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THE UNIVERSITY OF OKLAHOMA GRADUATE COLLEGE

AN EVALUATION OF EDUCATIONAL MEDIA PROGRAMS IN OKLAHOMA UNIVERSITIES AND COLLEGES

A DISSERTATION

SUBMITTED TO THE GRADUATE FACULTY

in partial fulfillment of the requirements for the

degree of

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BY

ROY CURTIS ALLEN

Norman, Oklahoma

1972

AN EVALUATION OF EDUCATIONAL MEDIA PROGRAMS IN OKLAHOMA UNIVERSITIES AND COLLEGES

APPROVED BY

DISSERTATION COMMITTEE

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AN EVALUATION OF EDUCATIONAL MEDIA PROGRAMS IN OKLAHOMA UNIVERSITIES AND COLLEGES

CHAPTER I

Introduction

American educational systems have experienced marked changes during the past half century in an effort to catch up with the everincreasing demands on our complex time. National leaders have become increasingly convinced that education is essential not only for making self-government work and teaching the equality of man but also for survival and progress.

Various forces are placing our educational system under increasing stress: rising birth rates are leading to rising enrollments; expanding knowledge in many fields is dictating a modification of the curriculum; and advancing technology is influencing the instructional process. 1

Leaders in the field of educational reform have emphasized the vital need for using a more varied array of impressions in teaching in order that learning can take place more naturally and effectively.

¹James W. Brown, Richard B. Lewis, and Fred F. Harcleroad, A-V Instruction Media and Methods (New York: McGraw-Hill Book Company, 1969), p. 16.

Their ideas have gradually found their way into modern educational practice and a degree of acceptance of these methods and techniques has been achieved in our institutions. While the fundamentals of educational media have been utilized for generations, their full potential in our educational system is far from being recognized.

Research has indicated the potential of educational media.

The values in the use of field trips, flat pictures, filmstrips, slides, motion pictures, television, teaching machines, and other media have been carefully studied and reported.

The instructional process is the heart of education. Development in communications reveal possibilities for improvement of the process by making it more effective and efficient. Indeed, such improvement may come, for basically education is instructionalized communication.

New technological developments in media communication have extended the meaning of the "instructional materials." A few decades ago, the "older" medium--print--was supplemented by audiovisual materials such as motion pictures, filmstrips, slides, disc and tape recordings, and radio. These materials offer the instructor the possibilities for accelerating and enriching the learning process.

The "newer" media--closed circuit television, teaching machines, media packages, computers, audio tutorial systems, dial access retrieval systems, micro image systems, and the like--have revealed still other instructional possibilities. Many believe that carefully designed and integrated learning or educational media materials in the forms of

unified package of printed and audiovisual media can serve as more than adjuncts for the teacher. If they are used on the basis of teaching tasks of the moment and the special contribution to learning each can make, they can serve the instructor as a variety of teaching tools.

Since World War II, there has been a tremendous expansion of the educational media field. Signs of rapid growth appear in the upsurge of local, state, and national educational media associations; in educational media textbooks and periodicals; and in educational media departments in universities and colleges.

In 1948 a study revealed that 36 of 56 university extension divisions reporting had separate departments furnished for educational media education.³ This is approximately 66 percent.

The whole logic of the educational media department revolves around the concept that instructors in education will gain results accordingly as they are able to do things with things. The instructors must be supplied with all possible services in the way of materials, equipment, and guidance in order that the desired instructional objectives may be met.⁴

The recognized requirements for improving the quality of instruction will focus attention on enormous tasks of selecting,

²James W. Brown and Kenneth P. Norberg, <u>Administering Educational Media</u> (New York: McGraw-Hill Book Company, 1965), p. 14.

³W. R. Fulton, <u>The Oklahoma Audiovisual Program: An Evaluation</u> (Norman: University of Oklahoma, 1956), p. 14.

⁴Nelson B. Henry, <u>Audiovisual Materials of Instruction</u>, The Forty-Eighth Yearbook of the National Society for the Study of Education (Chicago: University of Chicago Press, 1949), p. 105.

organizing, producing and recording, and distributing instructional materials. Educational media centers are needed. They could be the focus of interinstructional efforts in producing and distributing instructional materials of proved quality.⁵

The contribution which educational media makes to instruction in a university or college is determined largely by the extent to which institutions provide educational media to instructors and students.

Few efforts have been made to determine the degree to which Oklahoma universities and colleges make educational media services available to instructors. Educational leaders in Oklahoma need to know which elements of educational media programs in universities and colleges are in need of improvement. A review of the literature revealed that no statewide study has been conducted for the express purpose of evaluating educational media programs in universities and colleges of Oklahoma.

A pilot study of ten teacher training institutions in Oklahoma was conducted by an audiovisual committee representing East Central State College, Ada, Oklahoma. Educational media program results indicated that very few higher education institutions in Oklahoma had adequate media centers. Data were collected and analyzed using

⁵Samuel Baskin, <u>Higher Education: Some Newer Developments</u> (New York: McGraw-Hill Book Company, 1965), p. 151.

⁶Carlton W. H. Erickson, Administering Instructional Media Programs (New York: The MacMillian Company, 1970), pp. 22-24.

⁷Roy C. Allen, "Unpublished Survey of Audiovisual Programs in Ten Teacher-Training Institutions in Oklahoma," (Ada, Oklahoma: East Central State College, 1970).

Fulton's⁸ instrument and Faris'⁹ standards. As a result of this study, the investigator became interested in the following problem.

Statement of the Problem

The problem of this study was to evaluate the educational media programs in Oklahoma's universities and colleges. The investigator was trying to determine whether adequate educational media programs were more prevalent in universities and senior colleges than in junior or community colleges; and to determine whether adequate educational media programs were more prevalent in state-owned universities and colleges than in independent colleges. More specifically, this study made an analysis of the data to see if there was a relationship between the quality of the educational media programs and the quantity of personnel, equipment, and materials available to the media programs.

Purposes of the Study

The purposes of this study were to evaluate the educational media programs of all Oklahoma universities and colleges. Stated more specifically, the purposes of this study were (1) to compare the educational media programs of all universities and senior colleges to all junior and community colleges; (2) to compare the educational media

⁸W. R. Fulton, Evaluative Checklist: An Instrument for elf-Evaluating an Educational Media Program in Colleges and Universities (Washington, D.C.: Association for Educational Communications and Technology, formerly Department of Audiovisual Instruction, NEA, 1970).

⁹Gene Faris and Mendel Sherman, <u>Quantitative Standards for</u>
Audiovisual Personnel, Equipment, and <u>Materials in Elementary, Secondary, and Higher Education</u> (Washington, D.C.: National Education Association, Department of Audiovisual Instruction, 1966).

programs of all state-owned universities and colleges to all independent colleges; (3) to make an analysis of the data to see if there was a relationship between the quality of the educational media program and the quantity of personnel, equipment, and materials available to the media program; and (4) to make an analysis of the data to see if there was a relationship between the position of the educational media director's immediate supervisor and the qualitative data as measured by the evaluative instrument. Finally, the investigator used the results obtained from these comparisons to formulate recommendations for the improvement and continued expansion of educational media programs of all Oklahoma universities and colleges.

Hypotheses

For the purpose of this study, the investigator extended the following propositions:

- There will be a difference in the qualitative and quantitative data recorded for all state-owned universities and senior colleges and the qualitative and quantitative data recorded for all independent colleges.
- There will be a difference in the qualitative and quantitative data recorded for universities and senior colleges and the qualitative and quantitative data recorded for all junior and community colleges.
- 3. There will be a correlation between the qualitative and quantitative data recorded for all universities and colleges.
- 4. There will be a positive correlation between the quality of the educational media program and the position of the immediate supervisor of the educational media director in all Oklahoma universities and senior colleges.
- 5. There will be a positive correlation between the quality of the educational media program and the position of the immediate supervisor of the educational media director in all Oklahoma junior and community colleges.

Assumptions

For the purpose of this study, the investigator made the following assumptions:

- 1. That the evaluation instruments--Evaluative Checklist: An Instrument for Self-Evaluating an Educational Media Program in Colleges and Universities and Quantitative Standards for Audiovisual Personnel, Equipment, and Materials in Higher Education--are valid and reliable measures of the educational media programs of universities and colleges.
- That the number of universities and colleges used in the sample is of adequate size from which to generalize results.
- 3. That the data collected are pair-wise independent.
- 4. That the data collected are bivariate normal in their distribution.
- 5. That the variances of the different groups are statistically equal.

Deliminations and Limitations

The delimitations of this study are restricted to all Oklahoma universities and colleges both state-owned and independent. It is further delimited to include only the educational media programs of the universities and colleges.

This investigation was limited to six major aspects concerning the quality of the educational media program and three major aspects concerning the quantity of the educational media program. First the six major aspects of the quality of the educational media program will be presented followed by the three major aspects concerning the quantity of the educational media program.

The first aspect is the commitment of the institutions to be provisions of a wide variety of educational media services. Elements included in the first aspect are as follows:

- 1. Commitment to media program.
- 2. Commitment to educational media as an integral part of instruction.
- 3. Commitment to providing educational media facilities.
- 4. Commitment to financing the educational media program.
- 5. Commitment to staffing the educational media program.

The second aspect deals with the relationship of the educational media program to the instructional program. The second aspect includes the following elements:

- 1. Consultative services in educational media utilization.
- 2. Media services to educational preparation programs.
- 3. Faculty-student use of educational media.
- 4. Involvement of media staff in planning.

The institutional educational media center is the third aspect. Elements included in this aspect are as follows:

- 1. Location and accessibility of educational media.
- Dissemination of media information.
- Availability of educational media.
- 4. Storage and retrieval of media.
- 5. Maintenance of media.
- 6. Production of media.

The fourth aspect is the physical facilities which are provided for the utilization of educational media in instruction. This aspect includes the following two elements:

- 1. Physical facilities in existing classrooms.
- 2. Physical facilities in new classrooms.

The fifth aspect deals with the financial support provided for the educational media program and with the educational media budget.

The following elements are included in this aspect:

- 1. Reporting financial needs.
- 2. Basis for budget allocations.
- 3. Development of the media budget.

The professional, technical, and clerical media staff represent the sixth aspect. Elements included in the sixth aspect are as follows:

- 1. Instructional system media staff.
- 2. Instructional system media director.

The first major aspect concerning the quantity of the educational media personnel and supporting staff consists of personnel in the areas of administration, graphics, film production, audio production, instructional television, technicians and secretarial help.

The second major aspect deals with the audiovisual equipment related to the educational media program. This consists of 16 mm sound projectors, 8 mm projectors, 2"X 2" slide projectors, filmstrip or combination filmstrip projectors, 3½" X 4" auditorium projectors, overhead projectors (10" X 10" classroom type and 10" X 10" auditorium type), opaque projectors, record players, tape recorders, projection

carts, projection screens, electronic learning labs, video-tape recorders, television receivers, closed circuit television studio, and local production equipment.

The third major aspect deals with materials. Major elements included in this aspect are 16 mm films, filmstrips, and audio recordings (tape and disc, but not electronic learning lab materials).

The six major aspects of the quality of the educational media program and the three major aspects dealing with the quantity of the educational media program are directly related to the instruments used to evaluate the educational media program.

Definition of Terms

<u>Clerical Personnel</u>--This term includes the media staff who perform the duties of secretaries, distribution clerks, and filing clerks.

Community Junior College--This term refers to public colleges owned by the state, community, or municipality and that receive the majority of its financial support from state funds rather than private sources. These institutions provide at least two, but fewer than four years of educational opportunity beyond high school. (See Appendix F.)

<u>Evaluation</u>--This term refers to the appraisal of an educational media program based on established criteria which relate to specific elements of the program.

Educational Media -- This term pertains to all non-book materials used for teaching and learning purposes and the equipment necessary for the use of these materials.

Educational Media Coordinator--This term pertains to the supervisor of the educational media program in a specific department or division of the educational institution.

Educational Media Director -- This term refers to the supervisor of the educational media program for the entire educational system being surveyed.

Educational Media Program--This term refers to the total efforts of an educational system to provide educational media services to its faculty and students.

Independent Junior College--This term defines the colleges that are owned and governed by a particular religious sector denomination and that receives the majority of their financial support from private rather than state funds. These colleges provide at least two, but fewer than four years of educational opportunity beyond high school. (See Appendix F.)

Independent College-This term refers to four-year colleges and/or universities that are owned and governed by a particular religious sector denomination and that receives the majority of their funds from private rather than state funds. (See Appendix F.)

<u>Institution</u>--This term includes all universities and colleges, regardless of size and type, engaged in providing higher educational experiences for students.

