles of Teaching in the Elementary Schools, Education 3040, Principles and Practices in Secondary Education, during the Fall, 1977 semester at Louisiana State University.

This study attempted to answer the following questions:

1. Was there a significant difference in the mean scores of a measurement of attitude toward educational media of undergraduate students at the beginning and the end of the undergraduate educational media course, Education 3500, Utilization of Instructional Materials, at Louisiana State University?

2. Was there a significant difference in the mean scores of a measurement of attitude toward educational media of undergraduate students at the beginning and the end of the undergraduate educational media course, Education 3500, Utilization of Instructional Materials,
as compared to the mean scores of the same measurement of attitude toward educational media of undergraduate students at the beginning and at the end of two junior level courses, Education 3025, Principles of Teaching in the Elementary Schools, Education 3040, Principles and Practices in Secondary Education?

3. Was there a significant difference in a comparison of the scores of the attitude survey between the experimental group, Education 3500, and the control group, two sections of Education 3025 and two sections of Education 3040?

To survey the attitudes of students involved in the study, a modification of the survey instrument, Controversy in Academia was used. The survey instrument was used for both the pre-test and the post-test for purposes of this investigation.

A report of the analysis of these data was presented in this chapter. Tabulated results and associated commentary were given in relationship to each of the three major areas investigated.

Data in Table 2 indicated the total population of the group studied indicating the numbers of students in both the experimental and control group.

The total number of students investigated for purposes of this study was 149. This total figure was derived through a matching of students who participated in both the pre-test and the post-test surveys. Students who participated in either the pre-test or the post-test, but not both the pre-test and the post-test surveys, were not included in this study.
Table 2
Distribution of Total Population in Study

<table>
<thead>
<tr>
<th>Group</th>
<th>Number of Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control Group</td>
<td>61</td>
</tr>
<tr>
<td>Experimental Group</td>
<td>88</td>
</tr>
<tr>
<td>Total</td>
<td>149</td>
</tr>
</tbody>
</table>

Data in Table 3 presented the numbers of students who participated in pre-test and the post-test surveys, prior to the matching of respondents.

Table 3
Total Numbers of Survey Instruments Distributed

<table>
<thead>
<tr>
<th>Group</th>
<th>Pre-Test</th>
<th>Post-Test</th>
<th>Matched Pairs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control Group</td>
<td>71</td>
<td>67</td>
<td>61</td>
</tr>
<tr>
<td>Experimental Group</td>
<td>117</td>
<td>111</td>
<td>88</td>
</tr>
<tr>
<td>Total</td>
<td>188</td>
<td>178</td>
<td>149</td>
</tr>
</tbody>
</table>

Only those students who participated in both the pre-test and post-test surveys were investigated for this study. An examination of data in Table 3 indicated that the total number of students actually included for the investigation was less than the total
number of students participating in either the pre-test or post-test surveys. These totals varied due to one of four possibilities for shifting in sizes of individual class sections: (1) Students dropped individual classes throughout the semester, (2) Students dropped out of the University, (3) Students changed class sections within a course, (4) Students added classes to existing class schedules.

SIGNIFICANCE OF THE PRE-TEST AND THE POST-TEST RESULTS

The distribution and comparison of the pre-test and post-test of the control group and experimental group are shown in Tables 4 through 7.

Data presented in Table 4 indicated a comparison of the pre-test and post-test scores of the control group. The hypothesis that no significant difference occurred regarding the pre-test and the post-test scores of the control group was accepted at the .05 level of significance. The mean for the pre-test for the control group was 79.74 as compared to the mean of the post-test which was 77.95. This comparison of the mean scores indicated a slightly less favorable increase in the attitudes of the control group toward educational media as measured by the survey instrument.

The data presented in Table 4 indicated that there was no significant difference in the pre-test and post-test results of the experimental group were accepted at the .05 level of significance. The mean for the pre-test was 81.05 as compared to the mean for the post-test which was 83.88. This increase in the mean scores indicated a slightly favorable increase in attitudes toward educational media.
as measured by the survey instrument.

