

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.

Xerox University Microfilms

300 North Zeeb Road
Ann Arbor, Michigan 48106

73-23,946

KENNARD, Albert Liles, 1932-
MEDIA COMPETENCY OF TEACHERS IN RELATION TO
THE QUALITY OF THE EDUCATIONAL MEDIA PROGRAMS
IN TEACHER TRAINING INSTITUTIONS: A STUDY
OF SELECTED LOUISIANA PUBLIC INSTITUTIONS
AND GRADUATES.

The University of Oklahoma, Ph.D., 1973
Education, teacher training

University Microfilms, A XEROX Company, Ann Arbor, Michigan

THE UNIVERSITY OF OKLAHOMA
GRADUATE COLLEGE

MEDIA COMPETENCY OF TEACHERS IN RELATION TO THE QUALITY OF
THE EDUCATIONAL MEDIA PROGRAMS IN TEACHER TRAINING
INSTITUTIONS: A STUDY OF SELECTED LOUISIANA
PUBLIC INSTITUTIONS AND GRADUATES

A DISSERTATION
SUBMITTED TO THE GRADUATE FACULTY
in partial fulfillment of the requirements for the
degree of
DOCTOR OF PHILOSOPHY

BY
ALBERT L. KENNARD
Norman, Oklahoma
1973

MEDIA COMPETENCY OF TEACHERS IN RELATION TO THE QUALITY OF
THE EDUCATIONAL MEDIA PROGRAMS IN TEACHER TRAINING
INSTITUTIONS: A STUDY OF SELECTED LOUISIANA
PUBLIC INSTITUTIONS AND GRADUATES

APPROVED BY

W. R. Furr
Beard Kild
Phil B. ...
Tillman J. Ragon

DISSERTATION COMMITTEE

ACKNOWLEDGEMENTS

To Dr. W. R. Fulton, Chairman of the Doctoral Committee, the writer expresses sincere appreciation for wise and helpful guidance throughout the doctoral program.

To other members of the committee—Dr. Robert F. Bibens, Dr. Gerald Kidd, and Dr. Tillman J. Ragan—the writer is grateful for their significant contributions to the doctoral program and to this dissertation.

To his wife, the writer is especially indebted for the opportunity culminating in this study.

Finally, to the media directors of the universities, the public school officials, and the teachers who participated in this study, the writer expresses his thanks for providing the information solicited.

TABLE OF CONTENTS

	Page
LIST OF TABLES	vi
CHAPTER	
I. INTRODUCTION AND PROBLEM	1
Introduction	
Statement of the Problem	
Purpose of the Study	
Hypotheses	
Definition of Terms	
Plan of the Study	
Analysis of Data	
Limitations and Assumptions of the Study	
II. SURVEY OF RELATED LITERATURE	14
Media Competencies of Teachers	
Methods and Approaches for Developing	
Media Competency	
Educational Media Programs	
Summary	
III. METHODS AND PROCEDURES	30
Instrumentation	
Selection of Subjects and Data	
Collection	
Analysis of Data	
IV. ANALYSIS AND RESULTS	46
Findings of the Study	
Summary of Results	
V. SUMMARY AND CONCLUSIONS	68
Recapitulation	
Conclusions	
Recommendations	
Implications for Further Research	

BIBLIOGRAPHY	83
APPENDICES	
A. EVALUATIVE CHECKLIST	86
B. MEDIA COMPETENCY SURVEY	98
C. MEDIA COMPETENCY EMPHASIS CHECKLIST	106
D. INSTRUCTIONS TO PUBLIC SCHOOL OFFICIALS	111
E. LETTER TO REGISTRARS	114
F. LOUISIANA PUBLIC FOUR-YEAR TEACHER TRAINING INSTITUTIONS	116
G. LETTER TO MEDIA DIRECTORS	118
H. RANKS OF INSTITUTIONS ON ALL VARIABLES WITH SCORES, MEANS, AND PERCENTAGES USED AS BASIS FOR RANKING	120

LIST OF TABLES

Table	Page
1. Number of Institutions, Graduates, Teachers Employed, and Respondents	39
2. Percentages by Institution of Graduates and Teachers Employed	40
3. Ranks and Scores of Institutions on Level of Media Competency and Quality of Media Program	49
4. Ranking of Institutions on the Basis of Per Cent of Respondents Completing an Audio- visual Course and Level of Media Competency of Teachers	50
5. Ranking of Institutions on the Basis of Emphasis on Development of Competency and Media Competency Level	53
6. Ranks and Scores of Institutions on Quality of Media Program and Emphasis on Development of Media Competency	55
7. Ranks and Scores of Institutions on Quality of Media Program and Level of Competency in Production of Materials	57
8. Ranks and Scores of Institutions on Quality of Media Programs and Level of Competency in Equipment Operation	61

MEDIA COMPETENCY OF TEACHERS IN RELATION TO THE QUALITY OF
THE EDUCATIONAL MEDIA PROGRAMS IN TEACHER TRAINING
INSTITUTIONS: A STUDY OF SELECTED LOUISIANA
PUBLIC INSTITUTIONS AND GRADUATES

CHAPTER I

INTRODUCTION AND PROBLEM

Introduction

College and university programs for the preparation of teachers and other professional education personnel are subject to periodic examination by the National Council for Accreditation of Teacher Education (NCATE). NCATE has adopted certain standards and procedures for use in determining the accreditation status of these programs. Standard number 4.2 of the Recommended Standards for Teacher Education deals with "Materials and Instructional Media Center." The preamble to this standard reads as follows:

Modern media and materials are essential elements in the communications system of contemporary society. For this reason, teachers need to understand the technologies that make such media and materials usable in their teaching and need to possess skills in using them. As a means to assist prospective teachers in developing these understandings and skills, the institution makes available to students and faculty members appropriate teaching-learning materials and instructional media. . . .

A program for the preparation of teachers includes the use of teaching-learning materials and instructional media in two important ways:

prospective teachers are instructed how to devise and use modern technologies in their teaching, and modern technologies are utilized by the faculty in teaching students.¹

This standard and its preamble make clear that it is the responsibility of a teacher training institution to develop skills and understandings of prospective teachers relative to the use of educational media. The preamble specifies three key elements which must be provided if skills and understandings relative to media, i.e., media competency, of teachers are to be developed: (1) instruction in how to devise and use media; (2) faculty use of media in teaching; and (3) appropriate media available for use by both faculty and students.

The first task of an institution as it attempts to develop the media competency of prospective teachers is the actual specification of the competencies to be stressed or emphasized. Many studies have been conducted in an attempt to provide comprehensive and representative lists of media competencies needed by and useful to teachers. The most recent, and perhaps most authoritative of these, is a study edited by Meierhenry,² which was an attempt by recognized media experts

¹Recommended Standards for Teacher Education: The Accreditation of Basic and Advanced Preparation Programs for Professional School Personnel (Washington, D.C.: The American Association of Colleges for Teacher Education, 1971), p. 11.

²W. C. Meierhenry, ed., Media Competencies for Teachers: A Project to Identify Competencies Needed by Teachers in the Use of the Newer Media and Various Approaches to Achieving Them, National Defense Education Act, Title VII, Contract No. 5-0730-2-12-6 (Lincoln: University of Nebraska, 1966).

to systematically identify needed media competencies. A consensual list of specific media competencies can be compiled from this study and adjusted where necessary and appropriate to meet the needs and conditions prevalent in the school systems which the institutions training teachers seek to serve.

The task of providing instruction in how to devise and use media has become a relatively complex problem. Institutions have attempted to meet this instructional responsibility by using one of four basic approaches or by using some combination of the four. These four basic approaches, or patterns, are the following: (1) the formal audiovisual course; (2) a laboratory-type experience with media; (3) the integration of media utilization and the methods course; and (4) a completely integrated approach, in which the entire professional education sequence is saturated with the use of media.³ The adoption of a particular approach is strictly the decision of the individual institution, and throughout the country each approach and various nuances and combinations can be found. There is no empirical evidence indicating that any particular approach is best in all instances and under every set of circumstances. In fact, a study by Torkelson indicated that "there was not a proven overall superiority of one pattern over another."⁴

³W. R. Fulton, "A Multiple Approach for a Multi-Purpose Institution," Audiovisual Instruction, IV (January, 1959), 18.

⁴Gerald M. Torkelson, An Experimental Study of Patterns for Improving the Preparation of Pre-Service Teachers in the Use of Audio-Visual Materials and Effect on Pupils, National Defense Education Act, Title VII, Project No. 079 (The Pennsylvania State University, 1965), p. 61.

This study was conducted over a four-year period, the length of the normal teacher education program, and compared four patterns for developing media competency.

A number of studies have been conducted relative to the use of media by college and university faculties. Varying degrees of use and non-use and the possible explanations in either case have been reported. One study conducted at the University of North Carolina is representative and found the following major deterrents to the use of media by the university faculty:

1. Limited financial support (designated by 80%)
2. Lack of suitable materials for college use (57%)
3. Lack of information on college materials (43%)
4. Lack of assistance for preparing materials (42%)⁵

To alleviate such problems as these and in order to provide appropriate media for both faculty and student use, most teacher training institutions have set up at least some kind of area or facility basically for housing and producing materials and for storing equipment. Along with these media centers, or whatever they may be called in a particular area, it has been necessary to establish an entire component of varying degrees of sophistication to deal with educational media. These components, or educational media programs, are

⁵James W. Brown and James W. Thornton, Jr., New Media in Higher Education (Washington, D.C.: Association for Higher Education and the Division of Audiovisual Instructional Service of the National Education Association, 1963), p. 140.

dedicated to providing the faculty and students with appropriate media and the concomitant staff, services, and facilities necessary for wide and effective use of media in both teaching and learning.

While the goal of the educational media program may be to improve teaching and learning in all departments and programs of the institution, the media program is especially critical to the teacher training program, specifically to the development of media competency of prospective teachers. By providing the actual media necessary for practice and try-out of instructional models, the media program in fact undergirds whatever approach has been adopted for developing media competency. The media program is essential, obviously, to the availability of media for both faculty and students; and it should eliminate the major, if not all deterrents to faculty use of media as well as encourage faculty and student use.

In view of the fact that no particular approach for developing media competency has been proven superior, this study was made in an effort to determine whether the educational media program, undergirding the approach and contributing to the use of media by both faculty and students, is a critical factor in the development of the media competency of teachers. The study explored the idea that the media competency of teachers may be developed in proportion to the quality of the educational media program functioning in their behalf at the training institution from which they graduated. If this premise is well founded, then teacher training insti-

tutions with high quality media programs should prepare teachers with high levels of media competency; conversely, those institutions with average or weak quality media programs should graduate teachers with lower levels of media competency. In other words, there should be a high positive correlation between the quality of the training institution's educational media program and the level of media competency attained by its teacher graduates.

Statement of the Problem

Based on the above rationale, the problem with which this study was concerned is stated as follows:

What is the relationship between the quality of a training institution's educational media program and the level of media competency attained by its teacher graduates?

Specifically, the problem of this study was to determine the relationship between the quality of the educational media programs in Louisiana public teacher training institutions and the level of media competency reported by their 1972 graduates who were serving as first-year teachers in Louisiana public schools as of August or September, 1972. The focus of the study was to see if graduates of institutions with high quality media programs reported having higher levels of media competency than graduates of institutions with lower quality media programs.

Purpose of the Study

Evidence from this study can be used in a number of ways. First, the study gathered data which can be useful in planning and conducting both pre- and inservice programs for teachers in the area of media. Second, by completing the "Evaluative Checklist" on their programs, media directors now have systematically organized information which readily identifies weaknesses which exist in the programs. Third, the study provided the participating teachers with an instrument for self-evaluation of media competency. Fourth, the study provides the first compilation of qualitative data descriptive of the educational media programs in Louisiana public teacher training institutions. Finally, the report of the study is comprehensive enough to point out specific areas in which further research is needed.

To this writer's knowledge no studies have attempted to correlate teachers' level of media competency with the quality of the educational media program in their preservice training institution.

Hypotheses

The preliminary review of literature leading to the rationale for the problem statement generated the following hypothesis to be tested:

H₁: There will be a positive correlation between the level of media competency the teachers claim to possess and the quality of the

educational media programs in the teacher training institutions.

Literature related to the topic of teacher competency in media almost without exception stressed the importance of cooperation and planning for the development of media competency—cooperation and planning which involves all those responsible for the training of prospective teachers in a given institution. Considering the extensive list of media competencies from which selected competencies may be chosen for particular emphasis and also considering the various points of view among a number of planners and those implementing plans, it was considered probable that competencies themselves and the degree to which individual competencies were emphasized would vary among institutions. Since the amount of emphasis placed on the development of media competency seemed to be an important factor in the eventual achievement of those competencies, the following additional hypotheses were formulated for testing in this study:

H₂: There will be a positive correlation between the level of media competency the teachers claim to possess and the amount of emphasis placed on development of media competency by the training institutions.

H₃: There will be a positive correlation between the amount of emphasis placed on development of media competency and the quality of the educational media programs.

Sufficient evidence appeared in the literature review to substantiate the efficacy of self-instructional techniques in the acquisition of two categories of media competencies. In light of the possibility that such techniques might be available without regard to the quality of the media program, the following hypotheses were formulated:

H₄: There will be no correlation between the level of media competency in production of materials which teachers claim to possess and the quality of the educational media program.

H₅: There will be no correlation between the level of media competency in preparation and use of physical facilities (equipment operation) which the teachers claim to possess and the quality of the educational media program.

Definition of Terms

This study employs the term educational media to mean all materials, equipment, services, and techniques traditionally described as "audiovisual" and all so-called newer media such as television and programmed materials. In order to facilitate an orderly review of related literature, the terms media, audiovisual media, newer media, educational media, and the like are used interchangeably.

The educational media program is the total efforts of an institution to provide educational media and concomitant staff, services, and facilities to the faculty and students.

The educational media director is the supervisor or direct chief administrator of the educational media program. The quality of the educational media program is the sum of the numerical ratings checked by the media director on the "Evaluative Checklist."

Public teacher training institutions are four-year institutions of higher education offering a program leading to teacher certification which are principally supported by public funds. Teachers in this study are 1972 spring and/or summer term certified teacher graduates of Louisiana public teacher training institutions who began their inservice teaching in Louisiana public schools in August or September, 1972.

Level of media competency, the principal dependent variable of the study, refers to the mean score of the teachers from a given institution on the Media Competency Survey. In completing this instrument, teachers rated themselves on a scale for each media competency; the numerical ratings were summed over each instrument to provide a score for each teacher. Level of media competency in production of materials is the mean score of the teachers from a given institution on those competencies in the Media Competency Survey categorized as Production of Materials. Level of media competency in preparation and use of physical facilities is the mean score of the teachers from a given institution on those competencies in the Media Competency Survey categorized as Preparation and Use of Physical Facilities. Following the review of literature,

this group of competencies is referred to as equipment operation in the subsequent part of this report.

Emphasis on development of media competency is the score for each institution on the Media Competency Emphasis Survey, completed by the media director.

Plan of the Study

The design of this study follows the pattern of the exploratory field study. According to Kerlinger field studies are scientific; they systematically pursue relationships and test hypotheses; they are ex post facto; and they are made in life situations.⁶ The purpose of exploratory studies is three-fold: "to discover significant variables in the field situation, to discover relations among variables, and to lay a groundwork for later, more systematic and rigorous testing of hypotheses."⁷

Study of the posited problem necessitated locating or formulating instruments for gathering necessary data. Fulton's "Evaluative Checklist"⁸ is a valid, available instrument for determining the quality of an educational media program and was used for that purpose in this study. To collect data relative to teachers' level of media competency, the writer developed

⁶Fred N. Kerlinger, Foundations of Behavioral Research (New York: Holt, Rinehart and Winston, Inc., 1964), p. 387.

⁷Ibid., p. 388.

⁸W. R. Fulton, "Evaluative Checklist: An Instrument for Self-Evaluating an Educational Media Program in Colleges and Universities" (Washington, D.C.: Association for Educational Communications and Technology, September, 1970).

a Media Competency Survey, an instrument which allows teachers to rate their media competencies on the basis of their teacher education training. In order to obtain some measurement of the emphasis placed on development of media competency of teachers by training institutions, a different rating scale was applied to the same list of competencies contained in the Media Competency Survey, thus allowing media directors to rate emphasis numerically.

Collection of data for the study involved the following procedures: (1) identifying teachers and having them complete the Media Competency Survey; (2) contacting each media program director and having him complete the "Evaluative Checklist" and the Media Competency Emphasis Survey.

Analysis of Data

Level of media competency, the principal dependent variable, was determined by grouping respondents' scores on the Media Competency Survey according to graduating institution and then computing the mean score for each institution. The principal independent variable was the quality of the educational media programs as indicated by the summed numerical ratings on the "Evaluative Checklist." The emphasis on the development of competencies was treated in one instance as a dependent variable and in another as an independent variable. In either case the variable was the summed ratings on the Media Competency Emphasis Survey. Two other dependent variables were level of competency in production of materials and level of

competency in preparation and use of physical facilities (equipment operation), the mean scores on corresponding subparts of the Media Competency Survey. The statistic used to test the hypotheses was the Spearman rank correlation coefficient, and the level of significance established for rejecting the null hypothesis was .05.