<u>Professional Media Staff</u>--This term pertains to personnel who have special training required in the operation of the media program.

Included in this category were photographers, graphic artists, and film librarians who were engaged in media activities.

<u>Self-Evaluation</u>--This term represents the appraisal of an educational media program by officials of the institution whose program is being evaluated.

State-Owned Junior College--This term includes those colleges owned by the state, community, or municipality and that receive the majority of their support from state funds. These institutions provide at least two, but fewer than four years of educational opportunity beyond high school. (See Appendix F.)

State-Owned University or Senior College--This term pertains to those universities and/or colleges that are owned by the state, community, or municipality and that receive the majority of their financial support from state government rather than private sources.

(See Appendix F.)

Technical Personnel--This term includes the media staff who are engaged in activities in the area of equipment and material repair, film inspection, and materials production.

Qualitative Data--This term defines the data recorded for each institution for the purposes of determining the value of their educational media program in terms of how good it is and how useful it is in relation to known standards.

Quantitative Data--This term includes the data recorded for each institution for the purposes of determining how many and how much in terms of educational personnel, equipment, and materials.

CHAPTER II

REVIEW OF THE LITERATURE

A review of the literature revealed that a number of studies have been reported concerning the educational media programs in public schools. Initially the forces of educational change and institutional improvement were focused upon the elementary and secondary schools.

Numerous studies during the past decade have dealt with various dimensions of educational media and their application to the solutions of problems related to instruction. These research studies specifically relate to selected media and the utilization techniques used for the improvement of instruction both in public schools and institutions for higher education.

The professional literature directly related to this study is somewhat limited; however, in recent years there has been increased emphasis on media programs in higher education as a result of the Higher Education Act of 1965. Most of the studies in the past have dealt with media programs or the development of media programs in specific institutions.

The investigations reported in the literature which relate to this study include national surveys, university extension divisions, and senior institutions engaged in teacher education. These studies were conducted from 1923 to 1970.

Although other studies reported in this literature have relevance to this research, two national studies included in the literature have particular implications. These studies, known as the Higher Education Media Studies (HEMS), were conducted in 1962 and 1967.

The study of audiovisual services in universities and colleges began in 1910 at the University of Texas with the founding of a Bureau of Visual Instruction. From 1910 until 1948 the literature on audiovisual research in higher education is somewhat limited, but a few studies were conducted.

In 1923, McClusky conducted the first national study of the administration of audiovisual education. He made the following recommendations from his study:

- 2. A clearing house for administrative information needs to be established.
- Educational institutions . . . should materially increase their financial support of bureaus of visual education, thus placing them on a sound and respectable economic base.
- 4. Departments of visual instruction should secure funds and time for carrying forward experiments and surveys in the field.
- 5. The training of teachers in the use and value of visual instruction should be promoted
- 6. The administrative status of directors of visual education needs to be clearly defined

¹F. Dean McClusky, "The Administration of Visual Education: A National Survey," (unpublished report, Washington, D.C.: National Education Association, 1923), p. 89.

7.	Directors of visual instruction should draw up a uniform set of record and report forms, thus enabling each one to interpret intelligently the statistics gathered by another.
	• • • • • • • • • • • • • • • • • • • •
9.	Education experts should assist in the creation of all visual aids
10.	All activities of visual education should look toward the mental development of the individual child
15.	Methods of selecting visual materials for school use need to be systematically analyzed and a more scientific procedure evolved
16.	Catalogues (of audiovisual material) need to be carefully graded and systematically arranged to correlate with the course of study
22.	City and state bureaus should make systematic studies of the materials in circulation in terms of their use by patrons.
23.	Adequate housing, storage, and transportation facilities should be furnished every bureau.
26.	Those state institutions and city school systems which comtemplate the organization of visual instruction in a separate department should build on the experience and success of a large group of educational institutions which have been pioneers in the field 2
	Dent, in 1930, made a survey of visual instruction budgets among
members	of the National University Extension Association. This study
reveale	d the following:
1.	Seventeen University Extension Divisions maintained a a visual instruction service;

²<u>Ibid</u>., pp. 181-184.

- 2. Annual budgets ranged from \$100 to \$24,675;
- 3. An average of 8.28 percent of the general extension division budgets was being used for visual instruction service; and
- 4. The percentage of the budget secured through appropriations ranged from 6 to 100 percent.³

A study was conducted at Columbia University in 1948, sponsored by the Office of the Provost, for the purposes of analyzing the existing audiovisual needs and facilities at Columbia. Jenson's recommendations for reorganization of the audiovisual services at Columbia University have important implications for this study. He recommended coordinated audiovisual activities within a centralized administrative unit. According to Jenson, the major financial support for the center should be derived from direct university appropriations; equipment and operator services should be provided without charge for official university use. 4

In 1950, Swartout reported the trends in the administration of ten colleges and universities. His findings were as follows:

- 1. Expansion of audiovisual services in both depth and scope were taking place;
- 2. A trend toward centralizing the administration of equipment and expensive audiovisual materials was noted; and
- 3. Less expensive equipment was centrally administered but decentralized according to use,5

³Ellsworth C. Dent, "Report of the Budget Survey," in National University Extension Association, <u>Volume Fourteen Proceedings</u> (Bloomington: Indiana University Press, 1932), pp. 88-91.

⁴Herbert Roland Jenson, "A Survey of Audiovisual Activity at Columbia University and Recommendations for Its Improvement," (unpublished doctor's dissertation, Columbia University, 1949), p. 33.

⁵Sherwin G. Swartout, "Administrative Practices of Selected Colleges and University Audiovisual Centers," (unpublished doctor's dissertation, Ohio State University, 1950), pp. 110-111.

Four patterns of administrative organization were found to exist. Audiovisual centers were organized in (1) university extensions; (2) Colleges of Education; (3) university libraries; and (4) as separate units directly responsible to the university administration. Swartout concluded that the latter pattern was most desirable and efficient, and developed a normative plan for the organization of audiovisual services with lines of responsibility directly to the president.

A research study in 1952 on audiovisual services in colleges and universities was conducted by the Association of College Research Libraries. The institutions reporting (84% of the total number) had taken steps to meet campus audiovisual needs, although the extent of the services provided indicated that only a few United States colleges and universities have developed adequate audiovisual services. More than half of the institutions reporting (53%) had developed centralized audiovisual services. Larger institutions tended toward centralization of services in an audiovisual agency while smaller institutions more often developed centralized audiovisual services in the library.

A survey of college and university in-service audiovisual programs by Sands in 1953 revealed that out of the 112 institutions reporting, 104 maintained an equipment center for campus utilization.

A striking prepondenance of the colleges and universities are providing centralized services in audiovisual education consisting of films and projector equipment. There is general

^{6&}lt;u>Ibid.</u>, pp. 259-290.

^{7&}quot;Audiovisual Services in Colleges and Universities in the United States," (Tuscon: Association of College and Research Libraries, 1953), p. 17.

recognition that these services are insufficient but a persistent optimism is expressed that conditions will continually improve.⁸

Wait, in 1953, made a study for the purposes of discovering and to describe the administrative audiovisual patterns in operation in selected teachers colleges in the United States with some analysis of their strengths and weaknesses. His major findings have important implications for this study. They were as follows:

- Most common administrative practice in the eight teacher colleges make the audiovisual program responsible to the education department with some lines of authority emanating from the president's office.
- Sources of support are through film rentals, college budgets, and cooperative arrangements with state departments and public schools.
- Average expenditures for the eight college audiovisual programs was \$23,703.
- 4. Film libraries average 738 prints per library. An average of 18 prints per faculty member was used during 1931-1952.
- 5. Seven of the eight colleges extended off campus services to public schools. This service consisted chiefly of film distribution.

From his findings, Wait made the conclusions which follow:

1. The type of administrative organization in and of itself is of little account in determining the scope of the audio-visual program. A desire for an audiovisual program by the college administration and leadership on the part of those in charge of the program are essential.

⁸Lester B. Sands, <u>College and University In-Service A-V Programs</u>, An Analysis of Resources from 112 Colleges and Universities (Goleta: University of California, Santa Barbara College, 1953), p. 11.

⁹Clifford V. Wait, "A Study of Audiovisual Programs in Selected Teachers Colleges in the United States for the Purpose of Identifying and Describing Some Effective Administrative Patterns," (unpublished Dissertation, Indiana University, 1953), as quoted in <u>Dissertation</u> Abstract, Vol. 13, n. 5-6, p. 1108.

- 2. Direct appropriation to the audiovisual center through an approved college budget supplemented by cooperative arrangements for sharing materials and/or off-campus charges seem to be the most effective means of supporting such programs.
- 3. Audiovisual programs in teachers colleges can improve by establishing better accounting systems, acquiring a competent staff, further developing in-service and pre-service training, and expanding production and utilization services on-campus. 10

Wait made recommendations important to this study. They were as follows:

- 1. Teachers colleges should develop adequate, coordinated audiovisual programs to meet local on-campus and off-campus needs in terms of the utilization and production of materials as well as training and research in audiovisual education.
- Organize the audiovisual programs as separate administrative units with their functions interrelated with the functions of the departments involved in related activities.
- 3. Establish long-term budgets with adequate accounting systems for the audiovisual program.
- 4. Develop utilization and production services in a way that the college faculty and students can take full advantage of the audiovisual materials for instruction purposes. 11

In 1954 Minor studies audiovisual programs in four-year Negro colleges and universities. The purpose of this study was to determine to what extent audiovisual activities existed in the four-year, Negro, accredited colleges and universities, to analyze the organizational structure and the functions of the "better" audiovisual programs in Negro colleges and universities, and to suggest various approaches to the improvement

^{10&}lt;sub>Ibid., pp. 1108.</sub>

¹¹Ibid., pp. 1108.

of present audiovisual programs or for the development of new programs.

A few recommendations made by Minor have important implications for this study. They were as follows:

- 2. Programs of audiovisual education should be organized or reorganized to meet the educational objectives of the institutions in which they are located.
- 3. The audiovisual program should function through an audiovisual center, centrally located with adequate space, materials, and equipment, and have a direct line of authority to the president or policy making body.

- 5. The size of the audiovisual staff should increase as demands for services increase, and a full-time audiovisual director should be appointed with academic rank equal to that of other staff members with similar administrative responsibilities.
- 6. Audiovisual services, within the institution limitations, should be extended beyond the limits of the campus to assist in meeting the educational needs of the community. 12

A status study by Hailer in 1955 of audiovisual faculty needs in the College of Letters and Sciences at the University of Wisconsin found that appropriate materials and services were not available. He made the following recommendations for that institution:

- The staff and facilities of the Bureau of Audiovisual Instruction be expanded to more adequately meet campus needs;
- 2. The library of audiovisual materials be expanded;
- 3. All classrooms be equipped for use of audiovisual materials;
- 4. A graphic arts service be established as a campus service; and

¹² Edward Orville Minor, "An Analytical Study of Audiovisual Programs in Four Year Accredited Negro Colleges and Universities," (unpublished dissertation, Indiana University, 1954), as quoted in <u>Dissertation Abstract</u>, Vol. 14, n. 10-12, pp. 1587-1588.

5. An audiovisual coordinator in each department act as liaison between the department and the Bureau. 13

DeKieffer's study in 1959 of activities of four-year institutions engaged in teacher education has some implications for this study. Data compiled from his 1947 and 1957 questionnaires showed that there is a direct relationship between the size of the student body of an institution and the probability that it is conducting an audiovisual program. 14 It was interesting to note, from this study, that a large number of denominational colleges and universities answering the questionnaire in 1947 have inaugurated audiovisual programs within a ten year period. DeKieffer credits thir trend to the acceptance of instructional materials and their impact on teaching and learning.

A study completed in 1960 by Hoyes was conducted for the purpose of surveying 14 state teachers colleges in Pennsylvania. This study was concerned with the organization and administration of audiovisual programs as they existed in the state teachers colleges. Hoyes' survey included four major areas: finance, personnel, materials, and services. His following recommendations are important to this study:

The following recommendations were offered in the financial phase:

1. The State Department of Public Instruction should provide funds for a separate budget at each of the 14 state teachers colleges.

¹³Harold Herman Hailer, "A Study of the Role of the Campus Audio-Visual Service Center in Providing Audiovisual Materials for the Faculty of the College of Letters and Science of the University of Wisconsin," (unpublished doctor's dissertation, University of Wisconsin, 1955), pp. 122-130.

¹⁴E. R. DeKieffer, "AV Activities of Colleges and Universities," Audiovisual Communication Review, 1959, 7(2), 124.