Table 4
Distribution and Comparison of the Pre-Test and Post-Test Results in the Control Group and the Experimental Group

<table>
<thead>
<tr>
<th>Group</th>
<th>Number</th>
<th>Pre-Test Mean</th>
<th>Standard Deviation</th>
<th>Post-Test Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control Group</td>
<td>61</td>
<td>79.74</td>
<td>7.26</td>
<td>77.95</td>
<td>14.43</td>
</tr>
<tr>
<td>Experimental Group</td>
<td>88</td>
<td>81.05</td>
<td>12.10</td>
<td>83.88</td>
<td>12.13</td>
</tr>
</tbody>
</table>

Data in Table 5 illustrated a comparison of the means of the pre-test scores between the control group and the experimental group. The null hypothesis that there was no significant difference in the mean scores of the pre-test results was accepted at the .05 level of confidence. The mean for the pre-test scores of the control group was 79.74 as compared to the mean of the pre-test score of the experimental group which was 81.05. The pre-test mean scores of the experimental group were slightly higher than the control group. No significant differences occurred regarding the post-test scores of the control group and the experimental group were accepted at the .05 level of significance. The mean score of the control group for the post-test was 77.95 as compared to the mean score for the experimental group which was 83.88.

An analysis of data in Tables 4 and 5 indicated slightly higher mean scores for the pre-test and post-test results for the
experimental group when compared to the pre-test and post-test results of the control group.

Table 5

Distribution and Comparison of Pre-Test Results and Post-Test Results of the Control Group and Experimental Group

<table>
<thead>
<tr>
<th>Group</th>
<th>Number</th>
<th>Pre-Test Mean</th>
<th>Standard Deviation</th>
<th>Post-Test Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control Group</td>
<td>61</td>
<td>79.74</td>
<td>7.26</td>
<td>77.95</td>
<td>14.43</td>
</tr>
<tr>
<td>Experimental Group</td>
<td>88</td>
<td>81.05</td>
<td>12.10</td>
<td>83.88</td>
<td>12.13</td>
</tr>
</tbody>
</table>

PERCENTAGE ANALYSIS OF STUDENT RESPONSES

Data found in Tables 6 through 11 reflected a percentage analysis of student responses in the control group and the experimental group. Analyses showed the percentage of responses of students by academic classification, major, sex, and prior enrollment in a media course.

Data presented in Table 6 reflected the percentage distribution of the students in the total population. The total number of students in this study was 149 with 88 students comprising the experimental group and 61 students comprising the control group. The control group comprised 41 percent of the total population and the experimental group comprised 59 percent of the total population.
Table 6

Distribution of Students in the Control Group and the Experimental Group

<table>
<thead>
<tr>
<th>Group</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control Group</td>
<td>61</td>
<td>41</td>
</tr>
<tr>
<td>Experimental Group</td>
<td>88</td>
<td>59</td>
</tr>
</tbody>
</table>

Data shown in Table 7 illustrated a comparison of the mean scores of the pre-test scores of the control group and the experimental group, indicating the number and percentage of students by academic classification. The largest percentage of students in the control group were juniors, 67 percent, while the largest percentage of students in the experimental group were seniors, 64 percent. There were no freshmen in either of the groups surveyed.

Table 7

Distribution of Students in the Control Group and the Experimental Group by Grade Classification

<table>
<thead>
<tr>
<th>Group</th>
<th>Sophomores No./ %</th>
<th>Juniors No./ %</th>
<th>Seniors No./ %</th>
<th>Other No./ %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control Group</td>
<td>1 1</td>
<td>40 67</td>
<td>19 31</td>
<td>1 1</td>
</tr>
<tr>
<td>Experimental Group</td>
<td>0 0</td>
<td>32 36</td>
<td>56 64</td>
<td>0 0</td>
</tr>
</tbody>
</table>
Data in Table 8 showed no significant differences occurred regarding the pre-test of the control group and the experimental group by academic classification were accepted at the .05 level of significance. Junior level students in the experimental group scored slightly higher, 83.47, than did junior level students in the control group, 78.45. However, senior level students of the control group scored slightly higher, 83.47 than did senior level students in the experimental group, 79.88.