Limitations and Assumptions of the Study

The most obvious limitations of this study are that it (1) includes only Louisiana public teacher training institutions, and (2) surveys only those teacher graduates of these institutions presently teaching their first year in Louisiana public schools. Consequently, the results of the study are generalizable only to the extent that these institutions and these teachers are representative of other institutions and teachers possessing similar characteristics.

Another limitation of the study lies in the inherent weakness of any field study. The ex post facto character of the field study eliminates the possibility of manipulation of variables, weakens causal relationships, and provides no method of control.

It is the assumption of this study that the sample of teachers from each institution is in fact representative of the entire population of teachers graduating at the same time from the same institution.

CHAPTER II

SURVEY OF RELATED LITERATURE

The problem with which this study was concerned seemed to be rooted in three main areas: (1) media competencies of teachers, (2) methods and approaches for developing these competencies, and (3) educational media programs of teacher training institutions. Accordingly, the survey of literature presented in this chapter considered selected studies and literature related to these three areas. The first three parts of the chapter are devoted to these three areas, individually treating each. At the end of each section is a brief summary, and the concluding portion of the chapter summarizes and relates the survey specifically to the present study.

Media Competencies of Teachers

The most recent and authoritative study involving the specification of desirable media competencies for teachers was coordinated and edited by Meierhenry.¹ Meierhenry's report is primarily a compilation of position papers written by noted educators involved in the field of educational media. The various authors contributing to the report write from differing points of view, in some cases emphasizing their particular

¹Meierhenry, Media Competencies for Teachers.

specialties. Two of the papers in this report were of particular importance to this study. These papers, by Kemp² and Torkelson,³ both list specific media competencies needed by teachers; both list competencies in behavioral terms; and, most importantly, both build their lists of competencies from a carefully traced historical base rooted in empirical evidence wherever possible. Since the competencies contained in the competency surveys of this study reflect the basic competencies delineated by these two authors, little could be gained by reproducing these competencies in this section of the report.

Historically, numerous studies have been conducted and many views presented relative to the media competencies needed by teachers. Two of the earliest of such attempts to identify specific competencies were a study published in 1946 by De Bernardis and Brown⁴ and the so-called California Standards of 1947.⁵ The former study listed a number of media competencies and asked teachers, administrators, and super-

²Jerrold E. Kemp, "Identification of Pre-Service and In-Service Teacher Competencies in the Area of Audiovisual Production Techniques," in W. C. Meierhenry (ed.), Media Competencies for Teachers, pp. 127-166.

³G. M. Torkelson, "Competencies Needed by Teachers in the Use of Newer Media and Various Approaches to Achieving Them," in W. C. Meierhenry (ed.), Media Competencies for Teachers, pp. 169-211.

⁴Amo De Bernardis and James W. Brown, "A Study of Teacher Skills and Knowledges Necessary for the Use of Audio-visual Aids," Elementary School Journal, XLVI (June, 1946), 550-556.

⁵California State Department of Education, "Developing Standards for Teacher Competency in Audio-Visual Education," California Schools, XVIII (1947), 3-6.

visors to rate each competency as to its importance to the classroom teacher. The California Standards was a list of media competencies for teachers, published by the California State Department of Education.

In 1957, David Pascoe, audiovisual consultant to the state of California, circulated a questionnaire to audiovisual instructors in colleges and universities to evaluate the list of competencies comprising the California Standards. Pascoe presented his findings at the 1958 Okoboji Audio-Visual Leadership Conference.⁶

The same 1958 Okoboji Conference "attempted to develop a list of audio-visual competencies to be expected of teachers going into service."⁷ Also in 1958 Zimmerman attempted to identify the audiovisual knowledges and competencies beginning teachers needed.⁸

In their 1959 article Fulton and White wrote that "Teacher competencies in the selection and use of audiovisual materials on which there is general agreement may be classified

⁶"The Pascoe Report," Audiovisual Instruction, IV (January, 1959), 6-7.

⁷William H. Allen (ed.), A Summary of the Lake Okoboji Audio-Visual Leadership Conferences Held at the Iowa Lakeside Laboratory, Milford, Iowa, During the Years 1955-1959 (Washington, D.C.: Department of Audio-Visual Instruction, 1960), p. 27.

⁸Harry Zimmerman, "An Evaluation of Pre-Service Audio-Visual Experiences in Selected Oklahoma Teacher Education Institutions Based on Reactions of Teachers and Supervisors" (unpublished Ed.D. dissertation, University of Oklahoma, 1958).

under four major headings. . . ."⁹ The four headings or categories were listed as (1) selection and evaluation of materials, (2) utilization of appropriate instructional materials, (3) production of simple instructional materials, and (4) preparation and use of physical facilities.¹⁰

During the 1960-61 school year, Oliver surveyed supervisors and practice teachers for their opinion regarding the importance of certain media competencies.¹¹ Torkelson during a four-year study inventoried some forty-eight media competencies in terms of teachers' responses as to the helpfulness of the competencies in their teaching.¹²

Two 1967 doctoral studies dealt with the determination of needed teacher competencies¹³ and with the competencies that teachers actually possessed.¹⁴

⁹W. R. Fulton and Frederick A. White, "What Constitutes Teacher Competence in Audio-Visual Communication?" Phi Delta Kappan, XL (January, 1959), 159.

¹⁰Ibid.

¹¹G. E. Oliver, A Study of Pre-Service Teacher Education in the Use of Media of Mass Communication for Classroom Instruction, National Defense Education Act, Title VII, Project No. 130 (College of Education, University of Georgia, 1962).

¹²Torkelson, An Experimental Study of Patterns.

¹³Ernest Siegel, "The Competencies in the Use of Audio Visual Instructional Materials Deemed Requisite in the Training of Teachers in the Public Elementary Schools of New Jersey with Specific Reference to the Elementary Teacher Training of the State Colleges of New Jersey" (unpublished Ed.D. dissertation, New York University, 1967).

¹⁴Charles E. Streeter, "A Study of Relationships Among Selected Factors Affecting Media Use by Classroom Teachers Within Selected School Systems" (unpublished Ph.D. dissertation, Michigan State University, 1967).

In summary, the above review, purporting to be neither comprehensive nor detailed, indicates that numerous types of studies of media competencies needed by teachers have been made by a variety of agencies, groups, and individuals. Many of the studies cited contained detailed reviews themselves indicating that determinations and delineations of specific media competencies have been made and presented in various ways and in varied terms. A mere numerical review of these types of studies revealed the fact that there has been ample definition of media competencies needed by teachers.

The various lists of media competencies, in general, share common terminology and contain similar if not identical specific competencies. No significant, in fact not even minor, disagreements or controversies were revealed as researchers and writers pursued their tasks of identification of media competencies.

The general conclusion to be drawn from this part of the literature survey as it relates to this study can be stated very simply as follows: by gleaning from previously prepared competency lists, the careful researcher can prepare his own list of selected media competencies which adequately samples the universe of possible competencies and can devise instruments which yield reliable data relative to these competencies.

Methods and Approaches for Developing Media Competency

While most studies dealing with the identification of media competencies needed by teachers have addressed themselves

to the additional but highly relevant topic of developing these competencies, certain of the studies previously cited in the first part of this review and some additional studies have particular relevance in this regard to the present study.

One of the earliest studies bearing directly upon the problem of this study was by Gramlich in 1954.¹⁵ Gramlich summarized three areas influencing teacher attainment of media competency. First was the training institution's total audio-visual program, upon which the other factors were dependent. Second was a combination of (1) courses in audiovisual, (2) units relative to audiovisual in other professional courses, and (3) the practical application of audiovisual methods in student teaching activities. The third area theorized by Gramlich was the audiovisual influence exerted by college teachers in an indirect way, i.e., the examples by which teachers "learn" to teach.

Benda's 1956 study¹⁶ suggested a number of ways of correcting weaknesses in certain audiovisual courses. Chief among these were that prospective teachers need practical experience, not just instruction, in working with materials and equipment, and they need to observe master teachers using

¹⁵Jay J. Gramlich, "The Status of Audio-Visual Programs in Selected Four-Year Institutions of Higher Learning as They Relate to the Preparation of Pre-Service Teachers" (unpublished Ed.D. dissertation, University of Oklahoma, 1954).

¹⁶Harold W. Benda, "A Plan for the Improvement of the Pre-Service Course in Audio-Visual Education for the State Teachers Colleges of New Jersey" (unpublished Ed.D. dissertation, New York University, 1956), as quoted in Dissertation Abstracts, Vol. 18, No. 4, p. 1727.

media in actual, not contrived situations. The inference was very simply that the audiovisual course of itself may do little in the way of developing media competency.

One of Camp's findings in his 1957 study is particularly germane to this study. Camp concluded that "There appears to be no relationship between pre-service audio-visual training and general teacher [media] competency."¹⁷

In what might be considered a corollary to the Camp finding, Gibbony recommended in the same year that to insure media competency

. . . the entire teacher education program [should] present a continuous demonstration of the effective use of instructional materials. . . .

It should encourage and facilitate student use of instructional materials during the entire pre-service program. . . .

Since the audio-visual or instructional materials center can bring together the materials and equipment needed . . . , provide the facilities and services, and furnish professional assistance and consultation . . . it should be considered an indispensable part of any effective program of teacher education.¹⁸

In 1958 the Okoboji conferees considered four basic approaches or patterns most commonly used to develop media competencies of teachers. The four basic approaches described were labeled as: (1) the completely integrated approach,

¹⁷Maurice B. Camp, "Some Factors Related to the Utilization of Audio-Visual Materials with Suggestions for Teacher Preparation in This Area" (unpublished Ed.D. dissertation, Pennsylvania State University, 1957), as quoted in Dissertation Abstracts, Vol. 18, No. 1, p. 155.

¹⁸Hazel Lee Gibbony, "The Instructional Materials Center in Teacher Education" (unpublished Ph.D. dissertation, Ohio State University, 1957), as quoted in Dissertation Abstracts, Vol. 18, No. 4, p. 2070.

(2) integrated methods materials course, (3) the formal audio-visual course, and (4) the laboratory project approach.¹⁹

Studies related to various approaches were soon forthcoming following this 1958 conference. Oliver's study, conducted during the period 1959-1962,²⁰ produced evidence in favor of a combination of the completely integrated approach and the laboratory project approach. Oliver concluded that

It was apparent throughout the project that emphasis on instructional media during pre-service teacher education could not be divorced from other phases of the undergraduate professional sequence. As instruction progressed it became clear that emphasis on instructional media could best be developed on a team basis through cooperation among the professional staff, with an appropriate allotment of time for the study of instructional media, and with established objectives for instruction and laboratory opportunities.²¹

Oliver argued that his study demonstrated the need for "organized training . . . developed on specific objectives, with appropriate staff, and with adequate facilities."²² And

This project demonstrated that if specific emphasis is placed on the classroom use of instructional media during pre-service teacher education, that emphasis will be reflected in the effectiveness of the classroom use of such media by beginning teachers.²³

¹⁹Summary Report of the Fourth Lake Okoboji Audio-Visual Leadership Conference (Milford, Iowa: State University of Iowa and Department of Audio-Visual Instruction, 1958), pp. 37-40.

²⁰Oliver, A Study of Pre-Service Teacher Education.

²¹Ibid., p. 71.

²²Ibid., p. 75.

²³Ibid.

Certain of the basic approaches for developing media competencies of teachers were evaluated and reported by Torkelson in 1965.²⁴ Torkelson gathered data during the period from fall, 1959, to the end of spring, 1963. Students in the regular teacher training program at Pennsylvania State University were grouped for the purpose of studying the " . . . best pattern(s) for insuring pre-service teacher competencies in the optimal use of audiovisual materials. . . ."²⁵ Using three of the four basic approaches outlined by the Okoboji conferees, Torkelson studied the effects of four different patterns of instruction. The approaches, or patterns, used were the separate audiovisual course, integration of the content of the traditional audiovisual course with methods courses, audiovisual course content taught in conjunction with student teaching (a variation of the laboratory approach), and a self-instruction pattern.²⁶

Torkelson's finding contributes to the basic problem of this study in that the conclusion was that " . . . there was not a proven over all [sic] superiority of one pattern over another. . . ."²⁷ Two more specific findings from the Torkelson study apply directly to those competencies in this study classified under the headings of production of materials

²⁴Torkelson, An Experimental Study of Patterns.

²⁵Ibid., p. 1.

²⁶Ibid., pp. 1-2.

²⁷Ibid., p. 61.

and also preparation and use of physical facilities; the two findings, which follow, were used in the formulation of the two appropriate hypotheses in this study:

In terms of the teaching of perceptual-motor skills [in the production of materials], there is sufficient evidence that this type of learning . . . may be acquired through appropriately designed and sophisticated self instructional materials.²⁸

In terms of the teaching of equipment operation, the self study pattern proved that this kind of perceptual motor skill can be learned through the avenue of specially prepared materials. . . .²⁹

The Streeter study in 1967 was even more specific in regard to the production and equipment operation categories. Streeter stated that

Contemporary opinion among media specialists is that this information [basic production techniques and ability in equipment operation] can be acquired outside the classroom via self-instructional systems, and this writer assumes the same position.³⁰

In summary of this part of the survey of literature, it appears that there is definite evidence regarding development of media competency in preservice teacher education programs. Throughout this brief review of studies there appears one of two, or a combination of two, common threads. First, there is no definite evidence to support stringent adherence to any one particular method, approach, or pattern for the development of media competency of teachers. Second is the

²⁸Ibid., p. 72.

²⁹Ibid., p. 149.

³⁰Streeter, "Relationship Among Factors Affecting Media Use," p. 85.

idea of a "permeating effect" of media training which includes exposure to and practice with media under varied practical conditions and in differing circumstances. Fulton and White summed up this idea effectively:

Basic to all of the . . . approaches is the need for extensive use of audio-visual materials and techniques in all professional and academic courses, for teachers tend to teach as they have been taught. . . . [A] wide variety of appropriate materials and equipment must be readily available. . . .³¹

Although specific studies were not reviewed in this chapter, there is ample evidence that near-myriad approaches or patterns for developing competencies are in existence throughout the teacher training institutions across the country. Also not cited are numerous studies demonstrating that teachers report possessing varying degrees of media competency, the acquisition of which (or lack of which) both teachers and researchers attributed to any number of factors. Perhaps de Kieffer and de Kieffer sum up this problem most clearly:

There is, however, still the strangely unanswerable question as to how . . . students are obtaining information and experience regarding the use of educational media in teaching. Many institutions still do not require their students to take courses in this area prior to graduation, do not include short units of educational media in other education courses, and yet require their students to use media in their practice teaching.³²

³¹Fulton and White, "What Constitutes Teacher Competence?" p. 160.

³²Robert E. de Kieffer and Melissa H. de Kieffer, Media Milestones in Teacher Training (Washington, D.C.: Educational Media Council, 1970), p. 67.

Educational Media Programs

A complete survey of literature related to educational media programs would prove too lengthy even for the scope of this report. Doctoral studies by the score have surveyed various aspects of media programs; counted equipment and materials; analyzed distribution practices, services provided, maintenance performed, and other patterns of activities; compared media programs in certain institutions with those in other, both similar and different, institutions; and generally bared the aspects, functions, and elements of existing programs.

More important and relevant to this study than a general survey of literature related to college and university media programs are certain of the findings and comments of Fulton relative to the development of his "Evaluative Checklist."³³

Fulton explained that development of this evaluative instrument involved the establishment of "guidelines or criteria pertaining to those elements thought to be common to all educational media programs."³⁴ The first step involved a thorough review of literature, and the second step was the commissioning of twelve noted media educators for the purpose of describing what they considered to be the characteristics

³³W. R. Fulton, "Developing a Self-Evaluation Instrument for Appraising Educational Media Programs," in Neville P. Pearson and Lucius Butler (eds.), Instructional Materials Centers: Selected Readings (Minneapolis, Minn.: Burgess Publishing Co., 1969), pp. 327-331.

³⁴Ibid., p. 328.

of a model educational media program.³⁵

From the information gathered in these two steps and subsequent field testing, six elements were identified as being essential to an adequate educational media program. These six elements with subtopics constitute the components or sections of the evaluative instrument used in this study:

Section I, dealing with the Commitment of the Administration to an Educational Media Program, involves five subtopics which include: (a) general commitment to educational media, (b) commitment to educational media as an integral part of instruction, (c) commitment to the provision of adequate facilities for educational media use, (d) commitment to adequate financing of the educational media program, and (e) commitment to adequate staffing for the educational media program.

Section II, entitled Educational Media Services and the Curriculum and Instruction, has four sub-sections: (a) consultative services in the use of educational media, (b) media services to educational preparation programs in school systems, (c) faculty-student use of educational media, and (d) involvement of media staff in planning.

Section III, concerning the Educational Media Center, includes six subtopics: (a) location and accessibility of educational media, (b) dissemination of information about educational media, (c) availability of educational media for instructional purposes, (d) storage and retrieval of educational media, (e) maintenance of educational media, and (f) production of educational media.

Section IV, Physical Facilities for Educational Media, deals with two subtopics: (a) facilities existing in classrooms already in use, and (b) educational media facilities for newly constructed classrooms.

Section V, Budget and Finance of the Educational Media Program, includes three subtopics: (a) reporting of financial needs to the administration, (b) basis on which budget allocations are made for educational media, and (c) developing the educational media budget.