- 2. Each Pennsylvania Regional Film Library at the state teachers college should keep the rental fees collected and improve the local program.
- 3. Each state teachers college should plan an annual budget to include the two funds mentioned above.

In the personnel phase the following recommendations were made:

- 1. Certification requirements should be planned and adopted to improve personnel selection.
- 2. More nonprofessional members should be added to the audiovisual Center staffs.
- More student projectionists should be employed for classroom projection.
- 4. Audio-Visual Faculty Committee members should be chosen on a rotating membership basis.
- 5. All the college audio-visual programs should be organized and controlled through the Education Departments.

The following recommendations were made in the materials phase:

- 1. Obsolete films and filmstrips should be removed from the film libraries.
- 2. More new films, filmstrips, and recording disks and tapes should be added to the college Centers.
- 3. As many rooms as possible should be prepared for projection situations.
- 4. Supplements to the initial publication of the <u>Curriculum</u> Bulletin should be published periodically.

In the services division of the study the following recommendations were offered:

- Each audio-visual program should offer a workshop course to follow the required course in audio-visual education.
- 2. More preview and listening rooms should be made available on all campuses to encourage more requests for films, filmstrips, and recordings.

 Each audio-visual Center should publish and distribute information which would inform students, faculty, and interested public school personnel of the available equipment, materials, and services of the college Center.

The first of two national studies having particular implications on this study is Higher Education Media Study (HEMS) which was conducted in 1962 by the Association of Higher Education and the Division of Audio-visual Instructional Services of the National Education Association. This was a study to assess the scope of the emerging educational media programs.

New Media in Higher Education was the result of the first national study. This publication described the emerging patterns of administrative organization and the innovative use of media in colleges and universities. A summary of the results of the study indicated that the appropriate use of educational media could make a significant contribution to the improvement of instruction, both to teaching and learning. The study indicated that learning centers or resource centers are beginning to develop. According to the study, an overarching philosophy or theory is needed to accommodate the utilization of the new media. 16

¹⁵Jack Francis Hoyes, "The Organization and Administration of Audiovisual Programs in the State Teachers Colleges of Pennsylvania," (unpublished doctor's dissertation, University of Pittsburg, 1960), as quoted in <u>Dissertation Abstract</u>, Vol. 21, n. 1-3, pp.552-553.

¹⁶J. W. Brown and J. W. Thornton, Jr., New Media in Higher Education (Washington, D.C.: Association of Higher Education and National Education Association, Division of Audiovisual Instruction Services, 1963), pp. 165-177.

New Media and College Teaching was the second higher education media study. Conducted in 1968, it up-dated the previous research and provided increased scope and depth. 17

During the period between the two studies, The Higher Education

Act of 1965 was passed. The purpose of the Act was to improve undergraduate instruction by providing financial assistance on a matching fund basis for the acquisition of instructional equipment and materials.

Basically, the Act provided resources for the development of comprehensive educational media programs to service the instructional needs of the institutions.

Part B, Faculty Development Programs, of the Higher Education

Act of 1965 provided grants designed to enhance the proficiency of faculty personnel in the use of educational media. The goal of the program was to give faculty members a theoretical and practical background in educational media. The objective was to clarify for the faculty personnel such things as which educational media are available, appropriate facilities needed for the use of various media, theoretical bases for the use of the media, how programs involving their use are developed, strengths and weaknesses of media programs, and how they may be integrated into an effective

¹⁷J. W. Thornton, Jr., and J. W. Brown, New Media and College Teaching (Washington, D.C.: National Education Association, Department of Audiovisual Instruction, 1968).

¹⁸ Alfred Dubbe, Peter J. Esseff, and John W. Westfall, "The Higher Education Act of 1965: The College Equipment Grant Program, Title VI, Part A," Audiovisual Instruction (Washington, D.C.: National Education Association, Department of Audiovisual Instruction, December, 1966), pp. 826-828.

instructional program. This objective was usually met at the institutions through workshops or institutes. 19

During the period between the two HEMS studies there was considerable expansion in the application of educational media to the solution of instructional problems. The concepts identified in the first HEMS study were more fully developed and implemented in many institutions of higher learning by the time the second study was conducted. 20

The editors of <u>New Media and College Teaching</u> expressed an observation which has significant implications to this study.

. . . no permanent and lasting effect in improving instruction through the application of new media will occur until there is a substantial institutional commitment to the purpose. $^{21}\,$

This observation reflects a direct parallel to Fulton's "Criteria Relating to Educational Media Programs in Colleges and Universities,"22 and the "Evaluative Checklist: An Instrument for Self-Evaluating an Educational Media Program in Colleges and Universities."23 Administrative staffs of institutions must be committed to all aspects of an educational

¹⁹ Archie R. Ayers, "Educational Media in Colleges and Universities: Title VII-B, The Higher Education Act of 1965," <u>Audiovisual Instruction</u> (Washington, D.C.: National Education Association, Division of Audiovisual Instruction, December, 1967), pp. 1044-1045.

²⁰ Thornton and Brown, New Media and College Teaching, pp. 131-144.

^{21 &}lt;u>Ibid</u>., p. 146.

²²W. R. Fulton, "Criteria Relating to Educational Media Programs in Colleges and Universities," (Washington, D.C.: National Education Association, Department of Audiovisual Instruction, 1968).

²³W. 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, formerly Department of Audiovisual Instruction, NEA, 1970).

media program in order to improve the quality of instruction by the appropriate utilization of educational media.

According to Thornton and Brown, institutional commitment to this purpose must include at least the following elements:

. . . (a) administrative involvement expressed in financial support and in recognition of faculty participation, by means both of release time and of promotional policies; (b) adequate capital investments in both space and equipment; (c) technical staff to assist instructors in development of materials and in operation of technical equipment, with leadership of faculty status . . . (d) faculty interest in improving the quality of instruction. 24

Fulton's administrative commitment extends equally to each element of the educational media program. He states that a commitment should include:

. . . (a) the media program; (b) educational media as an integral part of instruction; (c) providing educational media facilities; (d) financing the media program; and (e) staffing the media program.²⁵

If Eurich's prediction about higher education in the twenty-first century is to become a reality, institutional commitment will be a necessity. Eurich predicted, "The most radical difference between today's colleges and those fifty years ago, however, is not in the curriculum, but in the use of learning resources." A commitment by the institution must be implemented for the development of a strong educational media program to introduce students to quality educational experiences. The educational media program should include services which would provide

Thornton and Brown, New Media and College Teaching, p. 146.

²⁵Fulton, <u>Criteria</u>, pp. 1-3.

²⁶A. C. Eurich, "Higher Education in the 21st Century," in G. Hass and K. Wiles, <u>Readings in Curriculum</u> (Boston: Allyn and Bacon, 1965), p. 564.

resources in areas of technology, appropriate utilization of educational media and human resources. The resources would provide the appropriate tools for the purpose of integrating the educational media into the instructional process.

The following concluding observations were made by Thornton and Brown:

- 1. Application of technology to higher education seems to have been far more adaptive than creative.
- 2. There is . . . need for concentrated effort both nationally and within regions and single institutions on the development of materials of instruction to be used with new media.
- 3. . . . physical facilities for instructional application of new media are still inadequate.
- 4. . . . faculty development programs are essential elements in efforts to modernize instruction.
- 5. . . . the systematic approach to instruction offers promise for the attainment of economics of efforts and of instructional time in higher education. 27

Observations made by Thorton and Brown are relevant to the development of educational media programs in higher education. However, this investigator believes that a more significant observation, which the HEMS editors express as institutional commitment, may be more important to the development of educational media programs.

The observations of HEMS were supported by Diamond in his belief that college and university administrators must be committed to improving the quality of education through improvement of instruction. Diamond suggested six ingredients that are essential, however, only three of these ingredients are related to this study.

²⁷ Thornton and Brown, New Media and College Teaching, pp. 145-146.

Recognition of the responsibility of the administration as well as the faculty for instruction.

Support personnel and related production capabilities . . . ideally, graphic, photographic, television, audio production, specialist in programmed instruction . . . computer assisted instruction.

Time and money . . . for faculty release time and support staff, material development, purchase of specialized pieces of equipment and materials 28

Quantitative Standards for Audiovisual Personnel, Equipment, and Materials in Elementary, Secondary, and Higher Education has been available from the Department of Audiovisual Instruction since 1966. ²⁹ In 1968, Fulton's "Criteria Relating to Educational Media Programs in School Systems and Colleges and Universities," and the accompanying "Evaluative Checklist: An Instrument for Self-Evaluating an Educational Media Program in School Systems and Colleges and Universities," was made available from the Department of Audiovisual Instruction. According to the Department of Audiovisual Instruction, the quantitative standards, criteria, and checklist have been widely distributed.

A search of the literature verified that the standards, criteria, and checklist have been widely used in public schools. A national study in 1967 by Bloodworth and Wedberg identified 247 schools making use of

²⁸Robert M. Diamond, "Change: Difficult But Not Impossible," College Management, Vol. 3, No. 10, (1963), p. 23-25.

²⁹Gene Faris and Mendel Sherman, Quantiative Standards for Audio-Visual Personnel, Equipment, and Materials in Elementary, Secondary, and <u>Higher Education</u> (Washington, D.C.: National Education Association, Department of Audiovisual Instruction, 1966).

³⁰Fulton, "Evaluative Checklist," op. cit.

educational media.³¹ Fulton's instrument was used to validate the sophistication of the programs as recorded by each school in the survey.

The Department of Audiovisual Instruction quantitative standards and Fulton's instrument were used by Teague to evaluate the educational media programs in Oklahoma public schools. The Teague study and the Bloodworth and Wedberg study were relevant to this study since each survey utilized Fulton's evaluative checklist. A review of the professional literature indicates that the quantitative standards, criteria, and checklist have not been utilized as widely by institutions of higher education.

A study made in 1970 by Lambert is particularly significant to this study since Fulton's evaluative instrument was used to design another instrument. The purpose of the Lambert study was to evaluate the educational media programs in selected colleges and universities in Florida. A self-evaluative rating scale was constructed by Lambert based upon Fulton's criteria for colleges and universities.

Areas investigated by Lambert which are related to this study include the following:

- 1. The status of the educational media program in selected institutions.
- 2. The group differences that existed between the taxsupported and private institutions

³¹M. Bloodworth and D. Wedberg, <u>Highlights Using Educational Media</u> (Washington, D.C.: National Education Association, Department of Audiovisual Instruction, 1967), p. 3.

³²Fred A. Teague, "An Evaluation of Educational Media Programs in Oklahoma Public Schools (unpublished doctor's dissertation, University of Oklahoma, 1966).

3. The extent of institutional commitment to the use of educational media. 33

Findings from Lambert's study include the following:

- 1. Collectively the status of the educational media program in the selected institutions was at the "median, passable, adequate" level as defined by the rating scale.
- 2. Institutional group differences existed. The tax-supported institutions had the most highly developed educational media program followed in descending order by church-related and non-church related private institutions.
- 3. Collectively, institutional commitment to the educational media program was slightly above the "median" level. The tax-supported institutions were more committed than the church-related and the non-church related private institutions.

This chapter included investigations which varied widely in the geographic locations where the studies were made, in the organization of the studies, and the period of time during which they were conducted. Certain program areas or major aspects of the audiovisual programs appeared to be common to most of the studies reviewed. The six aspects included in the limitations of this study appear to encompass all major program elements used as indicators of program adequacy in previous investigations.

Literature related to this study regarding educational media programs in junior and community colleges was not available. Only limited research could be found concerning media programs in private institutions.

³³Clio Wesley Lambert, "Evaluation of the Educational Media Program in Selected Colleges and Universities in Florida," (unpublished doctor's dissertation, University of Florida, 1970), p. 10.

³⁴Ibid., p. 85.

Although the existing professional literature directly related to this study was meager, it was particularly significant and provided the basis for the investigation.

CHAPTER III

METHODOLOGY

This study was conducted in order to evaluate the educational media programs of Oklahoma universities and colleges. Differences between quantitative and qualitative data were analyzed for each college.

That part of the study which evaluated the differences among the quantitative and qualitative data of the state-owned and independent universities and colleges in Oklahoma was accomplished by analyzing the data recorded for each school. Determination of the relationship between the quantitative and qualitative data was accomplished by correlating the two values with a Pearson Product-Moment Correlation. The relationship between the immediate supervisor of the educational media director and the qualitative data was determined by showing a relationship between the data using the Contingency Coefficient. 2

The methods and procedures used in recording the data for each institution are presented in this section. Chapter III is divided into three general areas of concern: (1) pre-experimental procedures;

¹N. M. Downie and R. W. Heath, <u>Basic Statistical Methods</u> (New York: Harper and Row, 1970), pp. 154-159.