Table 8
Percentage Analysis of Distribution and Comparison of Students' Pre-Test Results of the Control Group and Experimental Group by Academic Classification

<table>
<thead>
<tr>
<th>Group</th>
<th>Sophomores</th>
<th>Juniors</th>
<th>Seniors</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Control Group</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percentage</td>
<td>1 (N=1)</td>
<td>67 (N=40)</td>
<td>31 (N=19)</td>
<td>1 (N=1)</td>
</tr>
<tr>
<td>Mean</td>
<td>84.00</td>
<td>78.45</td>
<td>83.47</td>
<td>75.00</td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>0</td>
<td>6.59</td>
<td>7.31</td>
<td>0</td>
</tr>
<tr>
<td><strong>Experimental Group</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percentage</td>
<td>0 (N=32)</td>
<td>36 (N=56)</td>
<td>64</td>
<td>0</td>
</tr>
<tr>
<td>Mean</td>
<td>82.47</td>
<td>79.88</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>8.06</td>
<td>14.00</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Data shown in Table 9 reflected the distribution and comparison of the control group and experimental group post-test results. Mean scores of junior level students of both groups were almost identical; the control group scores were 77.78 while the experimental group scores 77.63 senior level students in the control group scored slightly higher, 85.35 than did students in the experimental group, 84.80.

<table>
<thead>
<tr>
<th>Group</th>
<th>Freshmen</th>
<th>Sophomore</th>
<th>Junior</th>
<th>Senior</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Control Group</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percentage</td>
<td>0</td>
<td>1</td>
<td>67</td>
<td>31</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>(N=1)</td>
<td>(N=40)</td>
<td>(N=19)</td>
<td>(N=1)</td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>85.00</td>
<td>77.78</td>
<td>85.32</td>
<td>86.00</td>
<td></td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>0</td>
<td>8.42</td>
<td>8.25</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td><strong>Experimental Group</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percentage</td>
<td>0</td>
<td>0</td>
<td>36</td>
<td>64</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>(N=32)</td>
<td>(N=56)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>77.63</td>
<td>84.80</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>22.47</td>
<td>9.51</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Data in Table 10 indicated that no significant differences occurred regarding the majors of the students in the control group and the experimental group were accepted at the .05 level of significance. Scores of elementary education majors in both groups were similar. The control group mean scores were 80.96 and the experimental group mean scores were 80.00. There was a slightly higher mean score for the secondary education majors in the experimental group 84.00 as compared to the control group, 83.36. Scores for students with a major other than elementary education or secondary education majors were higher for the experimental group, 81.19, than for the control group, 74.36. In both the control group and the experimental group, the highest mean scores appeared in the group of students who were secondary education majors, as compared with the responses of students who were elementary majors, as well as those students with majors other than either elementary education or secondary education majors.

Data presented in Table 11 indicated that no significant differences occurred regarding the post-test results according to major were accepted at the .05 level of significance.

Although there were no significant differences in the post-test results of the survey according to major, in a comparison of the control group with the experimental group, the number of elementary education majors in the control group was 25 as compared to 52 in the experimental group. The number of secondary majors in the control group was 22 and was greater than the number of students in the experimental group, 5 students.
Table 10

Distribution of the Pre-Test Results of Numbers of Students in the Control Group and the Experimental Group by Major

<table>
<thead>
<tr>
<th>Group</th>
<th>Elementary Education</th>
<th>Secondary Education</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Control Group</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number</td>
<td>25</td>
<td>22</td>
<td>14</td>
</tr>
<tr>
<td>Percentage</td>
<td>41</td>
<td>36</td>
<td>23</td>
</tr>
<tr>
<td>Mean</td>
<td>80.96</td>
<td>83.36</td>
<td>74.36</td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>8.19</td>
<td>6.97</td>
<td>22.69</td>
</tr>
<tr>
<td><strong>Experimental Group</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number</td>
<td>52</td>
<td>5</td>
<td>31</td>
</tr>
<tr>
<td>Percentage</td>
<td>59</td>
<td>6</td>
<td>35</td>
</tr>
<tr>
<td>Mean</td>
<td>80.00</td>
<td>84.00</td>
<td>81.19</td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>7.02</td>
<td>6.33</td>
<td>10.28</td>
</tr>
</tbody>
</table>
### Table 11