Section VI, entitled Educational Media Staff, has one part for institutions of higher education which

³⁵Ibid., pp. 328-329.

deals with the number and qualifications of staff necessary for an adequate educational media program.³⁶

In summary, Fulton reviewed the existing literature and defined and compiled the essential components of educational media programs and supplied the criteria for determining the degree to which these components were present and functioning in a given situation. To this writer's knowledge no additional components have been suggested or added to the original instrument despite widespread use.

Summary

The first section of this chapter deals with media competencies of teachers, indicating that numerous lists of competencies have been prepared and noting that an adequate list of selected competencies can now be prepared by gleaning from previous lists. As pointed out by Streeter, the lists

. . . reflect the logical and speculative judgements of knowledgeable people in the media field, and their recommendations can hardly be challenged since there is little experimental evidence to support or refute their viewpoints.³⁷

In view of this section of the review of literature, it seems logical for a researcher to use the most recent and authoritative lists of competencies as he attempts to gather data relative to selected media competencies.

Part Two of this chapter, dealing with methods and approaches for developing media competencies of teachers,

³⁶Ibid., p. 330.

³⁷Streeter, "Relationship Among Factors Affecting Media Use," p. 34.

establishes the fact that there seems to be no evidence to suggest the superiority of one method or approach to the exclusion of any or all others. Implicit also is the idea that an educational media program is essential to any and all methods or approaches adopted by an institution for training teachers.

In describing his media competencies project and advising any who attempt to implement the recommendations contained therein, Meierhenry wrote that

. . . thoughtful and systematic planning will need to be carried out in regard to the entire teacher education program and . . . the development of media competencies must now be deliberately planned with purposes and functions to be met rather than developed haphazardly, incidentally, or not at all. All persons responsible for the education of teachers . . . must provide for the learning experiences involving media in order that prospective teachers will experience firsthand contributions of such learning resources.³⁸

Calling for the development of a formal subsystem in media to place competencies in the proper perspective in relation to the total teacher training program, McMahon states explicitly what is inherent in Meierhenry's comment above:

The subsystem would be successful to the degree that it was built on a solid base of good relationships between media and education staff members; that it was jointly and deliberately planned, supported by an adequate instructional media center, and redesigned as there was a need to improve its functioning.³⁹

Thus, there is, or should be, one factor common to all

³⁸Wesley C. Meierhenry, "Teacher Competencies Project," Audiovisual Instruction, XII (December, 1967), 1031.

³⁹Marie McMahon, "A Challenge: The Systems Approach in Development of Media Competencies," Audiovisual Instruction, XII (December, 1967), 1063.

teacher training institutions purporting to attempt to develop the media competency of teachers, regardless of the disparity of methods or approaches adopted to effect this development. This factor is the institution's educational media program, or its total effort to provide educational media and concomitant staff, services, and facilities to the faculty and students.

The third part of this chapter is devoted to Fulton's "Evaluative Checklist." Included are Fulton's comments as to the background for determining the components of an educational media program and his description of the components as contained in the "Evaluative Checklist." An institution's media program, comprised of the components determined and listed by Fulton, is demonstrably relevant to the development of media competencies of teachers, regardless of the approach or even absence of a carefully planned approach for such development. The components comprising the media program must be the basis upon which any approach would be built. It is on the basis of this relevance of media program components to the development of teacher media competency that the present study was conducted.

Although it is recognized that when dealing with human behavior causal relationships are difficult to identify, this study was formulated and conducted in the belief that educators must continue efforts to identify and subsequently to influence those factors which seem to affect critical elements of the teaching-learning process—in this instance, the media competency of teachers in our elementary and secondary schools.

CHAPTER III

METHODS AND PROCEDURES

This paper reports an exploratory field study and, as such, describes what was found rather than predicting a large number of relationships. The purpose of the study was to gain information about the relationship between the educational media programs in Louisiana public teacher training institutions and the level of media competency which graduates of these institutions perceived that they possessed. Such information can be valuable to all those interested in developing media competencies of teachers.

In the study prospectus hypotheses which predicted relationships were formulated and three such predictions were made: (1) there will be a positive correlation between the level of media competency reported by teachers and the quality of the educational media programs in the training institutions; (2) there will be a positive correlation between the level of media competency reported by teachers and the amount of emphasis institutions place on developing this competency; and (3) there will be a positive correlation between the amount of emphasis institutions place on developing media competency and the quality of the educational media programs.

Upon the advice of one advisory committee member and after subsequent literature review, additional hypotheses

were generated regarding those competencies which could be categorized under the heading of either production of materials or preparation and use of physical facilities. Two more hypotheses were then posited, stating that: (1) there would be no relationship between the level of competency in production of materials and the quality of the educational media program; and (2) there would be no relationship between the level of competency in the preparation and use of physical facilities and the quality of the educational program.

Data for this study were gathered from teachers with regard only to the two conditions that they be graduates of one of the Louisiana public teacher training institutions during the spring or summer term of 1972 and that they had begun their inservice teaching in a Louisiana public school as of August or September of 1972. Data were acquired from media directors of the training institutions relative to the quality of the educational media programs and the emphasis placed on the development of teacher media competency.

Information from teachers relative to their level of media competency was obtained through a Media Competency Survey; data on emphasis placed on development of teacher media competency was obtained through Emphasis on Media Competency Survey; and the quality of the educational media programs was determined through the use of Fulton's "Evaluative Checklist." The returns from teachers were grouped according to graduating institution for the purpose of computing mean scores. All instruments were sorted and scored by hand, and

all computations were performed on a simple electrical-mechanical calculator.

The statistic used in the analysis of data was the Spearman rho (r_s) rank correlation coefficient. The level of significance set for hypothesis testing was .05.

Instrumentation

Three instruments were used in this study for gathering the needed data; one was an already existing instrument, and the other two were devised and formulated specifically for the purposes of and use in this study.

"Evaluative Checklist"

Fulton's "Evaluative Checklist" is the best instrument known to the writer for evaluating the quality of an educational media program in a college or university. The format of the checklist is such that it requires a rating for each of twenty-one elements of a media program. The rating scale includes the numerals one through twelve, and so the highest possible score is 252. Ranking of institutions according to the quality of their educational media programs was made on the basis that the higher the score on the "Evaluative Checklist," the higher was the quality of the media program.

The "Evaluative Checklist" was developed pursuant to a contract with the United States Office of Education under Title VII of the National Defense Education Act of 1958. Under the direction of Dr. W. R. Fulton, Professor of Education at the University of Oklahoma, a panel of twelve prominent educational

media people developed the checklist and a comprehensive list of criteria to accompany it. The instrument was field tested in approximately 200 schools and institutions of higher education.¹ Since its publication in 1966 this instrument has been used in numerous school systems and institutions of higher education to evaluate media programs. It has been used also in the collection of data for a number of doctoral dissertations, and it is felt to be a valid and reliable instrument for the purpose for which it was used in this study.

This "Evaluative Checklist" was the instrument used to determine the quality of the educational media programs in the teacher training institutions. A copy of the checklist can be found in Appendix A of this paper.

Media Competency Survey

The instrument used to gather data from teachers was titled Media Competency Survey. This is a two-part questionnaire, the first part of which solicits certain professional data and identifies the teacher according to the institution from which he graduated, the date of his graduation, and the date on which he began his inservice teaching. This part of the survey was originally formulated to be used as a means of identifying teachers according to the criteria established for the study. Some additional information was solicited mainly as a matter of interest, but the information obtained relative

¹Fulton, "Developing a Self-Evaluation Instrument," p. 329.

to the number of teachers reporting completion of an audio-visual course was later made a part of the study.

The second part of the survey provided the data on which the greater part of this study is based. This part lists forty-one (41) selected media competencies arranged under four headings or categories. Nine competencies are listed under Preparation and Use of Physical Facilities, twelve under Production of Materials, ten under Selection and Evaluation of Media, and ten under Utilization of Media.

Completion of this part of the survey entailed the use of a five-point scale, each point of which represented a way in which the teacher could rate his perception of how he judged his level of competency in terms of his preservice training. By counting the numerical ratings checked for each competency, it was possible to determine a teacher's score for each of the four categories of competencies and then sum these to obtain a total score for each individual. Grouping all teachers from a given institution and computing their mean score resulted in a score which was considered the level of media competency of the graduates of that institution. A mean score for each of the four categories was obtained in the same way, with the last two categories in the survey being combined for convenience of use in the study.

With a five-point rating scale for forty-one competencies the highest possible score was 205 for any individual teacher or for any institution's mean score. All rankings were made on the basis of the higher the mean score, the

higher the level of media competency of the teacher graduates, and thus the higher the ranking of the institution. Rankings for level of competency according to categories were made in the same way considering the various highest possible scores.

The forty-one competencies listed in the survey were taken from the Meierhenry report reviewed in the previous chapter of this paper; statements of competencies were drawn mainly from the Kemp and Torkelson papers in that study. Only selected competencies were listed after careful consideration of possible lists of what could be termed the most "basic" of media competencies, and the wording of the competencies is not always identical to that in the report. All of the competencies were stated in behavioral terms so that they would be more meaningful to the beginning teacher and so that he could easily judge the manner in which he could perform in accordance with the scale descriptions.

The first draft of this questionnaire was examined by the writer's doctoral advisor and other knowledgeable faculty members and graduate students at the University of Oklahoma for validity of content. After revision on the basis of these examinations a rating scale was developed with the aid of a test and measurement expert at the University of Oklahoma, and the instrument was tried out on a number of interested students on an informal basis. During the summer of 1972 a graduate student used the instrument to gather data for a research report. The instrument was administered to 215 graduate and undergraduate students, and all reported ambiguities and

suggestions were considered when formulating the final draft. The resulting form of the Media Competency Survey was adopted for this study, and a copy of this instrument together with the introductory letter which accompanied it can be found in Appendix B of this paper.

Media Competency Emphasis Checklist

The instrument used to determine the amount of emphasis placed on development of media competency in the teacher education programs of the institutions in this study was the Media Competency Emphasis Checklist.

This instrument lists the identical forty-one competencies contained in the Media Competency Survey. The competencies were not categorized on this instrument; the rating scale was altered to accommodate the purpose of the survey. Before each competency is a line five centimeters in length. The right extreme of the line represents much emphasis (M) and the left extreme represents no emphasis (N). Respondents, in this study the media directors, were instructed to mark an "X" at a point on each line to represent the degree or amount of emphasis placed on development of competency. Respondents were asked to consider the total teacher education program as they estimated this emphasis and not to confine the emphasis only to that in the formal audiovisual courses. Several of the media directors indicated that they had in fact consulted with other faculty members in completing this questionnaire.

Once these instruments were completed, it was possible

to measure the line from its left extreme to the point where the "X" had been placed and to consider this measurement as a numerical rating of the amount of emphasis placed on the development of the particular competency. Summing each of these numerical ratings over a completed instrument resulted in a total score which was then considered as the amount of emphasis placed on development of teacher media competency at that institution. Rankings were again determined on the basis that the higher the score, the higher was the emphasis and thus the higher the rank.

Prior to its use in this study the Media Competency Emphasis Checklist was examined by three knowledgeable media people in the Louisiana universities to determine the clarity of the instructions and its utility. After some revision of the instructions, the media people ascertained that they could use this instrument to indicate the amount of emphasis placed on development of teacher media competency in their teacher training programs, and the instrument was then adopted for use in this study. A copy of this instrument can be found in Appendix C of this paper.

Selection of Subjects and Data Collection

The prospectus submitted for this study listed the criteria for teachers who were to participate as follows:

- (1) a spring or summer 1972 certified teacher graduate of one of the Louisiana public teacher training institutions, and (2)
- an inservice Louisiana public school teacher beginning in

August or September of 1972. No sample size or criteria were established or attempted; rather efforts were made to include as many as possible of the teachers meeting the two criteria.

The initial step in the collection of data was to seek the assistance of some system-wide official in each of the sixty-six Louisiana public school systems (sixty-four parish, or county, systems and two city systems). These officials were contacted in person, by phone, or by mail by the writer. They determined or estimated the number of teachers in their system who met the established criteria; sufficient Media Competency Survey forms were sent to these officials along with written instructions and information; the officials then arranged to distribute and collect the survey forms in the manner most efficient and/or convenient to them individually. Once they had collected the survey forms, they returned the forms to the writer. Written correspondence to these officials can be found in Appendix D of this paper.

Teachers from fifty-four of the sixty-six Louisiana public school systems responded to the Media Competency Survey. Of the completed survey forms returned, a total of 822 were retained for use in the study.

Registrars of the teacher training institutions were asked to supply the total number of certified teacher graduates for the spring and summer terms of 1972. A copy of the letter asking for this information can be found in Appendix E of this paper.. The registrars from the eleven participating institutions reported a total of 2,457 certified teacher

graduates during the spring and summer terms of 1972. University placement directors, state department of education personnel, local school system officials, and other knowledgeable people estimated that approximately 65% of the total 1972 graduates would have been employed in the public schools of Louisiana beginning in August or September of 1972. Based on the reports of the registrars, estimates of knowledgeable people in education, and the actual responses included in this study, Table 1 shows that from the eleven institutions with 2,457 certified teacher graduates 822 of these graduates did respond to the Media Competency Survey and are included in this study, and that these 822 responses are from a probable 1,596 teachers who were actually employed in Louisiana public schools beginning in the fall of 1972.

TABLE 1

NUMBER OF INSTITUTIONS, GRADUATES,
TEACHERS EMPLOYED, AND RESPONDENTS

Institutions	Graduates	Teachers Employed*	Respondents
11	2,457	1,596	822

*Estimated as 65% of total graduates.

Table 2, which follows, shows a breakdown by institution of the percentages of respondents. It should first be noted in this table that each institution has been assigned a letter designation—A, B, etc.—and that these designations will remain constant throughout the remainder of this report.

This means that Institution A in Table 2 is the same Institution A referred to in later sections of this report. The second notation to be recognized concerning this table is that numbers of graduates and respondents from each institution are not listed. Even though such numbers might be meaningful in this report, the numbers would identify the institutions, and both teachers and institutions were promised anonymity.

TABLE 2
PERCENTAGES BY INSTITUTION OF GRADUATES
AND TEACHERS EMPLOYED

Institution	Percentage of Graduates	Percentage of Teachers Employed
A	25.1	38.6
B	41.3	63.7
C	35.7	54.0
D	33.5	51.5
E	45.9	70.0
F	29.7	45.6
G	20.7	32.1
H	35.2	54.3
I	45.9	70.7
J	31.6	48.4
K	38.9	60.0
Total	33.5	51.5

Table 2 shows that in the case of two institutions, E and I, responses to the Media Competency Survey of nearly 46% of the total graduates are included in this study. Only one institution, G, has fewer than 25% of its graduates included

in this report. The report includes the responses of 33.5% of all the certified teacher graduates from the eleven institutions consistent with the criteria established.

If the estimate that approximately 65% of the teacher graduates during the spring and summer, 1972, semesters actually began teaching in Louisiana public schools during the fall of 1972 is nearly accurate, then this report includes responses from over 50% of the teachers who were available to complete the survey. In the case of two institutions, E and I, at least 70% of the graduates available were included in the survey. In the case of only two institutions, A and G, were fewer than 40% of the available teachers included in the study.

Collection of data from the teacher training institutions hinged upon the cooperation of the media directors in those institutions. Only one media director failed to furnish the data necessary to the study, and the study, therefore, was completed on the basis of data received from eleven of the total of twelve public teacher training institutions in the state of Louisiana. A list of the twelve institutions is produced in Appendix F of this report.

Each media director was contacted by phone or in person and asked to complete the necessary instruments. A letter followed this initial contact, and a copy of that letter can be found in Appendix G.

The media directors completed the "Evaluative Checklist" and the Media Competency Emphasis Survey. All eleven

returns of the "Evaluative Checklist" and the Media Competency Emphasis Checklist were usable and are included in this study. Total scores on these two instruments, along with all other scores and means used as a basis for ranking, can be found in Appendix H of this report.

In connection with the returns from media directors, two similar situations need some comment. One institution had no media director at the time of the survey; however the previous media director, currently working in a different assignment in the education department, consented to complete the instruments since they both solicited information based on the program which he did direct last year and previously.

In the case of another institution, a new media director had been hired as of September, 1972. Since the previous media director was in this instance also still at the institution in a different capacity, the new media director asked that the former director complete the instruments on the basis of the program which he had directed previously.

Analysis of Data

In this study four sets of data were used as dependent variables. The first of these was the Level of Media Competency. This variable was determined by grouping teachers' scores on the Media Competency Survey according to the institution from which they graduated and then computing a mean score to be assigned to the appropriate institution. These mean scores were treated as the Level of Media Competency of

the teachers graduating from the respective institutions.

Level of Competency in Production of Materials and Level of Competency in Preparation and Use of Physical Facilities were the second and third dependent variables. These were determined in the same way as total Level of Media Competency except that only the corresponding parts of the Media Competency Survey were considered. These mean scores were then considered dependent variables on which basis institutions were ranked when these variables were considered.

The fourth dependent variable was Emphasis on Development of Media Competency. This was the compiled score for each institution on the basis of the Media Competency Emphasis Checklist.

In one statistical test Emphasis on Development of Media Competency was treated as an independent variable. In this case its determination was the same as described for its consideration as a dependent variable.