²<u>Ibid</u>., pp. 211-212.

(2) experimental procedures; and (3) analysis of the data. These three areas are discussed in the order given above.

Pre-experimental Procedures

Before the study was actually conducted, certain preliminary activities were performed. These activities consisted of such tasks as selection of data collection instruments, choice of research design, selection of proper statistical tests, and preparation and dissemination of correspondence. Each of these procedures will be in the following sections.

Research Design

The first pre-experimental step was to choose the proper research design for the conduct of the study. The words "research design," as used in this study, means the plan, structure, and strategy of investigation conceived to obtain answers to research questions and to control external variances. The plan is the overall scheme or program of the research problem; the structure is the more specific structure or paradigm of the operation of the independent variables; the strategy as used here is even more specific than the structure—it is the actual method used in gathering and analyzing the data.

A research design has two basic purposes: (1) to provide answers to research questions; and (2) to control unwanted sources of variances. In other words, it is through the design of a study that research is made effective. Kerlinger makes the following statement in regard to research design:

. . . How does design accomplish this? Research designs set up the framework for 'adequate' tests of the relations among variables. The design tells us, in a sense, what observations to make, how to make them, and how to analyze the quantitative representations of the observations. Strictly speaking, design does not 'tell' us precisely what to do, but rather suggests the directions of observation-making and analysis. An adequate design 'suggests,' for example, how many observations should be made, and which variables are active variables and which are assigned. We can then act to manipulate the active variables and to dichotomize, trichotomize, or otherwise categorize the assigned variables. A design tells us what type of statistical analysis to use. Finally, an adequate design outlines possible conclusions to be drawn from the statistical analysis.³

Survey methods and appraisal techniques were used in the present study. Good, Barr, and Scates write that the survey is "concerned with ascertaining the conditions which prevail in the group of cases chosen for study, and is essentially a method of quantitative description of the general characteristics of the study." They also state that "appraisal is the procedure by which we secure and make overt characteristically variable reactions." These techniques were appropriate for seeking solutions to the problems of this study.

Instruments

The second step of the pre-experimental procedures was to choose the proper data collection instruments. The first instrument chosen for this study was the <u>Evaluative Checklist</u>: An <u>Instrument for</u>

³Fred N. Kerlinger, <u>Foundations of Behavioral Research</u> (New York: York: Holt, Rinehart, and Winston, 1964), p. 276.

⁴ Carter J. Good, Arvin S. Barr, and Douglas E. Scates, The Methodology of Educational Research (New York: Appleton-Century Crafts, 1941), p. 286.

⁵<u>Ibid.</u>, p. 412.

<u>Self Evaluating an Educational Media Program in Colleges and Universities</u>. The instrument was part of a study performed pursuant to a contract with the United States Office of Education under Title VII of the National Defense Education Act and funded through the University of Oklahoma. The project was directed by Dr. W. R. Fulton, Chairman of the Department of Audiovisual Instruction Consultative Service Committee, College of Education, University of Oklahoma.

The project started on June 1, 1964, and extended through December 31, 1965. The development of the Evaluative Checklist: An Instrument for Self-Evaluating an Educational Media Program in Colleges and Universities involved several major steps. In order to make valid judgments about a particular program, it was necessary to develop some guidelines or criteria pertaining to those elements believed to be common to all educational media programs. Therefore, a thorough review of the literature was made in an attempt to identify advocated criteria. In the second step of the procedure a panel of 12 prominent educational media consultants representing all areas of the country developed a list of evaluation criteria.

A draft of the self-evaluative checklist was pilot tested in six school systems in widely separated geographical regions and nine

⁶W. R. Fulton, Evaluative Checklist: <u>An Instrument for Self-Evaluating an Educational Media Program in Colleges and Universities</u>
(Washington, D.C.: Association for Educational Communications and Technology, formerly Department of Audiovisual Instruction, NEA, 1970).

⁷W. R. Fulton, 'Developing a Self-Evaluative Instrument for Appraising Educational Media Programs," in Lucisu Butler and Neville P. Pearson, <u>Instructional Materials Centers Selected Reading</u> (Minneaoplis: Burgess Publishing Company, 1969), pp. 327-331.

colleges and universities similarly located in the United States. Due to differences in terminology peculiar to school systems and institutions of higher education, it was found that two forms of the instrument would be necessary. Other than these variations in terminology, there is essentially no difference between the forms. ⁸

For field testing, the self-evaluative checklist and the comprehensive list of criteria were mailed to 200 schools and institutions of higher education. The results of the field test indicated that the instrument is reliable for yielding the kind of information for which the instrument is designed. A copy of the instrument and criteria are shown in Appendices A and C.

Quantitative Standards for Audiovisual Personnel, Equipment, and Materials in Higher Education was the second instrument chosen for this study. The quantitative standards have progressed through several stages in their preparation. A tentative set of quantitative guidelines for selected materials and equipment was formulated by a national committee at the 1964 annual conference of the Department of Audiovisual Instruction. Reactions to the standards and suggestions from audiovisual specialists throughout the United States were gathered and consolidated by Dr. Gene Faris, Indiana University. The modified

⁸ Ib<u>id</u>.

⁹ Ibid.

guidelines were published in the March, 1965 issue of <u>Audiovisual</u>
<u>Instruction</u>.

In October, 1965, a nationally selected seminar of audio-visual specialists functioning under the auspices of the United States Office of Education, gathered to develop and validate quantitative standards for educational media programs. The research project was directed by Dr. Gene Faris, Chairman of the Department of Audiovisual Instruction Subcommittee on Professional Audiovisual Standards. The standards were adopted by the DAVI Executive Board on October 30, 1965, and since have been published by that organization. A copy of the quantitative standards is shown in Appendix D.

An inventory check sheet was used to collect quantitative data. The check sheet was constructed to include all items needed to determine whether an institution meets certain quantitative standards in terms of personnel, equipment, and materials. The check sheet not only covered each media item required in the standards, but also included background information about each institution which was needed to determine whether each standard was met.

A tentative draft of the inventory check sheet was prepared and interviews were held with members of the Oklahoma Association for

¹⁰ Gene Faris, "Tentative Guidelines for Audiovisual Personnel and Equipment," Audiovisual Instruction (Washington, D.C.: National Education Association, Department of Audiovisual Instruction, 1965), pp. 201-204.

¹¹ Gene Faris and Mendel Sherman, Quantitative Standards for Audiovisual Personnel, Equipment, and Materials in Elementary, Secondary, and Higher Education (Washington, D.C.: National Education Association, Department of Audiovisual Instruction, 1966).

Audiovisual Media and Technology. Check sheet revisions were made on the basis of these interviews.

A preliminary review of the check sheet was made by six media directors in institutions of higher education. The review was conducted to determine if all items on the check sheet were clear and understandable. Personal interviews were held with members of the pilot study sample after each had completed a study of the check sheet. Based on the review results, minor changes were made in the inventory check sheet. The final instrument is displayed in Appendix E.

Population and Sample

The population chosen for this study consisted of presidents of institutions in Oklahoma higher education. The presidents were asked to participate for the following reasons: (1) they were capable of selecting the person(s) who could provide the most reliable and valid information concerning the educational media program of their respective institutions; (2) all Oklahoma universities and colleges were needed in the sample to make the results generalizable to the entire state; 12 (3) a population larger than that offered by Oklahoma universities and colleges would result in a group which may prove unmanagable and unresponsive to a mail-out type instrument. Appendix F contains a list of the universities and colleges that were included in the study.

¹²George A. Ferguson, <u>Statistical Analysis in Psychology and Education</u> (New York: McGraw-Hill, 1966), Chapter 17.

¹³ Kerlinger, op. cit., p. 397.

Preliminary Correspondence to Participating Institutions

In conducting the study, the investigator received the support of the Oklahoma Regents for Higher Education. Dr. E. T. Dunlap,
Chancellor for the Oklahoma Regents agreed to contact each of the
universities and colleges and encourage them to participate. A copy
of his initial correspondence is presented in Appendix G.

The investigator also prepared a formal correspondence and mailed it to the president of each institution, asking them to respond to the questionnaires. Appendix H contains this correspondence.

Experimental Procedures

The actual conduct of this study began with the mailing of the data collection instruments to the presidents of the institutions of Oklahoma higher education. These two instruments, complete with instructions, were mailed to each of the 40 institutions during March, 1972.

Two weeks after the initial mailing, a follow-up letter was sent to the presidents of the institutions that failed to respond to the initial correspondence. A copy of this correspondence is shown in Appendix I.

Finally, at the end of the fourth week following the initial mailing, the investigator contacted the non-respondents by telephone and/or personal visitation as necessary to collect the information desired from each institution. A 100 percent response was recorded by the end of the four-week data collection period. As soon as all responses were received, an acknowledgement was mailed to each president.

A copy of these acknowledgements was included with a letter of appreciation to Dr. E. T. Dunlap and the Oklahoma State Regents for Higher Education. This correspondence is included in Appendix J.

Scoring of Qualitative Data

The next phase of the experimental procedures was the scoring of the responses recorded on the qualitative instrument. The procedures used for scoring were those recommended by the test constructors. responses from the individual items were plotted on the profile sheet shown in Appendix B. When each of the scores was entered and the points connected, a qualitative profile for the media program resulted. The data were further reduced for obtaining a total qualitative score. For each item assigned a 1, 2, 3, or 4, a rank of 1 was assigned (a rank of 1 indicated a weakness in the area). For each item having a value of 5, 6, 7, or 8, a rank of 2 was assigned (a 2 rank indicated a program of neutral strength). For each item assigned a 9, 10, 11, or 12, a rank of 3 was given (a rank of 3 indicated a strong program). The sum of these 21 ranks was designated as the qualitative measure of the educational media program. Using this scoring procedure it was possible for the range of qualitative values to vary from 21, the weakest possible, to 63, the strongest possible.

Scoring of Quantitative Data

The scoring of the quantitative data was accomplished by coding the responses received on the inventory check sheet shown in Appendix E. The responses from this instrument were correlated with the quantitative standards for audiovisual personnel, equipment, and

materials shown in Appendix D. The individual responses were regarded as indicative of an "advanced" or "basic" program. Each of the three categories, personnel, equipment, and materials, had possible totals of 42 for the most advanced and 21 for the most basic. The sum of the three categories was considered to be the quantitative measure for the responding institutions. Qualitative values ranged from 63, the lowest possible, to 126 the highest possible. The quantitative data were used in testing the hypothesis

Analysis of Data

The third and final phase of the methodology was the actual analysis of the data collected. These analyses are presented in Chapter IV.

After the responses were carefully screened and qualified, the data were submitted to the Merrick Computing Center and entered on IBM cards for further analysis. The card format used in entering the data is shown in Figure 1

Figure 1
Card Format for Entry of Data

Information	Card Columns	Possible Values
Name of Institution	1-15	
Position	16	1- 5
Type of School	17	1- 5
Immediate Supervisor of the Educational Media Director	18	1- 5
Qualitative Score	19-20	21- 63
Quantitative Score	21 -2 3	63-126

The Merrick Computing Center is equipped with an IBM 360-50 computer and accompanying configuration. Part of this configuration includes prewritten computer programs to be utilized in data processing. One set of programs is the Biomedical (BMD) series of statistical programs published by the University of California Press, Berkeley, California. These statistical programs are currently operational and were utilized in performing the analyses desired. Figure 2 shows the hypotheses to be tested, the statistical test to be performed, and the measures involved in each computation.

Figure 2
Hypotheses, Statistical Tests, and Measures

Но1.	t-test	Qualitative and quantitative data of all state-owned universities and senior colleges vs. qualitative and quantitative data of all independent colleges.
Но2.	t-test	Qualitative and quantative data of all universities and senior colleges vs. qualitative data of all junior and community colleges.
Но3.	"r"	Qualitative and quantitative data of all universities and colleges.
Но _Д .	contingency coefficient	Qualitative data and the numerical values assigned to the position of the immediate supervisor of the educational media directors in al Oklahoma universities and senior colleges.
Но ₅ .	contingency coefficient	Qualitative data and the numerical values assigned to the position of the immediate supe visor of the educational media director of all Oklahoma junior and community colleges.

¹⁴W. M. Dixon, <u>Biomedical Statistics</u> (Berkeley, California: University of California, 1970).