**Distribution of the Post-Test Results of Numbers of Students in the Control Group and the Experimental Group by Major**

<table>
<thead>
<tr>
<th>Group</th>
<th>Elementary Education</th>
<th>Secondary Education</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Control Group</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number</td>
<td>25</td>
<td>22</td>
<td>14</td>
</tr>
<tr>
<td>Percentage</td>
<td>41</td>
<td>36</td>
<td>23</td>
</tr>
<tr>
<td>Mean</td>
<td>77.84</td>
<td>82.27</td>
<td>85.50</td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>13.76</td>
<td>18.52</td>
<td>8.47</td>
</tr>
<tr>
<td><strong>Experimental Group</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number</td>
<td>52</td>
<td>5</td>
<td>31</td>
</tr>
<tr>
<td>Percentage</td>
<td>59</td>
<td>6</td>
<td>35</td>
</tr>
<tr>
<td>Mean</td>
<td>82.87</td>
<td>64.20</td>
<td>82.35</td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>7.70</td>
<td>36.23</td>
<td>10.69</td>
</tr>
</tbody>
</table>
Results of data in Table 12 indicated that a majority of students in both the experimental group (90 percent) and control group (97 percent) had not had a course in educational media prior to the semester during which this study was conducted.

Table 12
Distribution of Students in the Control Group and Experimental Group by Prior Course in Educational Media

<table>
<thead>
<tr>
<th>Group</th>
<th>YES</th>
<th>Percentage</th>
<th>NO</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td></td>
<td>Number</td>
<td></td>
</tr>
<tr>
<td>Control Group</td>
<td>6</td>
<td>10</td>
<td>55</td>
<td>90</td>
</tr>
<tr>
<td>Experimental Group</td>
<td>3</td>
<td>3</td>
<td>85</td>
<td>97</td>
</tr>
</tbody>
</table>

An examination of data in Table 13 indicated that most of the students who participated in the study were female, 79 percent, as compared with males who participated in the study, 21 percent. In total raw numbers, 116 females participated in the study and 33 males participated in the study.
Table 13
Distribution of Students in the Control Group and the Experimental Group by Sex

<table>
<thead>
<tr>
<th>Group</th>
<th>MALE</th>
<th>FEMALE</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Percent</td>
<td>Number</td>
</tr>
<tr>
<td>Control Group</td>
<td>12</td>
<td>20</td>
<td>49</td>
</tr>
<tr>
<td>Experimental</td>
<td>21</td>
<td>24</td>
<td>67</td>
</tr>
<tr>
<td>Group</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>33</td>
<td>21</td>
<td>116</td>
</tr>
</tbody>
</table>
CHAPTER 5

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

The purpose of this study was to determine the attitudinal change of undergraduate students, as a result of a course in educational media. The study included a total of 149 students enrolled at Louisiana State University during the Fall, 1977 semester. The total population was divided into two groups, a control group and an experimental group. The control group consisted of 61 students enrolled in two sections each of Education 3025, Principles of Teaching in the Elementary Schools, and Education 3040, Principles and Practices in Secondary Education. The experimental group consisted of all seven sections of Education 3500, Utilization of Instructional Materials, 88 students. To survey these students' attitudes a modification of the survey instrument entitled, Controversy in Academia was utilized. Survey procedures included a pre-test and post-test utilizing this instrument.

The treatment for the experimental group was the course in educational media, Education 3500, Utilization of Instructional Materials. Any effect that this course had on the attitudes of students toward educational media was measured. The data were analyzed by a t test and a percentage analysis of respondents with respect to their sex, major, academic classification, and prior
enrollment in an educational media course.