The Quality of the Educational Media Program was in all instances treated as an independent variable.

Having established the level of significance for rejecting the null hypothesis as .05, the hypotheses were tested in all instances by using the Spearman rank correlation coefficient, designated in this report by the symbol r_s . Of the rank statistics, this "was the earliest to be developed and is perhaps the best known today."² This statistic is

²Sidney Siegal, Nonparametric Statistics (New York: McGraw-Hill Book Co., 1956), p. 202.

"defined in such a way as to take a value of +1 when the paired ranks are in the same order, a value of -1 when the ranks are in inverse order. . . ." ³

The rank correlation coefficient is the relation between two sets of ordinal data. Although it is a nonparametric statistic and in this study required converting interval variables to ordinal variables, the statistic was deemed appropriate because of the relatively small number of institutions (N). With N=11 as in this study, it is difficult to meet the assumptions of the comparable parametric statistical test. Use of the rank correlation coefficient was further thought to be of particular value in this study in that conversion of data from interval to ordinal form may overcome the limitations of the differing response tendencies of persons using a scale—one to use the ends of the scale, another the middle, and the like. ⁴

In each statistical test the institutions were ranked on the basis of two variables, with the highest score or mean receiving a rank of 1, the next highest a rank of 2, and so on to the lowest which received the rank of 11.

Two of the institutions received identical scores on the "Evaluative Checklist." Each of these was assigned the average of the ranks which would have been assigned had no tie

³George A. Ferguson, Statistical Analysis in Psychology and Education (3rd ed.; New York: McGraw-Hill Book Co., 1971), p. 305.

⁴Tuckman, Conducting Educational Research, p. 244.

occurred. Since the proportion of ties was not large, no correction factor was incorporated in the calculation of r_s , for the effect of a small proportion of ties on r_s is negligible.⁵

Once ranks were established the Spearman rank correlation coefficient was computed as advocated by Ferguson⁶ using the following formula:

$$r_s = 1 - \frac{6 \sum d^2}{N^2(N-1)}$$

In this formula, d is the difference between each pair of ranks, and N is 11, the number of rankings in every case.

Critical values of r_s for different values of N required for significance at the .05 or .01 level can be determined from a table of such values. As N decreases, a value of r_s of more substantial size must be obtained before one has adequate grounds for rejecting the null hypothesis.⁷ For an $N=11$, an r_s equal to or greater than .535 is required for significance in a positive direction at the 5 per cent level.

⁵Siegal, Nonparametric Statistics, p. 206.

⁶Ferguson, Statistical Analysis, p. 306.

⁷Ibid., p. 308.

CHAPTER IV

ANALYSIS AND RESULTS

This chapter reports a compilation of the findings of this study. Findings relative to the five hypotheses are presented under four topic headings which indicate the four dependent variables under consideration: (1) Level of Media Competency, (2) Emphasis on Development of Media Competency, (3) Level of Competency in Preparation and Use of Physical Facilities, and (4) Level of Competency in Production of Materials. Under the topic heading Additional Explorations are presented some findings which are relevant to the entire study in general but which do not belong coherently to any one of the dependent variable considerations. Certain additional explorations are included under the first four topic headings, however, when the findings are highly relevant to the dependent variable under consideration.

Brief discussions of data follow the presentation of some sets of findings, and a summary section of all data presented concludes the chapter. A compilation of all scores, means, and percentages used as the basis for rankings is presented in Appendix H of this paper.

Findings of the Study

Level of Media Competency

The first hypothesis of the study was that there would be a positive correlation between the level of media competency of teachers and the quality of educational media programs in the teacher training institutions. Accordingly, the following null hypothesis was tested:

H_{o1} : There will be no correlation between the Level of Media Competency and the Quality of the Educational Media Programs.

To determine the correlation between the two sets of data, the Spearman rank correlation coefficient (r_s) was computed. The result was $r_s = .684$. Using $N=11$ in Critical Values of the Spearman Rank Correlation Coefficient Table, an r_s of approximately .535 was found to be significant at the .05 level. Since the computed value of r_s in this case exceeds .535, the null hypothesis is rejected.

The evidence obtained indicated that there is a positive correlation between the Level of Media Competency of teachers and the Quality of the Educational Media Program in the graduating institution.

According to Ferguson, it may be more meaningful to utilize the square of the correlation coefficient. Using Ferguson's method, the correlation coefficient (in this case, .684) is first squared and then multiplied by 100 to obtain a per cent. This procedure results in a figure of 47%

in this case. Using Ferguson's analysis, the calculated $r_s = .684$ represents a 47% association between the two variables, and it can be stated that 47% of the variance of teachers' Level of Media Competency is predictable from the variance of the Quality of the Educational Media Programs. Stated more simply, in this case one knows 47% of what he would need to know in order to make a perfect prediction. However, the converse is also true, viz., that 53% of the variance in teachers' Level of Media Competency is unaccounted for.¹

Considering the lack of empirical evidence concerning media competency of teachers, it seems a definite advantage in this study to be able to establish this 47% association between Level of Media Competency and the Quality of the Educational Media Program.

Table 3 below shows the scores for each institution on the two variables and the ranks assigned on the basis of these scores. It can be seen that in the case of four institutions—A, G, I, and K—the ranks on the two variables corresponded exactly, and Institution D could be considered the same since it was one of the tied ranks. Basically, then, five of the eleven paired ranks are in the same order, thus accounting for the high positive correlation between the two variables.

Mention should be made of teacher Level of Media Competency means reported in the table. Considering the Media

¹Ferguson, Statistical Analysis, p. 116.

TABLE 3

RANKS AND SCORES OF INSTITUTIONS ON LEVEL OF MEDIA
COMPETENCY AND QUALITY OF MEDIA PROGRAM

Institution	Media Program Quality		Media Competency Level	
	Rank	Score	Rank	Mean Score
A	1	213	1	165.89
B	2	204	5	163.01
C	3	200	6	161.01
D	4.5	184	4	163.82
E	4.5	184	2	164.97
F	6	175	10	156.90
G	7	154	7	159.61
H	8	129	3	164.54
I	9	107	9	157.30
J	10	64	8	157.89
K	11	60	11	153.19

Competency Survey as a kind of test with 205 total points, it can be seen that the mean which is ranked number 1 (165.89) represents about 80% of the 205 total. Considering also a fact mentioned earlier in this report that the forty-one competencies in the survey represented quite basic skills and knowledge, this 80% is relatively low. In terms of the five-point scale in the survey, the teachers are saying, in effect, that they can perform only after study and/or review.

As a matter of exploration institutions were ranked on the basis of the per cent of teacher respondents who indicated that they had completed an audiovisual course. Substituting these rankings for the Quality of the Educational Media Pro-

gram, it was possible to determine the relationship between the Level of Media Competency and the Per Cent of Respondents Completing an Audiovisual Course. Based on the rankings presented in Table 4, this investigation resulted in an $r_s = .327$, a positive correlation but much below the .535 needed for significance at the 5 per cent level.

TABLE 4

RANKING OF INSTITUTIONS ON THE BASIS OF PER CENT OF
RESPONDENTS COMPLETING AN AUDIOVISUAL COURSE
AND LEVEL OF MEDIA COMPETENCY OF TEACHERS

Institution	A-V Course Completion		Competency Level	
	Rank	Per Cent	Rank	Score
H	1	87.14	3	164.54
B	2	86.73	5	163.01
I	3	78.64	9	157.30
D	4	61.11	4	163.82
E	5	60.66	2	164.97
F	6	59.52	10	156.90
C	7	48.04	6	161.01
A	8	46.25	1	165.89
K	9	36.54	11	153.19
J	10	33.33	8	157.89
G	11	24.24	7	159.61

Again employing Ferguson's method, squaring the correlation coefficient (.327) and multiplying by 100 yields a value of 11%. Thus, the $r_s = .327$ represents an association of only 11% between Level of Media Competency and Completion of an Audiovisual Course. Table 4 illustrates this low per cent of association. Institution H with 87% of its respondents

indicating completion of an audiovisual course ranked behind two other institutions on the basis of level of media competency. Similarly, Institutions B and I, ranked second and third on the basis of its graduates' reporting respectively 86% and 78% completion of an audiovisual course, ranked only fifth and ninth in level of media competency. Conversely, the graduates of Institution A, while indicating the highest level of media competency, reported only a 46% completion of an audiovisual course for a rank of eight.

Discussion of the findings in this section should point out that the correlation coefficient (.684) found in testing the first hypothesis is quite large. Even more meaningful is the fact that this correlation coefficient represents a 47% association between Level of Media Competency and Quality of Educational Media Program. This 47% association becomes even more significant when one considers the multitude of variables which might influence Level of Media Competency.

Examination of the effect of Completion of an Audiovisual Course on Level of Media Competency revealed the fact that (1) groups with higher percentages of teachers completing an audiovisual course have acquired no higher level of media competency than groups with fewer teachers completing a course, and (2) relatively high levels of media competency were acquired in some way other than by completion of an audiovisual course. This information tells nothing about how media competency is acquired, but it does indicate that completion of an audiovisual course does not guarantee a high level of

teacher media competency.

Emphasis on Development of Media Competency

One of the consensus generalizations from recent literature revolves around the importance of planning, systematizing, and emphasizing the development of teacher media competency. Some studies imply that emphasis on media by the entire "team" of teacher trainers will generate a higher level of media competency for the teacher graduates.

In this study two hypotheses were formulated for the examination of the variable emphasis. The first hypothesis considered the emphasis as an independent variable, and the following null hypothesis was tested:

H_{o2} : There will be no correlation between the teachers' Level of Media Competency and the Emphasis on Development of Media Competency.

To test this hypothesis, a rank correlation coefficient was computed from the rankings presented in Table 5. An $r_s = .446$ resulted. Since $r_s \geq .535$ is required to reject the null hypothesis at the .05 level of significance, it can be assumed that teachers' Level of Media Competency is not significantly related to Emphasis on Development of Media Competency.

Table 5 shows that Institution B ranked first on the basis of Emphasis on Development of Media Competency; however the graduates of Institution B reported a Level of Media Competency high enough to be ranked only fifth. By the same token, Institution A, whose teachers reported a level of com-

petency ranked first, ranked only seventh on the basis of emphasis. Institution F, with an emphasis "score" nearly three times that of Institution J, ranked two places below Institution J on the basis of teachers' competency.

TABLE 5

RANKING OF INSTITUTIONS ON THE BASIS OF
EMPHASIS ON DEVELOPMENT OF COMPETENCY
AND MEDIA COMPETENCY LEVEL

Institution	Emphasis		Competency	
	Rank	Score	Rank	Score
B	1	180.8	5	163.01
C	2	165.1	6	161.01
D	3	142.3	4	163.82
E	4	133.5	2	164.97
F	5	132.4	10	156.90
H	6	124.2	3	164.54
A	7	119.4	1	165.89
I	8	57.1	9	157.30
G	9	41.6	7	159.61
K	10	39.8	11	153.19
J	11	37.6	8	157.89

While it seems that Emphasis on Development of Media Competency would be highly associated with the Level of Media Competency attained by teachers, the findings of this study do not support this assumption. In fact, $r_s = .446$ represents an association between the two variables of slightly less than 20%, certainly not a critical relationship.

The immediate reaction to this slight relationship is to question the instrument used for collecting data on

emphasis as well as the media directors' ability to estimate the emphasis throughout the teacher training program as a whole. These possible sources of error were not supported, however, in the data presented next.

The second hypothesis regarding Emphasis on Development of Media Competency, which was the third hypothesis in the study prospectus, considered emphasis as a dependent variable and predicted a positive correlation between it and the Quality of the Educational Media Program. The following null hypothesis was tested:

H_{03} : There will be no correlation between the amount of Emphasis on Development of Media Competency and the Quality of the Educational Media Program.

Computation of $r_s = .761$ provided sufficient evidence to reject the null hypothesis with an $r_s = .729$ required for rejecting the null hypothesis at the .01 level of significance. An $r_s = .761$ represents an association between these two variables of 58%. Thus, in Ferguson's terms again, 58% of the variance in emphasis is predictable from the variance in the quality of the media program. This finding would seem to dispell doubts concerning the instrument used to collect data relative to emphasis on development of media competency, since the finding is both a logical and expected one. It is reasonable to assume and predictable that an institution with a high quality media program would emphasize the development of media competency of teachers since the means are at hand with which to effect a number of approaches toward such development.

The rankings presented in Table 6 indicate that the two variables, emphasis and quality, corresponded closely with the exception only of Institution A, which ranked first on the basis of quality and seventh on the basis of emphasis. It is interesting to note the data in this table which shows graphically the high per cent of association between these two variables.

TABLE 6

RANKS AND SCORES OF INSTITUTIONS ON QUALITY OF
MEDIA PROGRAM AND EMPHASIS ON DEVELOPMENT
OF MEDIA COMPETENCY

Institution	Quality		Emphasis	
	Rank	Score	Rank	Score
A	1	213	7	119.4
B	2	204	1	180.8
C	3	200	2	165.1
D	4.5	184	3	142.3
E	4.5	184	4	133.5
F	6	175	5	132.4
G	7	154	9	41.6
H	8	129	6	124.2
I	9	107	8	57.1
J	10	64	11	37.6
K	11	60	10	39.8

It should be noted in closing the discussion of the relationship between these two variables, emphasis and quality, that this situation illustrates one of the main weaknesses of an ex post facto study such as this. The nearly 60% association makes it simple for one to assume that a high quality

media program is a critical factor in an institution's plan to emphasize the development of media competency; however in the absence of control, such as in this study, it is equally logical to assume that the institution first decided to emphasize development of media competency and that this plan fostered the development of a high quality media program. No matter how nebulous the cause-effect relationship, however, the fact remains that this study found a 58% association between the Quality of the Educational Media Program and the Emphasis Placed on Development of Media Competency.

Level of Competency in Production of Materials

The three preceding hypotheses were all presented in the proposal for this study. It was noted previously that the suggestion of one doctoral committee member and further literature review resulted in the formulation of two additional hypotheses. These two hypotheses, one treated in this section and one in the next section of this chapter, were formulated in terms of those groups of competencies which were categorized under the headings Production of Materials, and Preparation and Use of Physical Facilities. The rationale for the formulation of both hypotheses was that competencies under both these headings might well be developed on an individualized or self-instructional basis without regard to the quality of the educational media program.

For examination of the fourth hypothesis of this study, the following null hypothesis was tested:

H_{o4} : There will be no correlation between the Level

of Competency in Production of Materials and
the Quality of the Educational Media Program.

Compilation of the data relative to these two variables resulted in the scores and ranking presented in Table 7.

TABLE 7

RANKS AND SCORES OF INSTITUTIONS ON QUALITY OF
MEDIA PROGRAMS AND LEVEL OF COMPETENCY IN
PRODUCTION OF MATERIALS

Institution	Quality of Program		Production Competency	
	Rank	Score	Rank	Score
A	1	213	1	46.40
B	2	204	3	44.12
C	3	200	4	44.06
D	4.5	184	10	43.03
E	4.5	184	2	45.50
F	6	175	8	43.36
G	7	154	6	43.43
H	8	129	7	43.40
I	9	107	5	43.69
J	10	64	9	43.29
K	11	60	11	39.95

These ranks yielded and $r_s = .716$, again with an $r_s \geq .535$ required for rejecting the null hypothesis at the 5 per cent level of significance. The null hypothesis was therefore rejected, since the findings indicated that there was a high positive correlation between the Level of Competency in Production of Materials and the Quality of the Educational Media Program. It should again be noted that $r_s = .716$ represents a greater than 50% association between the variables.

Table 7 clearly shows the close association between the two variables. In the case of only three institutions (D, E, and I) is there a difference of more than two levels in rank order. In the case of one institution (F), the difference is exactly two, and in the case of all others the difference is only one.

Table 7 also shows the mean scores of the teachers from each institution on the production of materials competencies. With a possible maximum score of sixty (60), the first ranked mean of 46.40 is approximately a 77% score in terms of per cent. Much literature dealing with educational media points to the fact that teachers tend to use more and more effectively those materials which they prepare for themselves. If this is true, then considering the relatively low production skills of the teachers in this study, these teachers are definitely under a handicap in the area of production of materials.

In pursuit of additional information related to the teachers' Level of Competency in Production of Materials, two other r_s 's were computed. The first of these sought to determine the relationship between Level of Competency in Production of Materials and total Level of Media Competency. The rankings based on these variables yielded an $r_s=.627$, large enough to establish a relationship significant at the .05 level and indicating a 39% association between the variables.

The second exploratory relationship determined was between the Level of Competency in Production of Materials and

the per cent of teachers reporting Completion of an Audiovisual Course. The computed $r_s = .191$, while indicating a positive correlation between the two variables, was well below the $r_s \geq .535$ required for significance at the .05 level. The $r_s = .191$ also represents an association of less than 4% between Level of Competency in Production of Materials and Completion of an Audiovisual Course.

The three relationships reported in this section are deserving of additional discussion. The two significant correlation coefficients (.716 and .627) indicated that Level of Competency in Production was definitely related to both the Quality of the Educational Media Program and to the total Level of Media Competency. While these two relationships are not surprising, their magnitude is, especially considering that the two r_s 's represent associations of 51% and 39% respectively. In this instance, it is again necessary to remind the reader of all the variables which might possibly influence Level of Competency in Production of Materials.