CHAPTER IV

ANALYSIS AND EVALUATION OF DATA

Qualitative and quantitative measures of the educational media programs in Oklahoma's state-owned, community, and independent universities and colleges were analyzed in determining possible differences resulting from various factors such as size (student enrollment), number of faculty members, number of classrooms, number of buildings used for instructional purposes, type of organizational structure, and lines of responsibility. Data collection instruments developed by Fulton and Faris were used in recording the necessary data from the 40 universities and colleges surveyed.

Of the universities and colleges surveyed, one state-owned senior college, one community junior college, one independent senior and one independent junior college reported that they did not have an educational media program. The community junior college reported that their institution has not opened for classes, however, they do plan to implement an extensive educational media program. Thirty-six of the 40 institutions surveyed returned completed questionnaires.

Statistics pertinent to the data analysis procedures of the five groups are presented in Table 1 as follows: (1) Group One; all state-owned universities and senior colleges, (2) Group Two; all state-owned junior colleges, (3) Group Three; all community junior colleges,

TABLE 1 ORGANIZATION, FACULTY, ENROLLMENT, AND FACILITIES OF ALL UNIVERSITIES AND COLLEGES

Augus Padus Passutad	Group 1 (N=11)		Group 2 (N=8)		Group 3 (N=5)		Group 4 (N=7)		Group 5 (N=5)	
Areas Being Reported	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Media Organization:					<u> </u>					
 Centralized under One Center 	5	45.45	5	62.50	2	40.00	5	71.43	5	100
2. Centralized with Sub-centers	5	45.45	2	25.00	2	40.00	0	0.0	0	0
3. Decentralized with Sub-centers	1	9.09	1	12.50	1	20.00	2	29.57	0	0
	x	SD	х	SD	х	SD	х	SD	х	SD
Number of Faculty Members:]			
1. Full-time	268.91	289,25	47.00	23,72	23.20	23.59	65.43	35.27	21.00	16.19
2. Part-time	148.90	372.17	21.50	45.26	14.00	14.27	25.67	22.81	15.00	18.19
Enrollment (On Campus)	6,369.18	6,566.12	1,482.88	1,105.38	1,027.20	1,230.24	1,256.86	579.45	455.60	436.10
Number of Classrooms	105.45	61.14	30.17	11.58	16.40	11.01	61.14	67.74	17.40	12.14
Number of Auditoriums	4.90	3,31	.88	•64	.60	.89	4.29	5.82	1.20	.45
Number of Buildings Used for Instruction	11.36	10.29	4.50	2.35	2.60	2.51	5.00	2.87	4.00	3.39

 G_1 = state-owned universities and senior colleges G_2 = state-owned junior colleges G_3 = community junior colleges G_4 = independent senior colleges G_5 = independent junior colleges

(4) Group Four; all independent senior colleges, and (5) Group Five; all independent junior colleges.

Results of Testing Hypotheses

The five groups of colleges described in Table 1 were combined to form the groups used to test the hypotheses. The five hypotheses tested used different combinations of the universities' and colleges' data. The various combinations of colleges are presented in the following tables along with the results of each hypothesis.

Results of Testing Hypothesis One

Null hypothesis number one was tested as follows:

There will be no significant difference in the qualitative and quantitative data recorded for all state-owned universities and colleges and the qualitative and quantitative data recorded for all independent colleges.

To test this hypothesis it was necessary to perform two student's t-tests between the means of the qualitative and quantitative data recorded for the groups of colleges. Group One; state-owned universities and senior colleges, Group Two; state-owned junior colleges, and Group Three; community junior colleges, were combined to form the first composite group needed to test the first hypothesis. Group Four; independent senior colleges, and Group Five; independent junior colleges, were combined to form the second composite group needed to test the first hypothesis. The results of comparing the quantitative and qualitative measures of the two groups are presented in Table 2.

The results of testing hypothesis one, shown in Table 2 indicate that there was no significant difference between the qualitative and quantitative data reported by the two groups of colleges. The t value of the qualitative comparison was only $t \approx 0.84$. The t value

TABLE 2

QUALITATIVE AND QUANTITATIVE DATA RECORDED FOR ALL STATE-OWNED UNIVERSITIES AND COLLEGES AND ALL INDEPENDENT COLLEGES

(N = 36)

	Mean of Qualitative	Areas of	Mean of			
Group*	Data	Personne1	Materials	Equipment	Quantitative Data (Total)	
G1+G2+G3	45.17	30.79	34.17	37.33	102.29	
G4+G5	41.17	30.91	32.00	36.00	98.92	

 $[*]G_1$ = state-owned universities and senior colleges; G_2 = state-owned junior colleges; G_3 = community junior colleges; G_4 = independent senior colleges; G_5 = independent junior colleges.

of the quantitative comparison was slightly higher at t = 0.74However, neither was significant at the .05 level.

Results of Testing Hypothesis Two

Null hypothesis number two was tested as follows:

There will be no significant difference in the qualitative and quantitative data reported by all universities and senior colleges and the qualitative and quantitative data reported by all junior and community colleges.

It was necessary to combine the five groups of colleges into two composite groups to test hypothesis two. The first composite group was composed of the colleges in Group One; all state-owned universities and senior colleges, and Group Four; all independent senior colleges. The second composite group used in testing the hypothesis was composed of the colleges in Group Two; all state-owned junior colleges, Group

Three; all community junior colleges, and Group Five; all independent junior colleges. After the two comparison groups had been formed, a t-test was performed between the qualitative and quantitative data reported by the individual media program representatives. The results of the two t-tests are presented in Table 3.

QUALITATIVE AND QUANTITATIVE DATA RECORDED FOR ALL UNIVERSITIES AND SENIOR COLLEGES AND THE QUALITATIVE AND QUANTITATIVE DATA RECORDED FOR ALL JUNIOR AND COMMUNITY JUNIOR COLLEGES

	Mean of Areas of Quantitati				Mean of
Group*	Qualitative Data	Personne1	Materials	Equipment	Quantitative Data (Total)
G ₁ +G ₄	49.11	35.22	36.47	39.28	109.17
G ₂ +G ₃ +G ₅	38.56	26.44	32.22	34.50	88.94
t _{qual.} =	1.20, df = 34	, p > .05:	t _{quan} . = 4	72, df = 3	4, p < .001

 $[*]G_1$ = state-owned universities and senior colleges; G_2 = state-owned junior colleges; G_3 = community junior colleges; G_4 = independent senior colleges; G_5 = independent junior colleges.

The results of testing hypothesis two, presented in Table 3, indicate that there was no significant difference between the qualitative data recorded by the two testing groups (t = 1.20, df = 34, p > .05). But the comparison of the quantitative data produced a significant t-value (t = 4.72, df = 34, p < .001). The quantitative comparison of the two groups showed that the universities and senior colleges

had significantly more personnel, equipment, and materials than the junior and community colleges.

Results of Testing Hypothesis Three

Null Hypothesis number three was tested as follows:

There will be no significant correlation between the qualitative and quantitative data reported by all Oklahoma universities and colleges.

In order to test hypothesis three it was necessary to combine all the universities and colleges, both state-owned, community, and independent, into one group and relate their qualitative and quantitative data. The final composite group, a total of 36 universities and colleges, was used to calculate the correlation sought in the hypothesis.

A qualitative figure was obtained for each college by combining the ratings shown on the different sub-areas of the qualitative instrument into a total figure. A quantitative figure was obtained for each college by combining the values assigned to the various areas of personnel, equipment, and materials on the quantitative instrument. This information was then correlated and the results presented in Table 4.

The results of testing hypothesis three as shown in Table 4 indicates that the correlation between the quantitative and the qualitative data reported by all Oklahoma universities and colleges was calculated to be r=0.7435. With 34 degrees of freedom this was a significant relationship (r=0.7435, df = 34, p < .001). From this result, the **investigator** concluded that there was a strong relationship between the quality of an educational media program and the quantity

TABLE 4

DESCRIPTIVE STATISTICS AND THE PEARSON PRODUCT-MOMENT CORRELATION
BETWEEN THE QUALITATIVE AND QUANTITATIVE DATA REPORTED BY
ALL OKLAHOMA UNIVERSITIES AND COLLEGES

	Mean of Areas of Quantitativ			e Data	Mean of Quantitative	
Group*	Data	Personne1	Materials	Equipment	Data (Total)	
G ₁ +G ₂ +G ₃ +	43.17	30.85	33.09	36.67	100.61	
G ₄ +G ₅	73.17	30.03	33.07	30.07	100.01	
r = 0.7435	, df = 34, p	< .001				

 $[*]G_1$ = state-owned universities and senior colleges; G_2 = state-owned junior colleges; G_3 = community junior colleges; G_4 = independent senior colleges; G_5 = independent junior colleges.

of personnel, equipment, and materials available to that program. This is not surprising since it is generally assumed that it requires a certain amount of personnel, equipment, and material to constitute a quality program.

Results of Testing Hypothesis Four

Null hypothesis number four was tested as follows:

There will be no significant positive correlation between the quality of an educational media program and the value assigned to the position of the immediate supervisor of the educational media director in all Oklahoma universities and senior colleges.

In order to test hypothesis four, it was necessary to combine all the universities and senior colleges, both state-owned and independent, into one group and relate their qualitative data. The final group, a total of 18 universities and colleges, was used to make the calculations necessary to test the hypothesis.

The qualitative score of each institution, derived by a process described in the methodology section, was related to a rank-order value assigned to the position of the media director's immediate supervisor. The immediate supervisor of the media director was determined from Item B, Section IV., Administrative Organization of the Educational Media Program, on the Educational Media Inventory Check Sheet completed by each of the participants. On this particular item, departmental chairmen were given a value of 1, deans of instruction -- 2, presidents -- 3, and librarians--4, and "other" was assigned a value of 5. These values, in turn, were used to cross-categorize each of the individual colleges into a contingency table, using the quality of the program as one criterion for categorization and the position of the media director's immediate supervisor as the other. After all colleges had been placed in one of the cells of the contingency table, a contingency coefficient was computed to determine the amount of relationship between the two variables of program quality and immediate supervisor. The results of the calculations are presented in Table 5.

The results of hypothesis four showed a contingency coefficient of C = 0.479. While this coefficient is not a product-moment correlation, it does show relationship between two independent variables.

The amount of relationship between the two variables used to categorize the participants was significant beyond the .05 level. The investigator concluded that a significant relationship existed between the quality of an educational media program and the value assigned to the position of the immediate supervisor of the media director. This can also be interpreted to mean that the quality of the media program is directly related

TABLE 5

RELATIONSHIP BETWEEN THE IMMEDIATE SUPERVISOR OF THE EDUCATIONAL MEDIA DIRECTOR AND THE QUALITATIVE DATA REPORTED BY ALL OKLAHOMA UNIVERSITIES AND SENIOR COLLEGES

Qualitative Measure for All Universities and Senior Colleges	~	$\bar{X} = 49.11$ SD = 12.84
Immediate Supervisor of the Educational Media Director	C O D E	1* = 22.22 Percent 2 = 61.11 Percent 3 = 11.11 Percent 4 = -0- Percent 5 = 5.56 Percent
C = 0.497, $df = 16$, $p < .05$		

^{*1 =} Media director's immediate supervisor is the departmental chairman.

to its administrative structure. In making the assessments of the programs for the various universities and senior colleges, it was observed that the highest quality programs were organized in such a way that the media director was under the supervision of the dean of instruction or the president.

Results of Testing Hypothesis Five

Null hypothesis number five was tested as follows:

There will be no significant positive correlation between the quality of the educational media program and the value assigned to the position of the immediate supervisor of the educational media director in all Oklahoma junior and community colleges.

^{2 =} Media director's immediate supervisor is the dean of instruction.

^{3 =} Media director's immediate supervisor is the president.

^{4 =} Media director's immediate supervisor is the librarian.

^{5 =} Media director's immediate supervisor is classified as "other."

Hypothesis five was tested by combining all state-owned, junior, community, and independent junior colleges into one group and comparing their educational media program's quality with the value assigned to the position of the media director's immediate supervisor.

The same procedure was used in deriving the qualitative data and the rank-order values assigned to the administrative supervisors as used in testing hypothesis four. A contingency coefficient was also computed in testing the fifth hypothesis. The results of the computations are presented in Table 6.

TABLE 6

RELATIONSHIP BETWEEN THE IMMEDIATE SUPERVISOR OF THE EDUCATIONAL MEDIA DIRECTOR AND THE QUALITATIVE DATA REPORTED BY ALL OKLAHOMA JUNIOR AND COMMUNITY JUNIOR COLLEGES

Qualitative Measure for All Junior and Community Junior Colleges		$\bar{X} = 38.56$	SD = 12.62
Immediate Supervisor of the Educational Media Director	C O D E	1* = -0- Per 2 = 50.00 Per 3 = 27.78 Per 4 = 11.11 Per 5 = -0- Per	ccent ccent ccent
C = 0.090, df = 16, p > .05			

^{*1 =} Media director's immediate supervisor is the departmental chairman.