SUMMARY

The following findings were indicated from a comparison of the survey results of the control group and the experimental group. There was no significant difference at the .05 level of confidence in the mean scores of a measurement of attitude toward educational media of undergraduate students at the beginning and end of the undergraduate educational media course, Education 3500, Utilization of Instructional Materials. This would indicate that the course itself did not have an effect on the attitudes of students in the experimental group toward educational media.

No significant differences occurred between the control group and the experimental group with regard to the pre-test or post-test survey results, at the .05 level of confidence.

There were no significant differences in comparisons of the scores of the attitude of the students in both groups with respect to their sex, academic classification, present major, and prior enrollment in educational media courses. A majority of the students in the control group and the experimental group had not had a course in educational media prior to the Fall, 1977 semester. An investigation of the numbers of males and females in the study revealed 79 percent of all respondents were female as compared to 21 percent which were males.
CONCLUSIONS

Based on the findings of the study, the following conclusions may be drawn:

1. There was no significant difference in the attitudes of students surveyed toward educational media, as measured by the survey test Controversy in Academia, whether or not they had completed an undergraduate course in educational media.

2. There was no significant difference in the attitudes of the students surveyed, enrolled in an undergraduate course in educational media, when survey scores were compared at the beginning of that course with scores at the end of that course.

3. There were no significant differences in the attitudes of the students surveyed with respect to sex, academic classification, present major, and prior enrollment in a course in educational media.

RECOMMENDATIONS

The study was limited in that it did not deal with the motivational factors which may inhibit the more positive formation of attitudes toward educational media at the undergraduate level. The writer recommends that further research be conducted concerning the motivational factors affecting attitudes toward educational media.

To determine the consistency of these attitudes toward educational media, a follow-up study of students in the study should
be conducted. The follow-up could be conducted during the semesters when most of these students were completing their student teaching and possibly during their first year of teaching.

All instructors in whose classes the survey was administered were asked to respond to the survey instrument, with an analysis of their responses taken into consideration for analysis of the data.

The result of the study may be used to draw conclusions for the students surveyed, only. Therefore, it is suggested that the study be replicated to compare the results of the investigation with that of another similar group, either at Louisiana State University or on another college campus.
SELECTED BIBLIOGRAPHY


Dissertation Abstracts International; Part A, The Humanities & Social Sciences, 18 no. 1 to 38, no. 5 (Jan, 1958 to Nov., 1977), Ann Arbor, Michigan, University Microfilms.


______. "Reconciling Conflicting Results Derived from Experimental and Survey Studies of Attitude Change." American Psychologist, 14, no. 1, (Jan. 1959), pp. 8-17.


APPENDIX A

Controversy in Academia
CONTROVERSY IN ACADEMICIA

The following statements represent varying points of view about which there is some controversy in American education today. PLEASE assume no pose, but respond rapidly according to your degree of agreement with the statements listed below. Mark your answers in the blank space before each sentence according to the following code:

1. VERY STRONG DISAGREEMENT 4. MODERATE AGREEMENT
2. MODERATE DISAGREEMENT 5. VERY STRONG AGREEMENT
3. NEUTRAL—NEITHER AGREE NOR DISAGREE

01. The widespread use of teaching machines will revolutionize the process of instruction as we know it now.

02. All teachers in training should take a course in the use of A-V aids.

03. Every school should have a central A-V room where the equipment is permanently installed and available for use there.

04. Learning through A-V educational media is a passive experience.

05. The possible uses of A-V equipment are limited only by the imagination of the person directing the usage.

06. Wider acceptance of currently known A-V aids is needed.

07. Programs for teaching machines should be developed by A-V specialists.

08. Proper use of A-V materials can go a long way toward providing for individual differences in the learning needs of children.

09. Most professional educators have viewed newer educational media in the specific context of machines and operations rather than in the more general point of view of a medium for communication.