The third relationship ($r_s = .191$), representing as it does an association of less than 4% between production competency and completion of a formal audiovisual course, would seem to indicate that completion of an audiovisual course affected teachers' competency in production of materials not at all. At the very least, this finding seems to suggest that audiovisual courses either provided little training in production of materials or that the training provided was not effective. More is to be said about audiovisual courses in

a later section of this chapter.

Level of Media Competency in Equipment Operation

Competencies listed under the heading of Preparation and Use of Physical Facilities in this study could have easily and accurately been categorized as Equipment Operation. For convenience and accuracy this group of competencies will be referred to as Equipment Operation competencies from this point in the report.

As indicated in the previous section, the fifth hypothesis formulated for this study was based on evidence indicating that equipment operation competency can be acquired through a variety of self-instructional and individual types of learning techniques. It was felt, therefore, that this category of competencies would not be related to the quality of the educational media program, and the hypothesis so stated. The following null hypothesis was tested:

H_{o5} : There will be no correlation between the Level of Competency in Equipment Operation and the Quality of the Educational Media Program.

An $r_s = .580$ was computed from the ranks presented in Table 8. This is a significant correlation at the .05 level and represents a 34% association between Level of Competency in Equipment Operation and Quality of Educational Media Program.

The ranks presented in Table 8 show that in only two cases (Institutions B and K) did the ranks for program quality and competency in equipment operation correspond exactly. It

TABLE 8

RANKS AND SCORES OF INSTITUTIONS ON QUALITY OF
MEDIA PROGRAMS AND LEVEL OF COMPETENCY IN
EQUIPMENT OPERATION

Institution	Quality of Program		Equipment Operation Competency	
	Rank	Score	Rank	Score
A	1	213	6	37.19
B	2	204	2	38.10
C	3	200	5	37.46
D	4.5	184	3	38.02
E	4.5	184	4	37.50
F	6	175	7	36.62
G	7	154	10	36.08
H	8	129	1	38.60
I	9	107	8	36.32
J	10	64	9	36.09
K	11	60	11	33.81

should also be noted, however, that in only three instances (Institutions A, G, and H) was there a difference of as much as three levels in the paired rankings.

In pursuit of additional variables which might be related to Level of Competency in Equipment Operation, two different variables were substituted for program quality. The first of these was the total Level of Media Competency. The resulting $r_s = .709$ in this instance indicated a significant relationship at the .05 level between Level of Competency in Equipment Operation and total Level of Media Competency. An $r_s = .709$, it will be recalled, represents an association between variables of approximately 50%. Thus, 50% of the

variance of one of the variables should be predictable from the variance of the other.

The teachers' Level of Competency in Equipment Operation was also tested against the per cent of teachers reporting Completion of an Audiovisual Course. A significant (at the .01 level) relationship was determined on the basis of an $r_s = .809$. This correlation coefficient represents an association of 65% between these two variables. More is to be said later about this relationship.

Additional Explorations

Two of the hypotheses formulated for this study considered data from only two segments, or categories, of the Media Competency Survey—Production of Materials, and Equipment Operation. In effect, the total Level of Media Competency, itself a dependent variable, subdivided into two other dependent variables on the basis of the categorization of the specific individual competencies listed in the survey. These two categories of the survey, however, were only two of the total four categories; thus the study so far has ignored any treatment of the other two categories as separate levels of competency. The two categories in question are (1) Selection and Evaluation of Media, and (2) Utilization of Media—the very two groups of competencies, it might be argued, which are the essentials of overall media competency.

Further explorations into media competency were made by considering these two closely related categories as one variable and combining scores on the two sections of the Media

Competency Survey to obtain a mean Level of Competency in Selection, Evaluation, and Utilization of Media. Rank correlation coefficients were again determined using this as one of the variables. Three r_s 's were computed to determine the relationship between Level of Competency in Selection, Evaluation, and Utilization of Media and:

- (1) Total Level of Media Competency - $r_s=.855$
- (2) Quality of Educational Media Program - $r_s=.480$
- (3) Per cent of teachers indicating

Completion of an Audiovisual Course - $r_s=.336$

With $r_s \geq .535$ required for significance at the .05 level, it is obvious that only one of the relationships is a significant one. In this case the relationship between Level of Competency in Selection, Evaluation, and Utilization of Media and total Level of Media Competency ($r_s=.855$) is significant at the 1 per cent level. Here is indicated an association between variables of 73%.

Summary of Results

This study began with five hypotheses for examination, and in addition conducted several exploratory investigations in areas related to the variables under consideration in the stated hypotheses. The first hypothesis dealt with the relationship between the Level of Media Competency of teachers and the Quality of the Educational Media Program in the training institution. The null hypothesis was rejected at the .05 level of significance on the basis of the obtained evidence

that there was a positive correlation (.684) between these two variables.

An exploratory investigation tested the null hypothesis that there would be no correlation between teachers' Level of Media Competency and the per cent of teachers Completing an Audiovisual Course. The null hypothesis could not be rejected on the basis of a computed $r_s = .327$, substantially below the .535 required for significance at the .05 level. Thus, no evidence was obtained to establish a significant relationship between Level of Media Competency and Completion of an Audiovisual Course. This investigation indicates that relatively high levels of media competency were acquired in ways other than by completion of an audiovisual course.

The second null hypothesis tested in connection with the posited hypotheses for the study was concerned with the relationship between the teachers' Level of Media Competency and the Emphasis on Development of Media Competency reported by the training institutions. The null hypothesis was accepted on the basis of $r_s = .446$. Despite this relatively high positive correlation coefficient, the evidence is not sufficient to establish a significant relationship at the 5 per cent level. The evidence obtained in this investigation, then, does not establish that emphasis on development of teacher trainees' competency in media is a significant variable affecting the teachers' level of media competency.

The third null hypothesis tested the relationship between Emphasis on Development of Media Competency in teacher

training programs and the Quality of the Educational Media Program. This null hypothesis was rejected on the basis of the obtained $r_s = .761$, significant at the .01 level. This investigation indicated an association of 58% between these two variables, but a cause-effect relationship would be especially difficult to establish, since other information would be necessary to determine which was the independent variable. It might be argued, however, that the prior existence of either variable would affect the other, but the two could also develop together or concurrently.

The fourth and fifth hypotheses formulated for this study looked into the relationship between the Quality of the Educational Media Program and the teachers' level of competency in two categories—Production of Materials, and Equipment Operation. The evidence gathered did point to a significant relationship between program quality and Level of Competency in Production of Materials ($r_s = .716$) and also between program quality and Level of Competency in Equipment Operation ($r_s = .580$). The null hypotheses were rejected in both instances at the 5 per cent level.

Relevant to the fourth and fifth hypotheses, exploratory investigations into the relationships between competency levels in production and in equipment operation and the total Level of Media Competency indicated significant relationships in both cases at the .05 level. An $r_s = .709$ between Level of Competency in Equipment Operation and total Level of Media Competency represented a 50% association between variables;

the $r_s=.627$ between Level of Competency in Production of Materials and total Level of Media Competency represented a 39% association between variables.

Also germane to the fourth and fifth hypotheses were the relationships between the categorical competencies and the per cent of teachers reporting Completion of an Audiovisual Course. These explorations revealed the rather surprising results that Level of Competency in Production of Materials was only slightly ($r_s=.191$) related to Completion of an Audiovisual Course, while Level of Competency in Equipment Operation was highly ($r_s=.809$) related to Completion of an Audiovisual Course. The latter correlation coefficient represents a 65% association between equipment operation competency and completion of an audiovisual course, whereas the former represents only a 4% association between production competency and completion of a course.

Three additional exploratory investigations were relevant to several of the hypotheses and to the other explorations in a general way. The first of these explorations indicated an $r_s=.855$ (representing an association of 73%) between Level of Competency in Selection, Evaluation, and Utilization of Media and the total Level of Media Competency.

The second investigation revealed no significant relationship ($r_s=.480$) between Level of Competency in Selection, Evaluation, and Utilization of Media and the Quality of the Educational Media Program in the training institutions.

Finally, and surprisingly, the third investigation

indicated an $r_s=.336$, representing only and 11% association, between Level of Competency in Selection, Evaluation, and Utilization of Media and Completion of an Audiovisual Course.

CHAPTER V

SUMMARY AND CONCLUSIONS

Recapitulation

The main purpose of this study was to gather information on the quality of educational media programs in teacher training institutions, the emphasis placed on development of media competency of teacher trainees in these institutions, and the level of media competency of the teacher graduates of these institutions. The focus of the study was to discover relationships between and among these variables. In addition, certain relationships between these and other variables determined in the collection of data proved relevant to the study.

The plan of the study was to acquire from each media director in the Louisiana public teacher training institutions a rating of the educational media program in his institution and a rating of the amount of emphasis placed on development of media competency of teacher trainees in the institution. The 1972 spring and summer certified teacher graduates of the institutions, inservice teachers in Louisiana public schools as of August or September, 1972, were to supply a self-rating of their level of media competency.

Eleven of the twelve university media directors completed Fulton's "Evaluative Checklist" as a measure of the

quality of the media programs and a Media Competency Emphasis Checklist. From the same eleven institutions, 822 teacher graduates completed the Media Competency Survey.

The dependent variables used in testing proposed hypotheses were teachers' Level of Media Competency, Emphasis on Development of Media Competency of teacher trainees, Level of Competency in Production of Materials, and Level of Competency in Equipment Operation. The major independent variable was the Quality of the Educational Media Program of each institution. Emphasis on Development of Media Competency was also considered an independent variable in one hypothesis test.

The teachers' Level of Media Competency was the mean score of each group of teacher respondents graduating from the same institution. Level of Competency in Production of Materials and Level of Competency in Equipment Operation were mean scores of the same groups calculated from previously categorized sections of the Media Competency Survey. Emphasis on Development of Media Competency, whether considered as an independent or dependent variable, was each institution's score on the emphasis checklist. The Quality of the Educational Media Program was the total score for each institution on the "Evaluative Checklist."

Mean scores for each teacher group on the remaining two categories combined of the Media Competency Survey comprised the Level of Competency in Selection, Evaluation, and Utilization of Media, a variable used in additional investigations in the study. A second variable introduced for the

conduct of exploratory investigations was the per cent of teacher respondents from each institution who reported the Completion of an Audiovisual Course.

The statistic used in the analysis of data was the Spearman rank correlation coefficient (r_s). The .05 level of significance was set for rejection of the null hypotheses.

The findings of the study can be expressed in terms of the following relationships, all of which are positive correlations and significant if a level is indicated:

1. Level of Media Competency - Quality of Educational Media Program, $r_s=.684$, .05
2. Level of Media Competency - Emphasis on Development of Media Competency, $r_s=.446$
3. Emphasis on Development of Media Competency - Quality of Educational Media Program, $r_s=.761$, .01
4. Level of Competency in Production of Materials - Quality of Educational Media Program, $r_s=.716$, .05
5. Level of Competency in Equipment Operation - Quality of Educational Media Program, $r_s=.580$, .05
6. Level of Competency in Selection, Evaluation, and Utilization of Media - Quality of Educational Media Program, $r_s=.480$
7. Level of Competency in Production of Materials - Level of Media Competency, $r_s=.627$, .05
8. Level of Competency in Equipment Operation - Level of Media Competency, $r_s=.709$, .05

9. Level of Competency in Selection, Evaluation, and Utilization of Media - Level of Media Competency, $r_s=.855$, .01
10. Level of Media Competency - Completion of an Audiovisual Course, $r_s=.327$
11. Level of Competency in Production of Materials - Completion of an Audiovisual Course, $r_s=.191$
12. Level of Competency in Equipment Operation - Completion of an Audiovisual Course, $r_s=.809$, .01
13. Level of Competency in Selection, Evaluation, and Utilization of Media - Completion of an Audiovisual Course, $r_s=.336$

Conclusions

The first conclusion to be drawn from the findings of this study is an obvious one bearing out the prediction: teachers' level of media competency increased as the quality of the educational media program in the training institution increased. This conclusion is supported by findings which indicated an $r_s=.684$ between Level of Media Competency and Quality of the Educational Media Program. Thus, teacher training institutions with higher quality educational media programs did graduate teachers with a higher level of media competency than those teachers who graduated from institutions with lower quality programs.

A second conclusion is that while the emphasis placed

on development of media competency of teachers in a training institution is highly related to the quality of the institution's educational media program, greater emphasis is not translated into a higher level of media competency among the graduates of the institution. This conclusion is based on findings representing a 58% association ($r_s=.761$) between Emphasis on Development of Media Competency and Quality of the Educational Media Program, but only 20% ($r_s=.446$) between Emphasis on Development of Media Competency and teachers' total Level of Media Competency.

A related supposition was that teachers completing an audiovisual course should attain a higher level of media competency than those not having such training. The evidence in this study did not establish a significant relationship between Level of Media Competency and Completion of an Audiovisual Course but rather showed that even higher levels of media competency were reported in cases where fewer teachers completed formal audiovisual courses. The data reported in Table 2 supports this statement. Institution A ranked first in per cent of teachers completing an audiovisual course and Institution E ranked second; however the level of media competency of these same two groups of teachers was high enough to be ranked only eighth and fifth respectively. Conversely, Institutions I and B ranked ninth and fifth respectively in per cent of teachers completing a formal course in audiovisual while their teachers ranked third and second respectively on the basis of their level of media competency. The implications

must be that: (1) completion of an audiovisual course did not guarantee a higher level of media competency, and (2) a relatively high level of media competency was acquired from some source(s) other than a formal course in media.

The findings of this study indicated a 65% association ($r_s=.809$) between Level of Competency in Equipment Operation and the per cent of teachers reporting Completion of an Audiovisual Course with only 4% and 11% associations ($r_s=.191$ and $r_s=.336$) between Completion of an Audiovisual Course and Level of Competency in Production of Materials and Level of Competency in Selection, Evaluation, and Utilization of Media respectively. These associations seem to point to the conclusion that the audiovisual courses involved have been essentially "equipment operation courses."

Relative to the findings directly above was the fact that all of the categories of the Media Competency Survey were significantly related to the total level of media competency indicated. The findings of the study indicated that the relationship between total Level of Media Competency and (1) Level of Competency in Production of Materials was .627, (2) Level of Competency in Equipment Operation was .709, and (3) Level of Competency in Selection, Evaluation, and Utilization of Media was .855. Thus, while each category of competency is closely and significantly related to the total level of media competency, only one category seems to have been developed in audiovisual courses, i.e., equipment operation.

Contrary to conclusions and suppositions reported in

Chapter II, the findings of this study seem to indicate that neither completion of an audiovisual course nor emphasis on development of media competency in the teacher training program are the critical variables affecting total level of media competency.

Again contrary to conclusions reported in Chapter II as well as intuitive judgments, the conclusions to be drawn from findings relative to the relationships between media program quality and the different categories of media competencies were surprising. These findings indicated significant relationships between the Quality of the Educational Media Program and Level of Competency in Production of Materials ($r_s=.716$) and also between the Quality of the Educational Media Program and Level of Competency in Equipment Operation (.580). However, Level of Competency in Selection, Evaluation, and Utilization of Media, which competencies would seem to be more directly associated with the quality of a media program, shared only a 23% association ($r_s=.480$) with the Quality of the Educational Media Program.

These findings are even more perplexing in view of the evidence presented above showing all three categories significantly related to the total level of media competency. These findings showed a 73% association between total competency and selection, evaluation, and utilization competencies; a 47% association between total competency and program quality; but only a 23% association between program quality and selection, evaluation, and utilization competencies.

The findings of this study in general support the conclusions of Gramlich,¹ Gibbony,² and Fulton and White³ that there is a relationship between teachers' level of media competency and the quality of the educational media program in the training institution and the conclusions of de Kieffer and de Kieffer,⁴ Benda,⁵ and Camp⁶ that completion of an audiovisual course does not guarantee a higher level of media competency.

On the other hand, the findings of the study seem to be opposed to those of Oliver⁷ that emphasis on development of media competency is closely related to the level of competency attained. The findings that production and equipment operation competencies are related to the quality of the educational media program, while not actually opposing may supplement the conclusions of Torkelson⁸ and Streeter⁹ regarding the

¹Gramlich, "Status of Audio-Visual Programs."

²Gibbony, "Instructional Materials Center."

³Fulton and White, "What Constitutes Teacher Competence?"

⁴de Kieffer and de Kieffer, Media Milestones.

⁵Benda, "Improvement of Pre-Service A-V Course."

⁶Camp, "Factors Related to Utilization."

⁷Oliver, A Study of Pre-Service Teacher Education.

⁸Torkelson, An Experimental Study of Patterns.

⁹Streeter, "Relationship Among Factors Affecting Media Use."

benefits and appropriateness of self-instructional systems for acquiring production and equipment operation competencies. The conclusion here is that while level of competency in these two categories is related to the quality of the media program, the higher quality media program may well be some guarantee of the availability of such self-instructional systems and/or materials helpful to the development of these types of competencies.