^{2 =} Media director's immediate supervisor is the dean of instruction.

^{3 =} Media director's immediate supervisor is the president.

^{4 =} Media director's immediate supervisor is the librarian.

^{5 =} Media director's immediate supervisor is classified as "other."

The contingency coefficient computed in testing hypothesis number five was observed to be C = 0.090. This figure was not significant at the .05 level, and the researcher concluded that no significant relationship existed between the quality of the educational media programs in junior and community colleges and the value assigned to the position of the immediate supervisor of the media director. The investigator interpreted this to mean that the quality of the media programs in Oklahoma's junior and community colleges is not related to their administrative structure. There was a significant difference between the contingency coefficient values computed for the junior and community colleges and the universities and senior colleges. One possible explanation for this difference is the lack of high quality programs in the junior and community colleges. Because of this, it was difficult to make a meaningful comparison of the two groups.

Summary of Hypothesis Testing

Two hypotheses were tested in determining the differences between the qualitative and quantitative data of (1) all state-owned universities and senior colleges and all independent colleges and (2) between all universities and senior colleges and all junior and community colleges. One hypothesis, number three, was tested in an attempt to determine the relationship between the qualitative and quantitative data reported by all Oklahoma universities and colleges. Two additional hypotheses were computed to determine the amount of relationship existing between the quality of an educational media program and the position of the immediate supervisor of the educational media director.

The results of these hypotheses, presented in Tables 2-6, showed one significant difference and two significant relationships.

A summary of these results would be as follows:

- d. No significant difference was noted between either the qualitative or quantitative data reported by state-owned universities and colleges and the qualitative and quantitative data reported by all independent colleges.

 Therefore, the null hypothesis could not be rejected and the investigator concluded that there are no significant differences between the two groups' data.
- 2. No significant difference was noted between the qualitative data reported by the universities and senior colleges and the qualitative data reported by the junior and community colleges. Based on this result, the null hypothesis relating to the qualitative data was not rejected and the investigator concluded that there were no differences in the qualitative data reported by the two groups of colleges. However, a significant difference was noted in the quantitative data reported by the universities and senior colleges and the quantitative data reported by the junior and community colleges. Based on this result, the null hypothesis relating to the quantitative data was rejected and the researcher concluded that there is a significant difference in the quantity of personnel, equipment, and materials in the universities and senior colleges

- and the personnel, equipment, and materials in the junior and community colleges.
- 3. A significant relationship was noted between the qualitative and quantitative data reported by all Oklahoma universities and colleges (r = 0.7435). Based on this correlation value, the investigator rejected the null hypothmis of proposition number three and concluded that the quality of an educational media program and the amount of personnel, equipment, and materials available are definitely related.
- 4. A significant relationship was noted between the qualitative data reported by all Oklahoma universities and senior colleges and the position of the supervisor of the media director. Based on a contingency coefficient value of C = 0.497, the investigator rejected the fourth null hypothesis. It was concluded that the quality of the educational media programs in universities and senior colleges is highly related to their administrative structure in general and to the position of the immediate supervisor of the media director in particular.
- 5. No significant relationship was noted between the qualitative data reported by the junior and community colleges and the position of the immediate supervisor of the media director. Since the contingency coefficient value was C = 0.090, the investigator could not reject the null hypothesis of proposition number five. It was concluded that the quality

of the educational media programs in Oklahoma's junior and community colleges is not related to their administrative structure. Since this correlation of these data is significant for universities and senior colleges, the investigator analyzed the problem further. After considering the qualitative values assigned to the educational media programs it was concluded that the lower quality of the media programs in the junior and community colleges (mean for senior colleges = 49.11; mean for junior college = 38.56) when compared to the senior colleges accounts for the low correlation noted in testing hypothesis five.

In conclusion, it was observed that the null hypothesis number two relating to the quantitative data, null hypothesis number three and null hypothesis number four could be rejected, but the null hypothesis number one, the null hypothesis number two relating to the qualitative data, and null hypothesis number five could not be rejected. The investigator concluded that there are no differences in data reported by the groups in hypothesis one, the qualitative data reported in hypothesis two and no significant relationship between the media program's quality and the immediate superior of the media director in junior and community colleges.

Additional Findings

The number and percentage of personnel and the organization of the educational media programs are important in an evaluation of educational media programs in Oklahoma's universities and colleges.

The number and percentage of media directors, professional media staff technical personnel, clerical personnel, and the amount of time they

are assigned to media duties are presented in Tables 7-11. The tables also include the administrative organization of the educational media programs and the media director's immediate supervisor.

As shown in Table 7, 91 percent (10) of Group One, the 11 state-owned universities and senior colleges, reported that they had staff members who were assigned as media directors. However, only 18 percent (2) of the 10 media directors devoted full-time to the direction of the media program. Sixty-four percent (7) of the media directors were assigned one-half time or more and 18 percent (1) of the media directors were assigned for less than one-half time.

The number of professional personnel, other than media directors, reported by Group One was 64 percent (7) full-time and 64 percent (7) part-time. These 11 institutions indicated that 18 percent (2) full-time and 82 percent (9) part-time technical personnel and 36 percent (4) full-time and 73 percent (8) part-time clerical personnel were assigned to their educational media programs.

The administrative organization of Group One's media programs consisted of 55 percent (6) of the media programs being organized under the university or college library. The department or college of education was responsible for 18 percent (2) of the educational media programs and 18 percent (2) were organized as centralized media centers.

In response to the question dealing with the media director's immediate supervisor, 55 percent (6) institutions in Group One reported their immediate supervisor to be the dean of instruction, 18 percent (2) indicated their immediate supervisor to be the departmental chairman and 18 percent (2) reported directly to the college president.

TABLE 7

NUMBER AND PERCENTAGE OF PERSONNEL AND ORGANIZATION OF EDUCATIONAL MEDIA PROGRAMS IN STATE-OWNED UNIVERSITIES AND SENIOR COLLEGES

(N = 11)

Areas Being Reported	Number	Percentage
Number with Media Directors	10	91
Amount of Released Time for Director		
1. None	0	0
2. Less than ½ time	2	18
3. ½ time	2	18
4. More than ½ time	5	45
5. Full-time	2	18
Professional Media StaffFull-time	7	64
Professional Media StaffPart-time	7	64
Technical PersonnelFull-time	2	18
Technical PersonnelPart-time	9	82
Clerical PersonnelFull-time	4	36
Clerical PersonnelPart-time	8	73
Administrative Organization of Program		
1. Department or College of Education	2	18
2. University or College Library	6	53
3. Centralized Media Center	2	18
4. Extension Division	0	0
5. Other	1	9
Media Director's Immediate Supervisor		
1. Departmental Chairman	2	18
2. Dean of Instruction	6	55
3. President	2	18
4. Librarian	0	0
5. Other	1	9

Table 8 shows that 25 percent (2) of Group Two the eight reporting state-owned junior colleges, had staff members who were assigned as media directors. Of these two media directors, one was assigned to the media program for less than one-half time and the other was given no released time for his media duties.

The number of professional personnel, other than media directors, reported by Group Two was one full-time and one part-time. Technical personnel recorded for Group Two was one full-time and 25 percent (2) part-time while clerical personnel numbered 13 percent (1) full-time and 13 percent (1) part-time.

Concerning the administrative organization of Group Two's media program, it was reported that 38 percent (3) of the educational media programs were organized under the university or college library. Thirty-eight percent (3) of the media programs indicated that they were organized under the category of "other" which could include the dean of the college or the learning resource center.

Although only 25 percent (2) of Group Two reported having a media director, 63 percent (5) reported that the media director's immediate supervisor was the dean of instruction, one indicated his immediate supervisor to be the college president, and one reported to the college librarian.

Group Three, community junior colleges, reported having 40 percent (2) media directors. As shown in Table 9, 20 percent (1) of the media directors was assigned less than one-half time while the other indicated his assignment as more than one-half time.

TABLE 8

NUMBER AND PERCENTAGE OF PERSONNEL AND ORGANIZATION
OF EDUCATIONAL MEDIA PROGRAMS IN
STATE-OWNED JUNIOR COLLEGES
(N = 8)

Areas Being Reported	Number	Percentage
Number with Media Directors	2	25
Amount of Released Time for Director 1. None 2. Less than ½ time 3. ½ time 4. More than ½ time 5. Full-time Professional Media StaffFull-time Professional Media StaffPart-time Technical PersonnelFull-time	1 1 0 0 0 1 1	13 13 0 0 0 13 13
Technical PersonnelPart-time	2	2 5
Clerical PersonnelFull-time	1	13
Clerical PersonnelPart-time	1	13
Administrative Organization of Program 1. Department or College of Education 2. University or College Library 3. Centralized Media Center 4. Extension Division 5. Other	0 3 1 0 3	0 38 13 0 38
Media Director's Immediate Supervisor 1. Departmental Chairman 2. Dean of Instruction 3. President 4. Librarian 5. Other	0 5 1 1 0	0 63 13 13 0

TABLE 9

NUMBER AND PERCENTAGE OF PERSONNEL AND ORGANIZATION OF EDUCATIONAL MEDIA PROGRAMS IN COMMUNITY JUNIOR COLLEGES

(N = 5)

Areas Being Reported	Number	Percentage
Number with Media Directors	2	40
Amount of Released Time for Director		
1. None	0	0
2. Less than ½ time	1	20
3. ½ time	0	0
4. More than ½ time	1	20
5. Full-time	0	0
Professional Media StaffFull-time	0	0
Professional Media StaffPart-time	0	0
Technical PersonnelFull-time	1	20
Technical PersonnelPart-time	О	0
Clerical PersonnelFull-time	2	40
Clerical PersonnelPart-time	1	20
Administrative Organization of Program	}	
1. Department or College of Education	0	1 0
2. University or College Library	2	40
3. Centralized Media Center	2	40
4. Extension Division	0	0
5. Other	1	20
Media Director's Immediate Supervisor		
1. Departmental Chairman	0	0
2. Dean of Instruction	2	40
3. President	3	60
4. Librarian	0	0
5. Other	Ŏ	0

None of the five community junior colleges in Group Three reported any full-time or part-time professional media staff members.

Only 20 percent (1) full-time and no part-time technical personnel was reported by Group Three, however, 40 percent (2) full-time and 20 percent (1) clerical staff were assigned to media duties.

Forty percent (2) of Group Three indicated that their media programs were organized under the college library and 40 percent (2) reported their organization as a centralized media center.

In response to the question dealing with the media director's immediate supervisor, 40 percent (2) reported their immediate supervisor to be the dean of instruction and 60 percent (3) indicated the media director reported to the college president, although only 40 percent reported actually having a media director assigned to their educational media programs.

As shown in Table 10, 86 percent (6) of Group Four, the seven independent senior colleges, reported that they had staff members who were assigned as media directors. However, 29 percent (2) of the media directors were assigned less than one-half time to direct the media program and 29 percent (2) were not allowed any released time for their media duties. Twenty-eight (2) of Group Four who reported having a media director did not respond to this question.

The number of professional personnel, other than media directors, reported by Group Four was 29 percent (2) full-time and 43 percent (3) part-time. These seven institutions indicated that 29 percent (2) full-time and 29 percent (2) part-time technical personnel and 14

TABLE 10

NUMBER AND PERCENTAGE OF PERSONNEL AND ORGANIZATION OF EDUCATIONAL MEDIA PROGRAMS IN INDEPENDENT SENIOR COLLEGES (N = 7)

Areas Being Reported	Number	Percentage
Number with Media Directors	6	86
Amount of Released Time for Director	2	29
2. Less than ½ time	2	29
3. $\frac{1}{2}$ time	0	0
4. More than $\frac{1}{2}$ time	0	0
5. Full-time	2	29
Professional Media StaffFull-time	2	29
Professional Media StaffPart-time	3	43
Technical PersonnelFul1-time	2	29
Technical PersonnelPart-time	2	29
Clerical PersonnelFull-time	1	14
Clerical PersonnelPart-time	3	43
Administrative Organization of Program		
1. Department or College of Education	3	43
2. University or College Library	0	0
 Centralized Media Center 	2	29
4. Extension Division	0	0
5. Other	2	29
Media Director's Immediate Supervisor	İ	İ
1. Departmental Chairman	2	29
2. Dean of Instruction	5	71
3. President	0	0
4. Librarian) 0	0
5. Other	0	0

percent (1) full-time and 43 percent (3) part-time clerical personnel were assigned to their educational media programs.