10. There are no educational frontiers in newer educational media--just new gadgets.

11. Public relations are a primary responsibility of A-V people.
12. The development of new A-V aids is a waste of time and resources.

13. Recent technological trends in education demand a changing teacher role.

14. Only through A-V media can vicarious learning experiences be provided in the classroom.

15. The teaching of foreign languages in the elementary school lends itself particularly well to the use of A-V aids.

16. A-V materials and educational media usage should be the province of A-V specialists.

17. The creative student is apt to be stifled by the extensive use of A-V instructional media.

18. The vicariousness of learning by A-V aids is not conducive to the most effective learning.

19. A basic problem of A-V education is to change the attitude of many teachers who look upon A-V aids simply as frills tacked on to their regular teaching.

20. One of the most satisfactory ways to provide adequate educational opportunities for the increasing mass of students is through wider usage of A-V aids.

21. Provision for the purchase of A-V equipment should be included in every school's instructional budget.

22. The educational value of broadcast (commercial) television is practically nil.

23. The development of A-V centers in every school unit should be encouraged and facilitated.

24. In one teacher's college, 10 per cent of the instructional budget is given to the A-V department. More colleges should adopt this plan.

25. Exerting influence for administrative decisions favorable to A-V should be a key activity of A-V personnel.

26. The use of such aids as the bioscope, electric microscope, and science films can revolutionize the teaching of science.

27. The expense of most A-V media is out of all proportion to their educational value.
28. New teachers would be more inclined to use A-V aids if there were wider usage of these aids in teacher-training programs.

29. Most innovations in newer educational media have been well validated in research studies to substantiate their utility.

30. Most A-V persons do not use the mass communications media enough in developing a favorable public attitude toward A-V.

31. The percentage of teachers using newer educational media has increased greatly in recent years.

32. Wider usage of currently accepted A-V aids is needed.

33. The personal relationship between teacher and student is essential in most learning situations.

34. If surplus funds exist, which could be spent only for supplementary books or for more A-V equipment, the A-V equipment should be chosen.

35. Teaching machines utility cannot be evaluated solely on the basis of standardized scholastic achievement of students using them.

36. A-V materials are so specific as to have little adaptability to different teaching requirements or situations.

37. These newer educational media tend to subordinate the teacher's relationship with students.

38. The passivity characteristic of learning by A-V aids is not conducive to the most effective learning.

39. Wider use of newer educational media will ultimately mean that instructional costs can be reduced.
APPENDIX B

Educational Media Attitude Scale
EDUCATIONAL MEDIA ATTITUDE SCALE

The following statements represent varying points of view about which there is some controversy in American education today. PLEASE assume no pose, but respond rapidly according to your degree of agreement with the statements listed below. Mark your answers, on the sheet provided, after reading each sentence according to the following code:

1. VERY STRONG DISAGREEMENT
2. MODERATE DISAGREEMENT
3. NEUTRAL—NEITHER AGREE, NOR DISAGREE
4. MODERATE AGREEMENT
5. VERY STRONG AGREEMENT

Please do not mark on this questionnaire.

1. The widespread use of educational media will revolutionize the process of instruction as we know it now.
2. All teachers in training should take a course in the use of educational media.
3. Every school should have a central room where the educational media are permanently installed and available for use there.
4. Learning through educational media is a passive experience.
5. The possible use of educational media are limited only by the imagination of the person directing the usage.
6. Wider acceptance of currently known educational media is needed.
7. Proper use of educational media can go a long way toward providing for individual differences in the learning needs of children.
8. There are no educational frontiers in newer educational media—just new gadgets.
9. Public relations are a primary responsibility of educational media people.
10. The development of new educational media is a waste of time and resources.
11. Recent technological trends in education demand a changing teacher role.
12. Only through educational media can vicarious learning experiences be provided in the classroom.

13. Educational media usage should be the province of educational media specialists.

14. The vicariousness of learning with educational media is not conductive to the most effective learning.

15. A basic problem of educational media education is to change the attitude of many teachers who look upon these media simply as frills tacked on to their regular teaching.