A summary of the conclusions based on the findings of this study can be concisely stated as follows: teacher training institutions with higher quality educational media programs produce teacher graduates with a higher level of media competency, while those institutions with lower quality educational media programs produce teachers with a lower level media competency. If competencies are categorized, the production competencies and equipment operation competencies are significantly related to the quality of the educational media program, but selection, evaluation, and utilization competencies are not. Although emphasis on development of media competency in a teacher training institution is significantly related to the quality of the educational media program, a greater emphasis on development of media competency does not result in a higher level of media competency among graduates.

Recommendations

Based on the findings and conclusions presented in this report, certain recommendations are set forth which apply

to media directors in teacher training institutions, administrators and planners of teacher education programs, teacher inservice training planners, teachers themselves, and in general to all those who have any responsibility in the media aspect of the teacher training programs. These recommendations are further based on the assumption that development of a high level of media competency for teachers is an element to be desired, perhaps a critical element, in any program of teacher education, preservice or inservice.

Every one of the eleven institutions involved in this study indicated that there was an educational media program in existence and functioning at some quality level. The highest score, of a possible 252, on the "Evaluative Checklist" was 213, approximately 85% of the possible score. On the basis of the checklist items alone, it might be said that the highest quality educational media program among the eleven is only 85% of what it could or should be. The institution ranked last reported only 60 points on the checklist, thus indicating what might be termed 24% of quality which might be present.

Since the quality of a teacher training institution's educational media program seems to affect the level of media competency attained by the teacher graduates of the institution, those in a position to do so should initiate the necessary procedures for assuring the highest possible quality in these programs. The media directors involved in this study have already taken the first step by evaluating existing programs and now possess systematically organized data which

clearly identifies weaknesses in the programs.

The highly significant correlation between equipment operation competency and per cent teachers reporting completion of an audiovisual course, coupled with the only slight association between completion of an audiovisual course and competency in production, selection, utilization, and evaluation seems to point to the need for critical evaluation of the audiovisual courses presently offered. On the basis of the findings of this study, it seems that the present courses should either be identified as equipment operation training or redesigned to include more and/or more effective training in other categories of media competency.

Perhaps the most distressing finding of this study, from the point of media educators who have striven to include an audiovisual course in the teacher education sequence, was the low correlation (.336) between the per cent of teachers reporting completion of an audiovisual course and the level of competency in selection, evaluation, and utilization of media. If these are the critical media competencies, then definite steps must be taken for more and more effective development of them in the audiovisual courses presently offered.

Careful attention must be directed to the variable of emphasis on development of media competency. The low correlation between this emphasis and level of competency attained seems to indicate some discrepancy, perhaps in the instrument used to gather the data or, more critically, in the estimate reports themselves. The media directors along with the entire

teacher education faculty and staff may need to evaluate carefully, empirically if possible, the emphasis placed on development of media competency of teachers in their respective institutions.

The Media Competency Survey used in this study seemed to provide an adequate method for teacher self-evaluation of media competency. It was noted previously in this report that the teachers from Institution A, ranked first in level of media competency, attained a score (165.89) which represents only about 80% of the possible score of 205 on the survey. Coupled with the fact that the competencies contained in the survey were relatively basic competencies, this 80% figure does not at all represent a high level of media competency. This demonstrates a substantial need for careful attention to the development of teacher media competency on the part of preservice trainers, whether this attention be directed toward strengthening the audiovisual courses or devising other methods or approaches for the development of competency.

As inservice trainers note the relatively low level of media competency reported by teachers, they too must take steps to supplement their teachers' media competency levels. Even the teachers themselves can turn to a number of methods, such as self-instructional systems, for the improvement of their individual level of media competency.

In summary the basic recommendations of this study are as follows:

1. Since the quality of the educational media program

in the teacher training institutions seems to be related to the teacher graduates' level of media competency, the teacher training institutions should provide the highest possible quality educational media program.

2. Since the audiovisual courses presently offered seem to be providing primarily for the development of equipment operation competencies, these courses should either be designated as equipment operation training courses or evaluated and revised to include more attention to the development of the other categories of media competency.
3. Since teacher graduates of the eleven institutions included in this study seem to be attaining relatively low levels of media competency, the efforts toward development of their media competency must be heightened and/or channeled to more appropriate or effective phases of the total teacher training program.
4. Inservice trainers of teachers must compensate for the relatively low levels of media competency attained by teachers during their preservice training by establishing effective inservice programs and opportunities whereby teachers may develop and/or strengthen their present level of media competency.

Implications for Further Research

If the quality of a teacher training institution's educational media program is an important variable in the level of media competency attained by teacher graduates, then more must be known about how and to what extent this is true. Specifically, studies must be conducted to determine which specific competencies are affected in their developmental stage by the factor of a high quality media program. For example, does one hypothesize from the findings of this study that a high quality media program results in a higher level of competency in equipment operation, or does a high quality media program simply assure the availability and accessibility of the elements necessary for the development of such competencies, such as self-instructional systems and even the equipment itself?

Since this study was limited in scope to include only the public teacher training institutions of one state and a sample of its graduates presently teaching in that state, further study is necessary in order to explore the validity and generalizability of the relationships found in the study. The study could be strengthened by selecting teachers still in the institutions but toward the end of their training program to complete the Media Competency Survey. This procedure would assure teacher accessibility for the purpose of greater control in the experiment by random sampling methods. Additional evaluations of the institution's educational media program

might be obtained from the faculty and dean of the education department and the average of these evaluations used in defining the quality of the media program.

Finally, this study indicated that the quality of the educational media program in a teacher training institution is related to the level of media competency attained by the graduates of the institution; however the study neither explored nor revealed anything about the other variables which might possibly be associated with attainment of a higher level of media competency. Further research is needed to determine other variables affecting teachers' level of media competency in light of the relationships established in the present study.

BIBLIOGRAPHY

- Allen, William H., ed. A Summary of the Lake Okoboji Audio-Visual Leadership Conferences Held at the Iowa Lakeside Laboratory, Milford, Iowa, During the Years 1955-1959. Washington, D.C.: Department of Audio-Visual Instruction, 1960.
- Benda, Harold W. "A Plan for the Improvement of the Pre-Service Course in Audio-Visual Education for the State Teachers Colleges of New Jersey." Unpublished Ed.D. dissertation, New York University, 1956, Dissertation Abstracts, Vol. 18, No. 4, p. 1727.
- Brown, James W., and Thornton, James W., Jr. New Media in Higher Education. Washington, D.C.: Association for Higher Education and the Division of Audiovisual Instructional Service of the National Education Association, 1963.
- California State Department of Education. "Developing Standards for Teacher Competency in Audio-Visual Education." California Schools, XVIII (1947), 3-6.
- Camp, Maurice B. "Some Factors Related to the Utilization of Audio-Visual Materials with Suggestions for Teacher Preparation in This Area." Unpublished Ed.D. dissertation, Pennsylvania State University, 1957. Dissertation Abstracts, Vol. 18, No. 1, p. 155.
- De Bernardis, Amo, and Brown, James W. "A Study of Teacher Skills and Knowledges Necessary for the Use of Audio-Visual Aids." Elementary School Journal, XLVI (June, 1946), 550-556.
- de Kieffer, Robert E., and de Kieffer, Melissa H. Media Milestones in Teacher Training. Washington, D.C.: Educational Media Council, 1970.
- Ferguson, George A. Statistical Analysis in Psychology and Education. 3rd ed. New York: McGraw-Hill Book Co., 1971.

- Fulton, W. R. "Developing a Self-Evaluation Instrument for Appraising Educational Media Programs." Instructional Materials Centers: Selected Readings. Edited by Neville P. Pearson and Lucius Butler. Minneapolis, Minn.: Burgess Publishing Co., 1969.
- _____. "Evaluative Checklist: An Instrument for Self-Evaluating an Educational Media Program in Colleges and Universities." Washington, D.C.: Association for Educational Communications and Technology, 1970.
- _____. "A Multiple Approach for a Multi-Purpose Institution." Audiovisual Instruction, IV (January, 1959), 18-19.
- _____, and White, Frederick A. "What Constitutes Teacher Competence in Audio-Visual Communication?" Phi Delta Kappan, XL (January, 1959), 158-160.
- Gibbony, Hazel Lee. "The Instructional Materials Center in Teacher Education." Unpublished Ph.D. dissertation, Ohio State University, 1957. Dissertation Abstracts, Vol. 18, No. 4, p. 2070.
- Gramlich, Jay J. "The Status of Audio-Visual Programs in Selected Four-Year Institutions of Higher Learning as They Relate to the Preparation of Pre-Service Teachers." Unpublished Ed.D. dissertation, University of Oklahoma, 1954.
- Kerlinger, Fred N. Foundations of Behavioral Research. New York: Holt, Rinehart and Winston, Inc., 1964.
- McMahon, Marie. "A Challenge: The Systems Approach in Development of Media Competencies." Audiovisual Instruction, XII (December, 1967), 1060-1063.
- Meierhenry, W. C., ed. Media Competencies for Teachers: A Project to Identify Competencies Needed by Teachers in Newer Media and Various Approaches to Achieving Them. National Defense Education Act, Title VII, Contract No. 5-0730-2-12-6. University of Nebraska, 1966.
- Meierhenry, Wesley C. "Teacher Competencies Project." Audiovisual Instruction, XII (December, 1967), 1030-1031.
- Oliver, G. E. A Study of Pre-Service Teacher Education in the Use of Media of Mass Communication for Classroom Instruction. National Defense Education Act, Title VII, Project No. 130. University of Georgia, 1962.
- "The Pascoe Report." Audiovisual Instruction, IV (January, 1959), 6-7.

- Recommended Standards for Teacher Education: The Accreditation of Basic and Advanced Preparation Programs for Professional School Personnel. Washington, D.C.: The American Association for Teacher Education, 1971.
- Siegel, Sidney. Nonparametric Statistics. New York: McGraw-Hill Book Co., 1956.
- Siegel, Ernest. "The Competencies in the Use of Audio-Visual Instructional Materials Deemed Requisite in the Training of Teachers in the Public Elementary Schools of New Jersey with Specific Reference to the Elementary Teacher Training of the State Colleges of New Jersey." Unpublished Ed.D. dissertation, New York University, 1967.
- Streeter, Charles E. "A Study of Relationships Among Selected Factors Affecting Media Use by Classroom Teachers Within Selected School Systems." Unpublished Ph.D. dissertation, Michigan State University, 1967.
- Summary Report of the Fourth Lake Okoboji Audio-Visual Leadership Conference. Milford, Iowa: State University of Iowa and Department of Audio-Visual Instruction, 1958.
- Torkelson, Gerald M. An Experimental Study of Patterns for Improving the Preparation of Pre-Service Teachers in the Use of Audio-Visual Materials and of Effect on Pupils. National Defense Education Act, Title VII, Project No. 079. Pennsylvania State University, 1965.
- Tuckman, Bruce W. Conducting Educational Research. New York: Harcourt Brace Jovanovich, Inc., 1972.
- Zimmerman, Harry. "An Evaluation of Pre-Service Audio-Visual Experiences in Selected Oklahoma Teacher Education Institutions Based on Reactions of Teachers and Supervisors." Unpublished Ed.D. dissertation, University of Oklahoma, 1958.

APPENDIX A

EVALUATIVE CHECKLIST

EVALUATIVE CHECKLIST
AN INSTRUMENT FOR SELF-EVALUATING
AN
EDUCATIONAL MEDIA PROGRAM
IN
COLLEGES AND UNIVERSITIES

W. R. Fulton
University of Oklahoma
Norman, Oklahoma

REVISED: May 1969

REISSUED: September 1970

This instrument is part of study performed pursuant to a contract with the United States Office of Education, Department of Health, Education and Welfare, under the provisions of Title VII, Public Law 85-864.

Published by
ASSOCIATION FOR EDUCATIONAL COMMUNICATIONS AND TECHNOLOGY
Formerly
DEPARTMENT OF AUDIOVISUAL INSTRUCTION
A National Affiliate of
NATIONAL EDUCATION ASSOCIATION
1201 Sixteenth Street, N. W.
Washington, D. C. 20036

INTRODUCTION TO CHECKLIST

The Evaluative Checklist which follows has been revised from an instrument developed by W. R. Fulton.¹ The checklist has been through a try-out and validation phase. It is known that when properly applied to an institution, it will discriminate among the several levels of quality in educational media programs.

This Evaluative Checklist is based on the assumption that there are fundamental elements of an educational media program which will facilitate the improvement of instruction. The elements around which this Checklist was developed were assumed to be common to most educational media programs. These include: 1) administrators and teachers are committed to the proper use of educational media for instructional purposes, 2) educational media are an integral part of curriculum and instruction, 3) an educational media center is accessible to the faculty, 4) the physical facilities are conducive to proper use of educational media, 5) the media program is adequately financed, and 6) the staff is adequate and qualified to provide for the educational needs of all faculty members.

The status of an educational media program is not likely to be known without periodic evaluation. The use of this Checklist should greatly facilitate such an evaluation by providing useful guidelines for making judgments on program elements.

The term "educational media" as used in this instrument means all equipment and materials traditionally called "audio-visual materials" and all of the newer media such as television, overhead projectors, and programmed materials. Likewise, the terms "media" and "educational media" are used interchangeably to mean both instructional equipment and instructional materials.

Before completing the Checklist, the evaluator may want to become familiar with the inventory of educational media and pertinent physical facilities of the program being evaluated. He may also want to study the criteria relating to the elements covered in the Checklist.

¹ The original instrument was a part of a study performed pursuant to a contract with the United States Office of Education, Department of Health, Education and Welfare, under the provisions of Title VII, Public Law 85-864 by W. R. Fulton, Professor of Education, University of Oklahoma.

EVALUATIVE CHECKLIST

DIRECTIONS:

Mark one of the spaces at the left of the statement that most nearly represents the situation in your institution. If a statement accurately describes your institution, mark one of the middle spaces of 2, 5, 8, or 11 to the left of that statement. If you feel that the situation at your institution is below what is described, mark one of the lower numbered spaces of 1, 4, 7, or 10, if above, mark one of the higher numbered spaces of 3, 6, 9, or 12. In any case mark only one of the twelve spaces.

Remember, each one of the subdivisions preceded by a capital letter requires only one mark in one of the boxes numbered 1 to 12. Mark only one box in each subdivision.

EXAMPLE:

- | | | | | |
|-------------------|----|----|----|---|
| Mark only one box | 1 | 2 | 3 | There is no director of the media program. |
| | 4 | 5 | 6 | There is a part-time director of the media program. |
| | 7 | X | 9 | There is a full-time director in charge of the media program. |
| | 10 | 11 | 12 | There are a full-time director and a sufficient number of clerical and technical personnel. |

I. INSTITUTIONAL EDUCATIONAL MEDIA SERVICES

CRITERIA

- °An institution should have a program of media services administered through an educational media center, and sub-centers if such are needed, which provide the faculty with an adequate supply of appropriate instructional materials.
- °The educational media center should be a separate service unit that operates at the same level as other major institutional services.
- °An institution should have clearly defined policies, procedures, and plans for its educational media program including short-range and long-range goals.
- °There should be a sufficient number of professional media staff members to administer the educational media program and to provide consultative services to an institution's entire faculty.

A. Commitment to the Media Program

- ☐ 1 ☐ 2 ☐ 3 The institution's educational media program does not offer the services of a media center and no clerical or technical staff members are available to administer the educational media program.
- ☐ 4 ☐ 5 ☐ 6 The institution's educational media program consists of media services from a media center managed by clerical and technical staff members. The services are not well coordinated and no one person has been given administrative responsibility for institution-wide media activities.
- ☐ 7 ☐ 8 ☐ 9 The institution's educational media program consists of a media center with clerical and technical staff. The program is directed by a staff person who has some media training but not enough to qualify him as an educational media specialist. He reports to the institutional administrator directly responsible for instruction.
- ☐ 10 ☐ 11 ☐ 12 The institution has an educational media program including a media center and necessary sub-centers directed by an educational media specialist who reports directly to the administrative officer in charge of instruction. He is provided with facilities, finances, and staff essential in meeting the media needs of the instructional program.

B. Commitment to Educational Media As An Integral Part of Instruction

- ☐ 1 ☐ 2 ☐ 3 The institution provides some educational media for teachers, and no trained personnel are available to assist in the utilization of the educational media that is provided.
- ☐ 4 ☐ 5 ☐ 6 The institution has some educational media and services for faculty members who request them, but the faculty is not particularly encouraged to use the services.
- ☐ 7 ☐ 8 ☐ 9 A variety of educational media and services are generally available and some attempts are made to acquaint faculty members with the services, and to encourage their use.

Mark only one of the twelve boxes

- ☐10 ☐11 ☐12 The institution provides quantity and variety of educational media and services needed by all instructional units and encourages the faculty to use media as integral parts of instruction.

C. Commitment to Providing Educational Media Facilities

- ☐1 ☐2 ☐3 The buildings in use at this time provide for only very limited use of educational media.
- ☐4 ☐5 ☐6 Although some new and remodeled facilities provide for the use of some types of educational media, the institution gives very little attention to media utilization at the time classroom buildings are planned.
- ☐7 ☐8 ☐9 The institution provides most new and remodeled classrooms with light control and other facilities necessary for the use of some types of educational media.
- ☐10 ☐11 ☐12 All new classrooms are equipped for the greatest possible use of educational media and are designed to permit adaptation for the use of new developments in media. Old classrooms are being modified as fast as possible to provide for effective use of media.