The administrative organization of Group Four's educational media programs consisted of 43 percent (3) being organized under the department or college of education and 29 percent (2) were organized as centralized media centers.

Seventy-one percent (5) of the institutions in Group Four indicated the media director's immediate supervisor to be the dean of instruction while 29 percent (2) reported to the departmental chairman.

As shown in Table 11, the number of staff members assigned as media directors for Group Five was 40 percent (2) with one of the media directors devoting full-time to the media program and the other assigned more than one-half time to media duties.

The five independent junior colleges in Group Five indicated no full-time professional staff members, other than media directors, were assigned to the media program, however, 40 percent (2) part-time professional staff members were reported. Only 20 percent (1) part-time and no full time technical staff members were reported by Group Five. However, one full-time and 80 percent (4) part-time clerical personnel were recorded for the media programs.

The administrative organization of the media programs reported by the independent junior colleges indicated that 40 percent (2) of the media programs were organized under the college library. The department or college of education was responsible for 20 percent (1) and one was organized as a centralized media center.

TABLE 11

NUMBER AND PERCENTAGE OF PERSONNEL AND ORGANIZATION OF EDUCATIONAL MEDIA PROGRAMS IN INDEPENDENT JUNIOR COLLEGES

(N = 5)

Areas Being Reported	Number	Percentage
Number with Media Directors	2	40
Amount of Released Time for Director		
1. None	0	0
2. Less than ½ time	0	0
3. ½ time 4. More than ½ time	0 1	0 20
5. Full-time	1	20
Professional Media StaffFull-time	0	0
Professional Media StaffPart-time	2	40
Technical PersonnelFull-time	o	0
Technical PersonnelPart-time	1	20
Clerical PersonnelFull-time	1	20
Clerical PersonnelPart-time	4	80
Administrative Organization of Program		
1. Department or College of Education	1	20
2. University or College Library	2	40
Centralized Media Center	1	20
4. Extension Division	0	0
5. Other	1	20
Media Director's Immediate Supervisor		
 Departmental Chairman 	0	0
2. Dean of Instruction	3	60
3. President	1	20
4. Librarian	1	20
5. Other	0	0

Sixty percent (3) of the media directors were recorded as reporting to the dean of instruction and 20 percent (1) to the college president. The college librarian was indicated as the immediate supervisor of one of the media directors.

Summary of Personnel and Organization of the Educational Media Programs

Thirty-six of the 40 institutions surveyed returned completed questionnaires. Twenty-two institutions reported a media director.

Five of the 22 were full-time, seven were more than one-half time, and three had no released time to accomplish their media duties.

Ten professional staff members, other than media directors, were assigned full-time and 13 were part-time. Technical personnel consisted of six full-time and 14 part-time while clerical personnel included nine full-time and 17 part-time employees.

The total number of educational media staff members not including the media directors was 69 for 36 institutions. The stateowned universities and senior colleges had more professional, technical, and clerical staff members than the other institutions combined. Their total media staff, full-time and part-time, totalled 37. The independent senior colleges had (13 media staff members full-time and part-time) more staff members than any of the remaining institutions.

Eight full-time and part-time media staff members were employed in the independent junior colleges and state-owned junior colleges had seven full-time and part-time media staff members. Community junior colleges employed only four full-time and part-time media staff members.

Organization of Educational Media Programs

Thirty-five of the participants responded to questions concerning the administrative organization of their media program and to the media director's immediate supervisor. A total of 13 institutions reported that their media program was organized under the university or college library. Eight institutions indicated that their media program was organized as a centralized media center, six were organized under the department or college of education, and eight programs were organized under the oral communication department, dean of the college, or a learning resource center.

Twenty-one institutions reported that their media director's immediate supervisor was the dean of instruction while seven indicated the media director reported directly to the college president. The departmental chairman was the immediate supervisor of the media director in four institutions, two media directors reported to the college librarian, and one indicated that the director of educational services was the immediate supervisor.

The majority (13) of the media programs administrative organizations were subsumed under the university or college library, but the majority (21) of the media directors reported directly to the dean of instruction.

Analysis of Quantitative Data of Materials Based on DAVI Standards

Official Department of Audiovisual Instruction (DAVI) standards for higher education contain guidelines for only three types of media-instructional materials; 16 mm motion picture films (both

college and elementary and secondary titles), 35 mm filmstrips, and sound recordings. The total number of instructional materials reported by the institutions in each group are presented in Table 12. The results show that Group One, state-owned universities and senior colleges, has considerably more 16 mm films and filmstrips than the other four groups.

An analysis of the data was performed to determine which institutions met the DAVI standards for instructional materials. The data reported by the institutions is based on DAVI standards, which appear in Appendix D.

Table 13 shows the number and percentage of institutions from each group whose programs were classified as less than basic, basic, or advanced according to the DAVI materials standards.

TABLE 12

NUMBER OF ITEMS OF SELECTED TYPES OF INSTRUCTIONAL MATERIALS LOCATED IN EACH GROUP

	Number of Items by Groups											
Type of Material	G ₁ (N=11)	G ₂ (N=8)	G3 (N=5)	G ₄ (N=7)	G ₅ (N=5)							
16 mm Films (College Titles)	5,281	156	61	139	0							
16 mm Films (Elementary-Secondary)	8,505	0	0	5	25							
Filmstrips	2,942	1,476	2 56	72 5	194							
Recordings	5,574	3,392	682	6,770	860							

G1 = state-owned universities and senior colleges

G₂ = state-owned junior colleges

 $G_3 = community junior colleges$

G4 = independent senior colleges

G₅ = independent junior colleges

				Les	s Tha	n Ba	sic								Ba	sic									Adva	nced						
	G ₁		G ₂		G	3	G ₄		G	5	G ₁		G	2	G	3	G	4	G	5	G1		G	2	C	3	G	4	G	5		
	(N=11)		(N=11)		(N≠8	3)	(N=	5)	(N=7)		(N=5)		(N-11)		(N=8)		(N=5)		(N	- 7)	(N	= 5)	(N=	11)	(N=8)		(N	~ 5)	(N	= 7)	(2)	=5)
	<u>አ</u>	No.	7.	No.	7,	No.	1/2	No.	%	No.	7,	No.	7,	No.	7,	No.	7.	No.	7,	No.	7,	No.	%	No.	7.	No.	⁷ / ₃	No.	2)	No.		
.6 mm Films College Titles	55	6	100	8	100	5	100	7	100	5	45	5	0	0	0	0	0	0	0	0	0	0	D	Đ	0	0	0	0	0	0		
o mm Films Elementary and Secondary Titles	45	5	100	8	100	5	100	7	100	5	18	2	0	0	0	0	0	0	0	0	36	4	0	0	0	С	0	0	o	0		
ilmstrips	0	0	100	8	100	5	100	7	100	5	100	11	0	0	0	0	0	0	0	0	0	o	0	ij	0	c	С	0	0	ō		
ecordings	73	в	83	7	100	5	71	5	100	5	27	3	13	1	0	0	0	0	G	O	0	0	0	0	0	0	2 9	2	ŋ	ò		

G₁ = state-owned universities and senior colleges
G₂ = state-owned junior colleges
G₃ = community junior colleges
G₄ = independent senior colleges
G₅ = independent junior colleges

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16 mm Films (College-Level Titles). Universities and colleges can meet the basic standards for 16 mm films (college-level titles) in two ways: (1) 500 college level titles plus two per instructor and (2) an average of three film rental per instructor per course. Table 13 shows that 55 percent (6) of Group One did not meet the basic standards. Forty-five percent (5) of Group One met the basic standards, but none of the universities in Group One met the advanced standards for college level 16 mm films. The investigator did not ask the institutions to report the average film rentals per instructor per course, therefore, the number of institutions that met DAVI standards by the second method could not be determined.

One hundred percent (8) of Group Two, 100 percent (5) of Group inree, 100 percent (7) of Group Four, and 100 percent (5) of Group Five failed to meet the basic DAVI standards for 16 mm collegelevel films. None of the participating institutions met the advanced standards for 16 mm college-level films.

According to DAVI standards, each teacher education institution should have a basic film collection recommended for elementary and secondary schools. A basic collection consists of 1,000 elementary and secondary film titles. Forty-five percent (5) of the institutions in Group One did not meet the basic standards. Eighteen percent (2) met the basic standards and 36 percent (4) met the advanced standards for elementary and secondary 16 mm film titles. In Group Four, 100 percent (7) of the institutions failed to meet the basic DAVI standards for elementary and secondary film titles. Since Groups Two, Three,

and Five are not teacher education institutions, the DAVI standards for elementary and secondary films do not apply to their media programs.

<u>Filmstrips, 35 mm</u>. The DAVI basic standards for filmstrips is 2,000 titles with duplicates as needed. Of the five groups reporting, only Group One met the basic standards for filmstrips.

The DAVI advanced standards for filmstrips is 3,000 titles with duplicates as needed. None of the five groups met the advanced standards for filmstrips.

Recordings, Tape and Disc. The DAVI basic standards for recordings is a collection of 1,000 per institution. Seventy-three percent (8) of the institutions in Group One failed to meet the basic standards. Twenty-seven percent (3) of the institutions in Group One met the basic standards. Group Two reported that 83 percent (7) institutions did not meet the basic standards, but 13 percent (1) did meet the basic standards. However, the data reported by Group Four indicated that 29 percent (2) institutions did meet the basic standards.

The DAVI advanced standards for recordings is a collection of 2,000 recordings per institution. Of the five groups, 29 percent (2) of Group Four met the advanced standards while all other institutions failed to met the basic standards.

The DAVI standards did not develop guidelines for all types of instructional materials. Although guidelines were not developed for some materials, it should be recognized that they do make a contribution to instruction and must be made available to instructors. Table 14 shows the number and percentage of universities and colleges from each

group that provided certain types of instructional materials not included in the DAVI standards.

TABLE 14

NUMBER AND PERCENTAGE OF OKLAHOMA INSTITUTIONS
THAT PROVIDE CERTAIN TYPES OF INSTRUCTIONAL
MATERIALS FROM THE EDUCATIONAL
MEDIA PROGRAM TO INSTRUCTORS

		Nun	nber a	ınd I	Percer	ntage	by (Group	os		
Type of Materials		G ₁	G	2	G	3	G	4	G	5	
		=11)	_(N=	:8)	(N=	=5)	(N:	-7)	(N=5)		
	%	No.	%	No.	. %	No.	%	No.	. %	No.	
8mm Films	91	10	50	4	40	2	57	4	40	2	
2" X 2" Slides	91	10	75	6	80	4	71	5	80	4	
3½" X 4" Slides	55	6	0	0	0	0	14	1	20	1	
Study Prints	45	5	25	2	40	2	14	1	60	3	
10" X 10" Transparencies	91	10	63	5	80	4	86	6	80	4	
3-D Materials	45	5	38	3	20	1	0	0	0	0	
Graphic Materials	82	9	2 5	2	40	2	57	4	60	3	
Globes and Graphs	73	8	75	6	40	2	29	2	80	4	

G₁ = state-owned universities and senior colleges.

8 mm Films. As reported by each of the groups, 91 percent (10) of Group One, 50 percent (4) of Group Two, 40 percent (2) of Group Three, 57 percent (4) of Group Four, and 40 percent (2) of Group Five provided 8 mm films to instructors.

 G_2^- = state-owned junior colleges

G₃ = community junior colleges

G₄ = independent senior colleges

G5 = independent junior colleges

2" X 2" Slides. Two-by-two slides were provided through the media programs of 91 percent (10) of Group One's media program. Seventy-five percent (6) of Group Two, 80 percent (4) of Group Three, 71 percent (5) of Group Four, and 80 percent (4) of the institutions in Group Five provided these materials.

 $3\frac{1}{2}$ " X 4" Slides. Fifty-five percent (6) of the institutions reporting in Group One provided $3\frac{1}{2}$ " X 4" slides to their instructors. None of the institutions in Groups Two and Three, 14 percent (1) of Group Four, and 20 percent (1) of the institutions in Group Five provided these materials for use in instruction.

Study Prints. All institutions reporting from the media program provided study prints to instructors. Forty-five percent (5) of the institutions in Group One, 25 percent (2) in Group Two, 40 percent (2) in Group Three, 14 percent (1) in Group Four, and 60 percent (3) in Group Five offered study prints.