16. One of the most satisfactory ways to provide adequate educational opportunities for students is through wide usage of educational media.

17. Provision for the purchase of educational media should be included in every school's instructional budget.

18. The educational value of broadcast (commercial) television is practically nil.

19. The development of educational media in every school unit should be encouraged and facilitated.

20. In one teacher's college, 10 percent of the instructional budget is given to the educational media department. More colleges should adopt this plan.

21. Exerting influence for administrative decisions favorable to educational media should be a key activity of educational media personnel.

22. The expense of most educational media is out of all proportion to their educational value.

23. New teachers would be more inclined to use educational media if there was wider usage of these media in teacher-training programs.

24. The percentage of teachers using newer educational media has increased greatly in recent years.

25. Wider usage of currently accepted educational media is needed.

26. The personal relationship between teacher and student is essential in most learning situations.

27. If surplus funds exist, which could be spent only for supplementary books or for more educational media, the educational media should be chosen.
28. The utility of teaching machines cannot be evaluated solely on the basis of standardized scholastic achievement of students using them.

29. Educational media are so specific as to have little adaptability to different teaching requirements or situations.

30. The use of educational media tend to subordinate the teacher's relationship with students.

31. The passivity characteristic of learning with educational media is not conducive to the most effective learning.

32. Wider use of newer educational media will ultimately mean that instructional costs can be reduced.

33. Please do not mark on this paper. On the sheet provided, please mark your classification using the following examples as a guide:

   FRESH   SOPH   JR   SR   OTHER

34. On the sheet provided, please indicate your present major, using the following example as a guide:

   ELEMENTARY EDUCATION   SECONDARY EDUCATION   OTHER

35. On the sheet provided, please indicate if you are male or female, using the following example as a guide:

   MALE   FEMALE

36. On the sheet provided, please indicate if you have had a course in educational media, prior to this semester. Use the example following as a guide.

   YES   NO
APPENDIX C

Committee on Humans and Animals as Research Subjects
From: Committee on Humans and Animals as Research Subjects
To: Jean T. Kramer, Department of Education

The Committee on Humans and Animals as Research Subjects is responsible for a continuing review of all proposals previously approved. You were listed as Principal Investigator, Responsible Individual or Contact Individual for a proposal approved 9/29/77 entitled "Attitude Changes Toward Educational Media of Undergraduate Students".

The following information is requested on the above proposal:

1. Was proposal funded? No Date Amount
2. Date project initiated August 1977
3. Give brief description of current status of project. All data have been collected and are currently being analyzed for inclusion in my dissertation.

4. Describe any modifications in current procedure from that originally proposed.
   There have been no modifications

5. Describe any procedural modifications planned for proposal in immediate future.
   No procedural modifications are planned

A reply to this request within the next two weeks would be appreciated. Please forward requested information to the undersigned at the Department of Veterinary Clinical Sciences, LSU-BR. Thank you for your assistance.

W. S. Bivin, Chairman
Committee on Use of Humans and Animals as Research Subjects

Submitted by
From: W. Sheldon Bivin, Chairman  
Committee on the Use of Humans and Animals as Research Subjects

To: Research Investigators

Re: Follow-up on approved research projects

By federal law, the Committee on the Use of Humans and Animals as Research Subjects is required to follow-up each research proposal on a semi-annual basis. This review is being mailed out to all research investigators who had projects approved between the period of 1-3-77 to 7-31-77. If you do not have direct information on the project involved, please forward the enclosed form to the graduate student or principal investigator involved.

We need this response in our files, and would greatly appreciate your cooperation.

RECEIVED  
INSTRUCTIONAL RESOURCES CENTER

Enclosure
APPENDIX D

Permission Slips
FALL 1977

I agree to participate in the research project entitled: Changing Attitudes
Towards Educational Media.

NAME ____________________________
APPENDIX E

Letter for pre-test (example)
July 25, 1977

Dr. William Smith  
College of Education  
Louisiana State University  
Baton Rouge, LA  70800

Dear Dr. Smith:

Thank you for allowing me to include your Education class in the survey group for my dissertation.