D. Commitment to Financing the Educational Media Program

- ☐1 ☐2 ☐3 Finances for the educational media program are not included in the budget.
- ☐4 ☐5 ☐6 The major source of income for the educational media program is that received for media services rendered to instructional departments and non-institutional users, and the budget is based on immediate needs only.
- ☐7 ☐8 ☐9 The educational media program is partially financed by regularly appropriated institutional funds and partially by income derived from services to non-institutional users. Long-range plans are occasionally considered when making the budget.
- ☐10 ☐11 ☐12 The educational media program is financed entirely from regularly appropriated institutional funds when media and services are used for instructional purposes. The budget reflects to some degree long-range educational media plans and includes provision for special media for unusual curriculum problems. The budget is prepared, presented, and defended by the director of the media services in the same manner as that of any other budget unit.

E. Commitment to Staffing the Educational Media Program

- ☐1 ☐2 ☐3 The responsibility for utilization of educational media services rests entirely with the individual teacher who desires such services.
- ☐4 ☐5 ☐6 The responsibility for educational media services is assigned to various institutional staff members whose primary commitments are in other institutional jobs.
- ☐7 ☐8 ☐9 The responsibility for educational media services is delegated to a person who has had some training in educational media. He is provided some clerical and technical assistance.
- ☐10 ☐11 ☐12 Leadership and consultative services are provided by an educational media specialist and a qualified professional staff, all of whom have faculty status. An adequate clerical and technical staff is also provided.

II. EDUCATIONAL MEDIA SERVICES – CURRICULUM AND INSTRUCTION

CRITERIA

- °An institution should engage in a continuous evaluation of its educational media program as it relates to the instructional program.
- °Continuous inservice education in the use of educational media should be carried on as a means of improving instruction.
- °The faculty and the professional media staff should cooperate in planning and developing the parts of the instructional program that make provisions for the use of educational media.
- °Professional educational media personnel should be readily available for consultation on all instructional problems where media are concerned.

A. Consultative Services in Educational Media Utilization

- ☐ 1 ☐ 2 ☐ 3 There are no educational media personnel available to provide for consultative services.
- ☐ 4 ☐ 5 ☐ 6 Educational media personnel render consultative assistance in the instructional application of educational media when they are asked to do so and are free from other duties.
- ☐ 7 ☐ 8 ☐ 9 Educational media personnel are usually available and are called on for consultative assistance in the use of educational media.
- ☐ 10 ☐ 11 ☐ 12 Educational media professional personnel work as a part of their regular assignments with faculty members in analyzing teaching needs and in designing, selecting, and using educational media to meet these needs.

B. Media Services to Educational Preparation Programs

- ☐ 1 ☐ 2 ☐ 3 No inservice education activities relating to the utilization of educational media are provided.
- ☐ 4 ☐ 5 ☐ 6 The educational media program provides some media services for teacher preparation programs, but the department or college of education depends on its own leadership for planning media experiences in preparation programs for prospective teachers and media specialists.
- ☐ 7 ☐ 8 ☐ 9 The educational media program provides some media services and leadership for the teacher preparation programs, and gives some assistance in providing preview opportunities for those wishing to examine instructional materials.
- ☐ 10 ☐ 11 ☐ 12 Professional media personnel participate in the pre-service training of teachers through appropriate assignment to teach professional courses and by serving in a consultative capacity to the education faculty. The educational media service center provides necessary media and services not otherwise available to the instructional program in education.

Remember – Mark only one of the twelve boxes

C. Faculty-Student Use of Educational Media

- Remember - Mark only one of the twelve boxes
- 1 2 3 None of the teachers nor students make any use of educational media in their individual presentations.
- 4 5 6 Only a few faculty members make any use of educational media in their classrooms. Students rarely use media in class presentations.
- 7 8 9 Quite a few faculty members make occasional use of educational media in their classrooms. Students occasionally use media in class presentations.
- 10 11 12 Most faculty members use appropriate educational media for instructional purposes. Students also use appropriate media for individual and group study as well as for class presentations.

D. Involvement of Media Staff In Planning

- 1 2 3 There are no professional educational media staff available, therefore they cannot be involved in planning for the use of educational media.
- 4 5 6 The professional educational media staff is seldom involved with the faculty in planning for the use of educational media.
- 7 8 9 The professional educational media staff is occasionally involved with the faculty and staff in planning and producing materials for use in the instructional program.
- 10 11 12 The educational media specialist and his professional staff are usually involved with the faculty in planning for the use of and in experimenting with educational media in the instructional program. He is also regularly involved in decision making activities relating to the integration of educational media with the curriculum and instruction.

III. THE EDUCATIONAL MEDIA CENTER

CRITERIA

- °Educational media centers should be organized around the concept of offering a wide variety of services and media to all instructional and administrative units of an institution, with leadership, consultative help, and other services provided by professional media specialists and other media center personnel.
- °The instructional program should be supported by an adequate supply of educational media and a system of making them accessible to the faculty and students.
- °The educational media center should provide such media services as procurement, maintenance, and production of appropriate educational media to support the instructional program.

A. Location and Accessibility of Educational Media

- 1 2 3 The institution does not have an educational media center and does not have access to such services and media as might be rendered from an educational media center.

- 4 5 6 The location of the main educational media center is such that media are not accessible to most faculty members, and the main center is not supplemented by sub-centers where media are placed on long-term loan.
- 7 8 9 The location of the main educational media center is such that media are not very accessible to the faculty, but the main center is supplemented by sub-centers which duplicate some of the services of the main center.
- 10 11 12 The location of the main educational media center and the presence of necessary sub-centers make media highly accessible to all instructional units. Both the main center and the sub-centers are fully equipped to support a quality instructional program.

B. Dissemination of Media Information

- 1 2 3 Information concerning educational media is never disseminated to prospective users as a matter of policy, but occasionally information concerning educational media might be secured upon request.
- 4 5 6 Information concerning educational media is seldom disseminated to prospective users, and there are no definite plans or channels for such dissemination.
- 7 8 9 Information concerning educational media is disseminated to the faculty and staff on an occasional basis or when requested.
- 10 11 12 Information concerning educational media is frequently disseminated to the faculty, students, and staff as a matter of policy.

C. Availability of Educational Media

- 1 2 3 Educational media is practically nonexistent and responsibility for obtaining such materials rest entirely with the user.
- 4 5 6 The quantity of educational media is so limited that significant delays occur between requests for materials and their availability. Reservations must be made on a "first served" basis, and the media must be picked up by the user.
- 7 8 9 There is sufficient quantity of educational media to make it possible for them to be delivered on relatively short notice.
- 10 11 12 There is sufficient quantity of educational media to insure their delivery to the point of use at any time during the week in which they are requested.

D. Storage and Retrieval of Media

- 1 2 3 There are practically no media storage facilities and those that are available are most difficult to locate and retrieve.
- 4 5 6 Media storage facilities are available but are inadequate for some type of media, and personnel have difficulty in locating and retrieving specific items.
- 7 8 9 The main educational media center and all sub-centers have enough storage shelves and drawers for currently owned instructional materials. The retrieval system is adequate most of the time.

Remember — Mark only one of the twelve boxes

- 10 11 12** Adequate storage space, including space for future expansions, is provided in the main educational media center and in all sub-centers with proper humidity control where needed. The center has a master retrieval system for immediate location of media.

E. Maintenance of Media

- 1 2 3** The institution has no provision for cleaning and repairing educational media.
- 4 5 6** Educational media are cleaned and repaired when complaints regarding their operable condition are made by users.
- 7 8 9** Educational media are repaired and cleaned whenever the maintenance staff has the time to do so.
- 10 11 12** All educational media are inspected after each usage and are cleaned and repaired on a regular basis, or when inspection indicates the need.

F. Production of Media

- 1 2 3** Practically no facilities for production are made available to teachers in producing their own materials.
- 4 5 6** Limited production facilities are available for faculty members to produce their own materials.
- 7 8 9** The educational media personnel, as well as faculty members, produce some educational materials. The staff of the center is limited to the extent that all demands for productions cannot be met.
- 10 11 12** The educational media personnel produce a variety of educational media not otherwise available, and meet most production demands for such media as films, filmstrips, slides, graphics, and recordings.

IV. PHYSICAL FACILITIES FOR EDUCATIONAL MEDIA

CRITERIA

- ° Each classroom should be designed for and provided with essential facilities for effective use of appropriate educational media of all kinds.
- ° Each classroom should be equipped with full light control, electrical outlets, forced ventilation, and educational media storage space.
- ° Classrooms should be equipped with permanently installed bulletin boards, chalkboards, projection screens, map rails, and storage facilities needed for the particular type of instruction conducted in each room.

Remember — Mark only one of the twelve boxes

A. Physical Facilities in Existing Classrooms

- 1 2 3 No classrooms have been modified for use of educational media and no systematic plans have been made to adopt such classrooms for use of media.
- 4 5 6 A few classrooms have been modified for use of educational media. However, no systematic plans have been made to adapt all classrooms for the use of educational media, except that some departments have made such plans for their own classrooms.
- 7 8 9 Some classrooms have been modified and equipped with such physical facilities as light control and electrical outlets and others are partially equipped. A plan for systematically equipping all classrooms is in operation.
- 10 11 12 All classrooms have been modified and equipped for optimum use of all types of educational media.

B. Physical Facilities in New Classrooms

- 1 2 3 Most classrooms are not provided with physical facilities that make possible the use of educational media.
- 4 5 6 Some new classrooms are provided with physical facilities such as light control and electrical outlets, but only in special cases are provisions made for the use of a wide variety of media.
- 7 8 9 Most new classrooms are provided with physical facilities that make possible optimum use of educational media.
- 10 11 12 All new classrooms are designed for and equipped with physical facilities that make possible optimum use of all types of educational media by faculty and students.

V. BUDGET AND FINANCE OF THE EDUCATIONAL MEDIA PROGRAM

CRITERION

Financing the educational media program should be based on both the institution's long-range goals and immediate educational needs. The budget should reflect a recognition of long-range goals, and be sufficient to support an adequate media program for optimum instructional improvement.

A. Reporting Financial Needs

- 1 2 3 The financial needs of the educational media program are almost never reflected in the budget and are never reported to the administrative officer.
- 4 5 6 The financial needs of the educational media program are reported to the chief administrative officer in charge of instruction only when immediate expenditures are urgently needed.
- 7 8 9 The financial needs of the educational media program are regularly reported to the chief administrative officer in charge of instruction.
- 10 11 12 Regular reports reflecting the status and needs of the educational media program, including facts about inventory, facilities, level of utilization and effectiveness of the media program, are made to the chief administrative officer in charge of instruction.

B. Basis for Budget Allocations

- ☐ ☐ ☐ The budget does not usually contain an allotment for educational media.
- ☐ ☐ ☐ The educational media budget is based on an arbitrary allotment of funds irrespective of need.
- ☐ ☐ ☐ The budget is based almost entirely on immediate needs, though some consideration is given to long-range goals.
- ☐ ☐ ☐ The budget is based on both the immediate needs and the long-range goals of the institution and reflects clear-cut policies concerning allocations, income sources, and budget practices.

C. Development of Media Budget

- ☐ ☐ ☐ There is no provision for the development of a separate educational media budget.
- ☐ ☐ ☐ Each instructional department develops its own educational media budget without consulting an educational media specialist.
- ☐ ☐ ☐ The budget of the educational media program reflects the media needs of most instructional units. However, some departments have their own media budgets which have no relationship to the educational media program.
- ☐ ☐ ☐ The budget of the educational media program reflects the media needs of the entire institution and is developed by the professional media staff in consultation with departmental administrators.

VI. EDUCATIONAL MEDIA STAFF**CRITERION**

The educational media program should be directed by a well qualified full-time media specialist who is provided with sufficient professional, clerical and technical staff to provide adequate media services to all institutional programs.

- ☐ ☐ ☐ No person has been assigned to look after the media program. Utilization of educational media is entirely the responsibility of the user.
- ☐ ☐ ☐ An institutional staff person has been assigned to look after the educational media program. He performs more as a clerk, and a technician than as a professional media person.
- ☐ ☐ ☐ A professional media person with some special media training, or equivalent experiences is in charge of the educational media program and has some professional assistance. He and his assistants are primarily oriented toward the mechanical and technical aspects of the program.
- ☐ ☐ ☐ The educational media program is directed by a well qualified educational media specialist who is provided with sufficient professional, clerical and technical staff to provide adequate educational media services. He and his professional staff are instruction and curriculum oriented.

APPENDIX B

MEDIA COMPETENCY SURVEY

Dear Teacher:

This is a survey of first-year teachers who graduated from public Louisiana teacher training institutions and are now teaching in Louisiana public schools. The first part of the survey asks you to give certain data about yourself and your professional training. The second part, preceding which there are detailed instructions, asks you to rate your own knowledge and skills relative to educational media, or audiovisual materials and equipment.

All data received from individual teachers in this survey will be, first, strictly confidential and also grouped by institutions from which the respondents graduated. You will not be identified as an individual; your individual "score" or responses will not be analyzed; you will not be judged in any way on the basis of your responses. You will note, in fact, that your name will not appear on the response sheets. In light of the above you should feel free to respond as carefully and as honestly as you can in rating your own media competencies.

Thank you very much for participating in this survey. It is being conducted as part of a doctoral dissertation. Should you be interested in the study and wish to receive a summary when it is completed, you may so indicate in the space provided at the bottom of this page and return this page with your survey.

Thank you for your help.

Name _____

Address _____

PROFESSIONAL DATA

1. Institution from which you graduated _____
2. Date of graduation _____ 3. Degree _____
4. Certified to teach _____ (grade level) _____ (subject)
5. Date began teaching _____
6. Now teaching _____ (grade level) _____ (subject)
7. In your teacher training program, did you take a formal course in educational media, or audiovisual?
 Yes _____ No _____
 - a. If you did have a course,
 - (1) Was it required? Yes _____ No _____
 - (2) What was the title of the course? _____
 - (3) Did you have more than one course? Yes _____ No _____
 - (4) Did the course consist of more than equipment operation? Yes _____ No _____
 - b. If you did not have a course,
 - (1) Was a course available, to your knowledge? Yes _____ No _____
 - (2) Which of the below provided you with some knowledge of and skills in audiovisual? (If more than one is applicable rank in descending order – most, 1; next, 2; etc.)
 - ___ General education course(s)
 - ___ Methods course(s)
 - ___ Course(s) in major field
 - ___ Practice teaching
 - ___ Self-instructional laboratory
 - ___ Observation of college teachers
 - ___ Observation of public school teachers
 - ___ Other (Please indicate what.) _____
8. How would you indicate the amount of emphasis given to educational media or audiovisual materials and equipment in your teacher training program?
 Much _____ Some _____ Very little _____ None _____

INSTRUCTIONS FOR MEDIA COMPETENCY CHECKLIST

The items on the following pages describe some of the things teachers do as they use educational media, or audiovisual materials and equipment. Before each item are five numbered spaces, each of which represents a way in which you might judge yourself as being able to do or not do the task specified in the item. The meaning of each number on the scale is reproduced below and while the meaning remains the same throughout, also appears at the top of each page of the checklist for convenient reference.

- | | |
|---|--|
| 1 | I <u>definitely could not</u> do this. |
| 2 | Even after review and/or practice I <u>probably could not</u> do this. |
| 3 | After review and/or practice I <u>probably could</u> do this. |
| 4 | After review and/or practice I <u>definitely could</u> do this. |
| 5 | I <u>definitely could</u> do this. |

Two things of importance must be noted about the scale and the checklist. First, the scale is worded so that you may respond to each item in terms of your ability on the day you began your present job as a beginning teacher; disregard any abilities you may have acquired, by practice, self-instruction, inservice training, or the like, after you began your present job.

The second important point about the scale concerns the meaning of spaces 2, 3, and 4. While each indicates your judgment of your ability to perform the task specified, all of these choices additionally indicate some preservice training experience, learning, familiarity, etc. on your part. The essential element of each of these choices, then, is that checking any of them indicates that in your teacher training program you did have experience concerning the specified task.

Be as objective as possible as you judge your ability in regard to each item. Remember that your individual responses are not to be evaluated in any way. Check only one numbered space for each item, but be sure you check one space for every item.

102
MEDIA COMPETENCY CHECKLIST

Using the scale below, check only one numbered space for each of the items on this and the following pages.

- ☐ 1 I definitely could not do this.
- ☐ 2 Even after review and/or practice I probably could not do this.
- ☐ 3 After review and/or practice I probably could do this.
- ☐ 4 After review and/or practice I definitely could do this.
- ☐ 5 I definitely could do this.

PREPARATION AND USE OF PHYSICAL FACILITIES

- ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 1. Set up and operate at least one kind of 16mm motion picture projector for classroom use.
- ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 2. Set up and operate at least one kind of 35mm filmstrip projector for classroom use.
- ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 3. Set up and operate at least one kind of 35mm slide projector for classroom use.
- ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 4. Set up and operate an overhead projector for classroom use.
- ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 5. Set up and operate an opaque projector.
- ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 6. Operate such audio equipment as record players and tape recorders.
- ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 7. Arrange and operate a television receiver for classroom use.
- ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 8. Operate a spirit duplicator or mimeograph to produce printed materials.
- ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 9. Perform simple maintenance on projection equipment, such as replacing lamps and cleaning lenses.

PRODUCTION OF MATERIALS

- ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 1. Design and construct appropriate display devices, such as bulletin boards, feltboards, and exhibits.
- ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 2. Design and produce overhead transparencies using the thermal heat process (Thermofax).

- ☐ 1 I definitely could not do this.
- ☐ 2 Even after review and/or practice I probably could not do this.
- ☐ 3 After review and/or practice I probably could do this.
- ☐ 4 After review and/or practice I definitely could do this.
- ☐ 5 I definitely could do this.

- ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 3. Design and produce overhead transparencies using the diazo (ammonia) process.
- ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 4. Design and prepare handmade overhead transparencies, using marking pens, pencils, adhesive film, and the like.
- ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 5. Use mechanical lettering guides, such as a Wrico set.
- ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 6. Mount graphic and pictorial materials, using some kind of cement or dry mount tissue.
- ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 7. Construct models, or build dioramas, or work with papier-mache.
- ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 8. Make an audio tape recording of one voice or source, using a microphone.
- ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 9. Make an audio tape recording by dubbing from noncopyright records and/or tapes.
- ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 10. Plan and produce slide-tape sequences for instructional presentations.
- ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 11. Write, edit, and evaluate programmed instruction sequences.
- ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 12. Determine when local production would have inherent educational value, whether or not commercially prepared material might be available.

SELECTION AND EVALUATION OF MEDIA

- ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 1. Specify in behavioral terms the learning task for which a medium (filmstrip, record, etc.) is to be used.
- ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 2. Store and maintain a personal file of audiovisual materials for teaching.

- ☐ 1 I definitely could not do this.
- ☐ 2 Even after review and/or practice I probably could not do this.
- ☐ 3 After review and/or practice I probably could do this.
- ☐ 4 After review and/or practice I definitely could do this.
- ☐ 5 I definitely could do this.

- ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 3. Recall several services a teacher could expect from a media center and its personnel.
- ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 4. Locate and acquire materials from one or more sources of free materials.
- ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 5. Locate and acquire materials from sources available at the state level.
- ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 6. Locate and acquire materials from sources available at the local school district level.
- ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 7. Recall unique characteristics of various media.
- ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 8. Explain the various roles media play in the instructional process, for example, record instruction, extend the teacher, etc.
- ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 9. Select media for specific purposes and learners on the basis of principles derived from learning and communication theories.
- ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 10. Recall results of research studies which have implication for using media in teaching.

UTILIZATION OF MEDIA

- ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 1. Incorporate media into the "flow" of a lesson.
- ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 2. Introduce media presentations effectively.
- ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 3. Follow-up media presentations effectively.
- ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 4. Use media in complementary combinations.
- ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 5. Try out and test variations in the use of media.
- ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 6. Design and arrange the learning space to support the most effective use of media.

- ☐ 1 I definitely could not do this.
- ☐ 2 Even after review and/or practice I probably could not do this.
- ☐ 3 After review and/or practice I probably could do this.
- ☐ 4 After review and/or practice I definitely could do this.
- ☐ 5 I definitely could do this.

- ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 7. Adapt techniques of media usage to facilitate the use of media with learning groups of various sizes.
- ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 8. Overcome media limitations through appropriate methodology and editing or restructuring of the medium itself.
- ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 9. Guide students in the selection, production, and use of media for their own purposes.
- ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 10. Evaluate the effectiveness of the use of media in teaching.
-

Note: (1) Be sure you marked only one numbered space for each item.

- (2) If you checked spaces 2, 3, or 4, be sure you considered the meaning of the phrase "review and/or practice" as explained in the introduction.
- (3) Be sure that you have evaluated your own abilities as honestly and objectively as possible.

THANK YOU FOR YOUR HELP.

APPENDIX C

MEDIA COMPETENCY EMPHASIS CHECKLIST

MEDIA COMPETENCY EMPHASIS CHECKLIST

Instructions

On the following pages are listed forty-one (41) specific media competencies considered desirable for teachers to possess. Before each competency is a line, the right extreme of which represents much emphasis (M) while the left extreme represents no emphasis (N). You are asked to mark an "X" at some point on each line to represent the amount of emphasis placed on the development of the specific media competency in the teacher training program at your institution. In other words, you are attempting to answer the following question for each of the items listed:

In the teacher training program at my institution, how much emphasis is placed on training the prospective teacher to . . . (add the specific media competency)?

If possible, please try to consider the emphasis placed on development of media competencies in courses other than audiovisual courses.

EXAMPLE:



108
MEDIA COMPETENCY EMPHASIS CHECKLIST

N

M

Set up and operate at least one kind of 16mm motion picture projector for classroom use.

Set up and operate at least one kind of 35mm filmstrip projector for classroom use.

Set up and operate at least one kind of 35mm slide projector for classroom use.

Set up and operate an overhead projector for classroom use.

Set up and operate an opaque projector.

Operate such audio equipment as record players and tape recorders.

Arrange and operate a television receiver for classroom use.

Operate a spirit duplicator or mimeograph to produce printed materials.

Perform simple maintenance on projection equipment, such as replacing lamps and cleaning lenses.

Design and construct appropriate display devices, such as bulletin boards, feltboards, and exhibits.

Design and produce overhead transparencies using the thermal heat process (Thermofax).

Design and produce overhead transparencies using the diazo (ammonia) process.

Design and prepare handmade overhead transparencies, using marking pens, pencils, adhesive film, and the like.

Use mechanical lettering guides, such as a Wrico set.

Mount graphic and pictorial materials, using some kind of cement or dry mount tissue.

Construct models, or build dioramas, or work with papier-mache.

Make an audio tape recording of one voice or source, using a microphone.

N

M

Make an audio tape recording by dubbing from noncopyright records and/or tapes.

Plan and produce slide-tape sequences for instructional presentations.

Write, edit, and evaluate programmed instruction sequences.

Determine when local production would have inherent educational value, whether or not commercially prepared material might be available.

Specify in behavioral terms the learning task for which a medium (filmstrip, record, etc.) is to be used.

Store and maintain a personal file of audiovisual materials for teaching.

Recall several services a teacher could expect from a media center and its personnel.

Locate and acquire materials from one or more sources of free materials.

Locate and acquire materials from sources available at the state level.

Locate and acquire materials from sources available at the local school district level.

Recall unique characteristics of various media.

Explain the various roles media play in the instructional process, for example, record instruction, extend the teacher, etc.

Select media for specific purposes and learners on the basis of principles derived from learning and communication theories.

Recall results of research studies which have implication for using media in teaching.

Incorporate media into the "flow" of a lesson.

Introduce media presentations effectively.

Follow-up media presentations effectively.

N

M

Use media in complementary combinations.

Try out and test variations in the use of media.

Design and arrange the learning space to support the most effective use of media.

Adapt techniques of media usage to facilitate the use of media with learning groups of various sizes.

Overcome media limitations through appropriate methodology and editing or restructuring of the medium itself.

Guide students in the selection, production, and use of media for their own purposes.

Evaluate the effectiveness of the use of media in teaching.

APPENDIX D

INSTRUCTIONS TO PUBLIC SCHOOL OFFICIALS

Dear Sir:

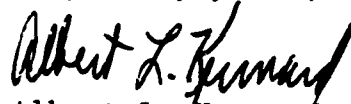
Thank you very much for agreeing to help in this collection of data. The survey is to include only first-year teachers who graduated from the twelve public Louisiana teacher training institutions. Your help will make it possible to contact all of these teachers presently teaching in Louisiana public schools.

You are asked to do the following things:

1. Identify in your school system all the first-year teachers who graduated from the twelve public Louisiana teacher training institutions.
2. Assure that each of these teachers receives a survey form and urge them to complete the form and return it to you as soon as possible.
3. Return the completed forms in the self-addressed, postage free envelope(s) provided.
4. Indicate on the attached form the information requested and return it with the survey forms.

Thank you very much for your time and efforts. Your generous contribution to this study is most sincerely appreciated.

Very truly yours,


Albert L. Kennard

School System _____

Number of first-year teachers in the system who
graduated from any of twelve public Louisiana
teacher training institutions _____

Number of survey forms distributed _____

Number of survey forms completed and returned _____

Send a summary of the completed study to

APPENDIX E

LETTER TO REGISTRARS

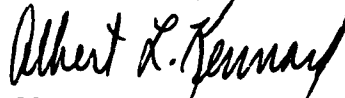
Dear Sir:

I am the supervisor of federal programs for the Jefferson Davis Parish School Board and am working on a dissertation for a doctor's degree from the University of Oklahoma. My dissertation involves a survey of beginning teachers who graduated from Louisiana public teacher training institutions and are presently teaching in Louisiana public schools.

Many of these teachers have already been asked to complete the survey form involved, and I now need to know approximately what percentage of all 1971-72 graduates have actually participated in the study. Please be so kind as to furnish me the information requested below as soon as possible. Simply fill in the information and return this letter to me in the self-addressed stamped envelope.

Thank you very much for your prompt attention. If we in Jeff Davis Parish can be of any service to you or your institution, we would certainly welcome the opportunity.

Very truly yours,



Albert L. Kennard

Semester	Number of students receiving teacher's certificate
----------	---

Spring 1972

Summer 1972

APPENDIX F

LOUISIANA PUBLIC FOUR-YEAR TEACHER
TRAINING INSTITUTIONS

LOUISIANA PUBLIC FOUR-YEAR TEACHER
TRAINING INSTITUTIONS

Grambling College of Louisiana, Grambling
Louisiana State University, Baton Rouge
Louisiana State University in New Orleans, New Orleans
Louisiana Tech University, Ruston
McNeese State University, Lake Charles
Nicholls State University, Thibodaux
Northeast Louisiana University, Monroe
Northwestern State University of Louisiana, Natchitoches
Southeastern Louisiana University, Hammond
Southern University, Baton Rouge
Southern University in New Orleans, New Orleans
University of Southwestern Louisiana, Lafayette

APPENDIX G

LETTER TO MEDIA DIRECTORS

Dear Sir:

This is in relation to our recent conversation regarding my study for a doctoral dissertation at the University of Oklahoma. A brief summary of the plan for this study is enclosed. Thank you very much for agreeing to participate in this study, which, it seems, could provide information valuable to all of us who are interested in both teacher training and media programs in our state institutions.

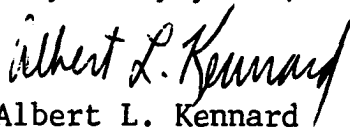
Enclosed are two instruments, both of which are preceded by instructions for completion. Dr. W.R. Fulton's "Evaluative Checklist" is designed for self-evaluation of a college or university media program. Only one factor need be mentioned regarding this instrument. You should complete it in terms of your media program for the 1971-72 terms. If, for example, major changes have been made in your program for this year, you should disregard the changes and respond to the items on the basis of your program as it existed last year.

The other instrument is a "Media Competency Emphasis Checklist," which asks you to estimate the amount of emphasis placed on development of media competencies of teacher trainees at your institution. This instrument, of course, should also be completed in terms of the programs operating last year at your institution.

Two copies of each instrument are enclosed. Please complete one copy of each and return it in the self-addressed, postage-free envelope enclosed. The second copy of each instrument is for your use. Please indicate on the copy you return the name of your institution. Needless to say, no institution will be referred to by name in the printed results of this study.

Thank you very much for your help in this study. Please complete the instruments promptly and return them to me. You will receive a summary of the study when it is completed.

Very truly yours,


Albert L. Kennard

APPENDIX H

RANKS OF INSTITUTIONS ON ALL VARIABLES WITH
SCORES, MEANS, AND PERCENTAGES
USED AS BASIS FOR RANKING

INSTITUTION A

VARIABLE	SCORE	RANK
Quality of Educational Media Program	213	1
Media Competency Level of Teachers	165.89	1
Emphasis on Development of Media Competency of Teacher Trainees	119.4	7
Teachers' Level of Competency in Production of Materials	46.40	1
Teachers' Level of Competency in Equipment Operation	37.19	6
Teachers' Level of Competency in Selection, Evaluation, and Utilization of Media	82.28	3
Per Cent of Teachers Indicating Completion of an Audiovisual Course	46.25%	8

INSTITUTION B

VARIABLE	SCORE	RANK
Quality of Educational Media Program	204	2
Media Competency Level of Teachers	163.01	5
Emphasis on Development of Media Competency of Teacher Trainees	180.8	1
Teachers' Level of Competency in Production of Materials	44.12	3
Teachers' Level of Competency in Equipment Operation	38.10	2
Teachers' Level of Competency in Selection, Evaluation, and Utilization of Media	80.79	5
Per Cent of Teachers Indicating Completion of an Audiovisual Course	86.73%	2

INSTITUTION C

VARIABLE	SCORE	RANK
Quality of Educational Media Program	200	3
Media Competency Level of Teachers	161.01	6
Emphasis on Development of Media Competency of Teacher Trainees	165.1	2
Teachers' Level of Competency in Production of Materials	44.06	4
Teachers' Level of Competency in Equipment Operation	37.46	5
Teachers' Level of Competency in Selection, Evaluation, and Utilization of Media	80.09	7
Per Cent of Teachers Indicating Completion of an Audiovisual Course	48.04%	7

INSTITUTION D

VARIABLE	SCORE	RANK
Quality of Educational Media Program	184	4.5
Media Competency Level of Teachers	163.82	4
Emphasis on Development of Media Competency of Teacher Trainees	142.3	3
Teachers' Level of Competency in Production of Materials	43.03	10
Teachers' Level of Competency in Equipment Operation	38.02	3
Teachers' Level of Competency in Selection, Evaluation, and Utilization of Media	82.77	1
Per Cent of Teachers Indicating Completion of an Audiovisual Course	61.11%	4

INSTITUTION E

VARIABLE	SCORE	RANK
Quality of Educational Media Program	184	4.5
Media Competency Level of Teachers	164.97	2
Emphasis on Development of Media Competency of Teacher Trainees	133.5	4
Teachers' Level of Competency in Production of Materials	45.50	2
Teachers' Level of Competency in Equipment Operation	37.50	4
Teachers' Level of Competency in Selection, Evaluation, and Utilization of Media	81.97	4
Per Cent of Teachers Indicating Completion of an Audiovisual Course	60.66%	5

INSTITUTION F

VARIABLE	SCORE	RANK
Quality of Educational Media Program	175	6
Media Competency Level of Teachers	156.90	10
Emphasis on Development of Media Competency of Teacher Trainees	132.4	5
Teachers' Level of Competency in Production of Materials	43.36	8
Teachers' Level of Competency in Equipment Operation	36.62	7
Teachers' Level of Competency in Selection, Evaluation, and Utilization of Media	76.92	12
Per Cent of Teachers Indicating Completion of an Audiovisual Course	59.52%	6

INSTITUTION G

VARIABLE	SCORE	RANK
Quality of Educational Media Program	154	7
Media Competency Level of Teachers	159.61	7
Emphasis on Development of Media Competency of Teacher Trainees	41.6	9
Teachers' Level of Competency in Production of Materials	43.43	6
Teachers' Level of Competency in Equipment Operation	36.08	10
Teachers' Level of Competency in Selection, Evaluation, and Utilization of Media	80.62	6
Per Cent of Teachers Indicating Completion of an Audiovisual Course	24.24%	11

INSTITUTION H

VARIABLE	SCORE	RANK
Quality of Educational Media Program	129	8
Media Competency Level of Teachers	164.54	3
Emphasis on Development of Media Competency of Teacher Trainees	124.2	6
Teachers' Level of Competency in Production of Materials	43.40	7
Teachers' Level of Competency in Equipment Operation	38.60	1
Teachers' Level of Competency in Selection, Evaluation, and Utilization of Media	82.51	2
Per Cent of Teachers Indicating Completion of an Audiovisual Course	87.14%	1

INSTITUTION I

VARIABLE	SCORE	RANK
Quality of Educational Media Program	107	9
Media Competency Level of Teachers	157.30	9
Emphasis on Development of Media Competency of Teacher Trainees	57.1	8
Teachers' Level of Competency in Production of Materials	43.69	5
Teachers' Level of Competency in Equipment Operation	36.32	8
Teachers' Level of Competency in Selection, Evaluation, and Utilization of Media	77.29	10
Per Cent of Teachers Indicating Completion of an Audiovisual Course	78.64%	3

INSTITUTION J

VARIABLE	SCORE	RANK
Quality of Educational Media Program	64	10
Media Competency Level of Teachers	157.89	8
Emphasis on Development of Media Competency of Teacher Trainees	37.6	11
Teachers' Level of Competency in Production of Materials	43.29	9
Teachers' Level of Competency in Equipment Operation	36.09	9
Teachers' Level of Competency in Selection, Evaluation, and Utilization of Media	78.51	9
Per Cent of Teachers Indicating Completion of an Audiovisual Course	33.33%	10

INSTITUTION K

VARIABLE	SCORE	RANK
Quality of Educational Media Program	60	11
Media Competency Level of Teachers	153.19	11
Emphasis on Development of Media Competency of Teacher Trainees	39.8	10
Teachers' Level of Competency in Production of Materials	39.95	11
Teachers' Level of Competency in Equipment Operation	33.81	11
Teachers' Level of Competency in Selection, Evaluation, and Utilization of Media	79.43	8
Per Cent of Teachers Indicating Completion of an Audiovisual Course	36.54%	9

73

23946