I will be investigating the change in attitudes of undergraduate students toward educational media. My plans are to pre-test your students during the beginning of the 1977 Fall semester, and to post-test these same students during the two weeks prior to the final examination period.

In my recent conversation with you, we tentatively set the day and time for the pre-test. Perhaps, you could indicate on this letter if this time is still suitable for you and return it to me in the stamped, self-addressed envelope. Also, could you verify the building and room number of your class. If this is no longer suitable, could you suggest an alternative time and date and return this to me in the stamped, self-addressed envelope no later then August 22?

For my dissertation research, I am planning to survey eleven sections of classes on the University campus during this first week and am taking great care to schedule each survey period most carefully.

I am deeply appreciative of your assistance in allowing me to conduct my research with your class.

Sincerely,

Jean Kreamer

JTK:dt

Education 3025  Section 5  
Peabody Hall 212  
Friday, September 2  
8:30 - 9:30
APPENDIX F

Answer Sheet
<table>
<thead>
<tr>
<th>NAME</th>
<th>COURSE</th>
<th>SECTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>YOUR LAST NAME</td>
<td>TEST ONLY</td>
<td>INCLUDE CODE ONLY</td>
</tr>
<tr>
<td>SOCIAL SECURITY NO.</td>
<td>ISSUE YEAR</td>
<td>SOCIAL SECURITY NO.</td>
</tr>
<tr>
<td>I 2 3</td>
<td>4 5 6</td>
<td>7 8 9</td>
</tr>
</tbody>
</table>

**Student Request**

**Student Request**

**Student Request**
APPENDIX G

Letter for post-test (example)
October 18, 1977

Dr. William Smith  
College of Education  
Louisiana State University  
Baton Rouge, LA 70800  

Dear Dr. Smith:

If possible, may I again have the opportunity to survey your class (es) as part of the data gathering procedures for my doctoral dissertation? The specific class (or classes), section, location, and time are noted at the bottom of this page for your approval and verification.

To plan for this post-testing survey, I have enclosed a stamped return envelope with my address. I have also enclosed the information concerning your class (es), section, location and time for your verification and return.

Thank you for allowing me to include your students in my study, I do, most sincerely, appreciate the time you have shared with me in my research, as well as the encouragement and guidance so graciously extended to me.

With kindest regards,

Jean T. Kreamer, Director  
Audiovisual Center  
Regional Film Library

JTK:dt

November 14 Monday  
3025 (Beabody (212)  
9:00 -
VITA

Jean Thibodeaux Kreamer was born June 15, 1944 in Breaux Bridge, Louisiana. She attended St. John Academy, Franklin, Louisiana from 1950 to 1962 and was graduated in 1962. She entered the University of Southwestern Louisiana in 1962 and received a Bachelor of Arts Degree in Elementary Education in the Spring of 1967. In the Fall of 1966 she entered the Graduate School of the University of Southwestern Louisiana as a graduate assistant in the College of Education. She earned the Master of Education degree in May of 1968.

She served as librarian of Hamilton Laboratory School at the University of Southwestern Louisiana during the 1968-69 academic year. From 1971-1975 she served as Director of the Materials Center in the College of Education at the University of Southwestern Louisiana. During the academic year of 1975-76, she served as the Assistant Director of Institutional Research at the University of Southwestern Louisiana. She is currently serving as Director of the University Media Center and Region V Regional Film Library, a position she has held since June 1977. She and her husband, Dr. Thomas L. Kreamer, are the parents of three sons, Thomas Lawrence, Michael Wade and Charles Martin.
EXAMINATION AND THESIS REPORT

Candidate: Jean Thibodeaux Kreamer

Major Field: Education

Title of Thesis: Attitude Changes Toward Educational Media Of Undergraduate Students

Approved:

[Signatures]

Major Professor and Chairman

Dean of the Graduate School

EXAMINING COMMITTEE:

[Signatures]

Date of Examination:

June 15, 1978