10" X 10" Overhead Transparencies. According to the institutions reporting, overhead transparencies were one of the most popular types of instructional materials. Ninety-one (10) institutions in Group One, 63 percent (5) in Group Two, 80 percent (4) in Group Three, 66 percent (6) in Group Four, and 80 percent (4) in Group Five provided these materials for instruction.

3-D Materials. The next area of media software was the area of 3-D materials. Forty-five percent of Group One, 38 percent (3) of Group Two, 20 percent (1) of Group Three, and none of the institutions in Groups Four and Five provided 3-D materials to their instructors.

Graphic Materials. Of the 11 institutions reporting in Group One, 82 percent (9) provided graphic materials to their instructors.

Twenty-five percent (2) of Group Two, 40 percent (2) of Group Three,

57 percent (4) of Group Four, and 60 percent (3) of Group Five reported that graphic materials were available through their media program.

Globes and Maps. Globes and maps were provided to instructors by 73 percent (8) of Group One, 75 percent (6) of Group Two, 40 percent (2) of Group Three, 29 percent (2) of Group Four, and 80 percent (4) of Group Five. All other reporting institutions failed to provide these materials.

Summary of Analysis of Materials Data

When the data reported by the five groups of institutions were analyzed using the DAVI standards for materials it was observed that only two areas showed any colleges that met advanced standards. These were in 16 mm films (elementary and secondary titles) and in recordings. In the area of 16 mm films (elementary and secondary) 36 percent of Group One showed an advanced standing. In the area of recordings, 29 percent of Group Four showed an advanced standing. Comparable findings were shown when the DAVI standards were used to establish those colleges that had a program which could meet the basic standards. Of the universities and colleges in Group One, state-owned universities and senior colleges, 45 percent had a basic 16 mm film collection which could meet the basic standards with elementary and secondary titles. The universities and senior colleges in Group One showed that 100 percent of these institutions could meet the basic standards for filmstrips.

However, in recordings only 27 percent of the institutions could meet the basic standards.

Group Two showed that 13 percent of the institutions met the basic standards in recordings. Groups Two, Three, Four, and Five could not meet the basic standards in any of the areas of materials. For instance, none of the institutions in Groups Two, Three, Four, or Five could meet the basic standards for 16 mm films (college titles or elementary and secondary titles). Neither could they meet the basic standards in filmstrips or recordings.

In the area of certain types of instructional materials such as 8 mm films, 2" X 2" slides, 3½" X 4" slides, etc., the data reported by the 36 institutions indicated that all of the universities and colleges in each group provided a majority of the materials through their educational media programs. The most popular item was the 10" X 10" transparency. The lowest percentage of the groups that presented this kind of material was Group Two which was the state-owned junior colleges. However, 63 percent of them made these materials available. The items most available by Group One were 8 mm films, 2" X 2" slides, and 10" X 10" transparencies. In each case, 91 percent of the institutions made these materials available. The highest percentage in Group Two was shown for 2" X 2" slides and globes and graphs. Group Three showed the highest percentage in 2" X 2" slides and 10" X 10" transparencies. Group Four showed the highest percentages in 10" X 10" transparencies and 2" X 2" slides while Group Five showed the highest percentages in 2" X 2" slides, 10" X 10" transparencies, and globes and graphs.

The results of the materials analysis can be summarized by saying that according to DAVI standards, universities and colleges in Oklahoma are far below average and very few met the basic standards for materials.

Analysis of the Quantitative Data of Equipment Based on DAVI Standards

Official DAVI standards for higher education media programs contains guidelines for 19 types of media instructional equipment.

The data reported by the institutions included the number of pieces of equipment contained in each of the 19 areas. Table 15 shows the actual numbers of pieces of equipment as reported by the institutions in each of the five groups. The number of item of selected types of permanent media installations as reported by the institutions in each group is shown in Table 16. The state-owned universities and colleges reported the largest number of pieces of equipment in all of the 19 areas. None of the other groups showed comparable amounts of equipment, however, there was at least some equipment reported in all areas by each of the five groups.

Further analysis of the data was performed to determine which of the institutions met the DAVI standards for instructional equipment. The data reported by the institutions is based on DAVI standards which appear in Appendix D.

Table 17 shows the number and percentage of institutions from each group that classified as less than basic, basic, or advanced according to the equipment standards. The 19 types of equipment are shown in Table 17 and discussed on the following pages.

IN EACH GROUP

		Number o	of Items b	y Groups	
	G ₁ (N=11)	G ₂ (N=8)	G ₃ (N=5)	G4 (N=7)	G ₅ (N=5)
16 mm Projectors	309	32	17	5 2	15
8 mm Projectors	152	13	12	21	2
2 X 2 Slide Projectors	261	18	23	80	13
Filmstrip Projectors	157	23	13	36	14
Sound Filmstrip Projectors	s 46	3	4	3	2
3½ X 4 Projectors	17	0	0	2	1
Filmstrip Viewers	66	11	25	23	4
Overhead ProjClassroom	526	82	61	113	15
Overhead ProjAuditorium	68	2	7	9	1
Opaque Projectors	65	9	5	11	5
TV Receivers	279	2	16	13	3
Record Players	100	29	19	51	21
Tape Recorders	305	90	60	209	25
Projector Carts	56	26	65	22	17
Video-tape Recorders	44	4	6	13	2
Radio Receivers	19	0	4	3	3
Projection Screens (port)	267	23	15	41	13

 G_1 = state-owned universities and senior colleges

G₂ = state-owned junior colleges

 G_3 = community junior colleges

G₄ = independent senior colleges

G₅ = independent junior colleges

NUMBER OF ITEMS OF SELECTED TYPES OF PERMANENT MEDIA INSTALLATIONS LOCATED IN EACH GROUP

TABLE 16

Maria of Trestallation		Number	r of Items	by Grou	ıps		
Type of Installation	G ₁ (N=11)	G ₂ (N=8)	G3 (N=5)	G ₄ (N=7)	G ₅ (N=5)		
Number of Classrooms With Light Control	56	8	4	17	3		
Permanently Installed Screens	391	91	60	87	31		
Electronic Learning Lab	12	5	4	7	3		
Closed Circuit Television	6	0	0	2	1		

 G_1 = state-owned universities and senior colleges

G₂ = state-owned junior colleges

 G_3 = community junior colleges

 G_{L} = independent senior colleges

 G_5 = independent junior colleges

TABLE 17

NUMBER AND PERCENTAGE OF INSTITUTIONS FROM EACH GROUP THAT WERE CLASSIFIED AS LESS THAN BASIC, BASIC OR ADVANCED ACCORDING TO DAVI EQUIPMENT STANDARDS

				L	288 T	han	Basic								Ва	sic									Advar	ced				
	G	1	G	2		3	G	4	G	5	G	1	G	2	G	3	G	4	G	5	G	1	-	32	_	3	G	4	G	35
	(N=	11)	(N	=8)	(N	(- 5	(N	- 7)	()	1=5)	(N=	11)	(N	-8)	(N	•5)	(N	≃7)	(N	= 5)	(N=	11)	(1)	1=8)	(1)	= 5)	(N	≖ 7)	(N	V=5)
	7.	No.	7,	No.	7.	No.	%	No.	7.	No.	%	No.	7,	No.	%	No.	%	No.	%	No.	%	No.	3%	No.	<u>%</u>	No.	%	No.	7.	No
6 mm Projectors	9	1	38	3	0	0	43	3	40	2	9	1	24	2	80	4	57	4	0	0	82	9	38	3	20	1	0	0	60	3
mm Projectors	9	1	50	4	40	2	43	3	60	3	45	5	25	2	0	0	43	3	40	2	56	5	25	2	60	3	14	1	0	0
X 2 Slide Proj.	36	4	50	4	40	2	43	3	40	2	18	2	50	4	0	0	0	0	20	1	56	6	0	0	60	3	57	4	40	2
ilmstrip Proj.	36	4	38	3	0	0	57	4	0	0	18	2	25	2	20	1	29	2	0	0	56	6	38	3	80	4	14	1	100	5
ound Filmstrip Projector	100	11	100	8	100	5	100	7	100	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
X 4 Projector	100	11	100	8	100	5	86	6	100	5	0	0	0	0	0	0	14	1	0	0	0	0	0	0	0	0	0	0	0	0
ilm Viewer	64	7	100	8	80	4	71	5	100	5	27	3	0	0	20	1	29	1	0	0	9	1	0	0	0	Û	0	0	0	0
werhead,Classroom	9	1	37	3	0	0	43	3	40	2	82	9	50	4	100	5	43	3	60	3	9	1	13	ı	0	0	14	1	0	0
verhead,Auditorium	9	1	75	6	60	3	43	3	100	5	45	5	25	2	20	1	0	0	0	0	46	5	0	0	20	1	57	4	0	0
paque Projector	27	3	88	7	100	5	71	5	80	4	45	5	12	1	0	0	29	2	20	1	28	3	0	0	0	0	0	0	0	0
V Receivers	91	10	100	8	80	4	86	6	100	5	9	1	0	0	20	1	14	1	0	0	0	0	0	0	0	0	0	0	e	0
ecord Players	27	3	12	1	0	0	14	1	0	0	18	2	0	0	20	1	28	2	20	1	55	ó	88	7	80	4	58	4	80	<u> </u>
ape Recorders	9	1	38	3	20	1	0	0	20	1	73	8	25	2	20	1	57	4	20	1	18	2	37	3	60	5	43	3	60	3
rojection Carts	0	0	25	2	100	5	29	2	60	3	9	1	25	2	0	0	0	0	0	0	91	10	50	4	С	0	71	5	40	2
ideo-tape Rec.	18	2	50	4	40	2	43	3	60	3	82	9	50	4	40	2	57	4	40	2	0	0	0	0	20	ì	0	0	Û	ũ
losed Circuit TV	45	5	100	8	100	5	71	5	80	4	55	6	0	0	0	0	29	2	20	1	0	0	0	O	0	0	0	0	О	0
adio Receivers	82	9	100	8	100	5	100	7	100	5	18	2	0	0	0	0	0	0	0	0	0	0	e	0	0	0	e	0	0	0
rojection Screens	100	11	100	8	100	5	100	7	100	5	0	0	0	0	0	0	0	0	0	0	0	0	С	J	0	G	ū	0	0	0
lec. Learn. Lab.	18	2	50	4	60	3	43	3	60	3	82	9	50	4	40	2	57	4	40	2	0	0	0	O	C	0	0	0	0	c

Motion Picture Projectors, 16 mm. Universities and colleges can meet DAVI standards for 16 mm sound projectors two different ways. One, they can meet the standards if they have one 16 mm sound projector for every eight teaching stations. The second way they can meet the standards is to have one for every five teaching stations, but this is only if it is a single purpose institution. Nine percent (1) of Group One could not meet the basic standards, one met the basic standards, and 82 percent (9) met the advanced standards. In Group Two, state-owned junior colleges, 38 percent (3) had programs that could not meet the basic standards, 24 percent (2) had programs that could not meet the basic standards, and 38 percent (3) met the advanced standards. In Group Three, community junior colleges, 80 percent (4) met the basic standards and 20 percent (1) met the advanced standards. In the independent senior colleges, Group Four, 43 percent (3) had programs that could not meet basic standards, 57 percent (4) met the basic standards, and none of the programs could meet the advanced standards. In Group Five, independent junior colleges colleges, 40 percent (2) could not meet the basic standards and 60 percent met the advanced standards.

Motion Picture Projectors, 8 mm. In order for a university or college to have a media program that meets the basic DAVI standards they must have from one to three sound projectors per institution. To meet the advanced standards, the institution must have an 8 mm projector per each ten teaching stations. Based on these standards, 9 percent (1) of Group One had a program that could not meet the basic standards, 45 percent (5) of the programs could meet the basic standards, and five of the institutions met the advanced standards.

Of the colleges in Group Two, 50 percent (4) could not meet the basic standards, 25 percent (2) met the basic standards, and two programs met the advanced standards. In Group Three, 40 percent (2) could not meet the basic standards and 60 percent (3) met the advanced standards. In Group Four, 43 percent (3) could not meet the basic standards, three met the basic standards, and 14 percent (1) met the advanced standards. In Group Five, 60 percent (3) could not meet the basic standards, while 40 percent (2) met the basic standards, and none of the institutions in Group Five could meet the advanced standards.

Slide Projectors, 2" X 2". The DAVI standards indicate that a university or college media program must have one 2" X 2" slide projector per ten teaching stations to meet the basic standards. For the media program to meet the advanced standards it is necessary to have one 2" X 2" slide projector to each six teaching stations. According to these standards, 36 percent (4) of the institutions in Group One could not meet the basic standards, 18 percent (2) met the basic standards, and 46 percent (5) met the advanced standards. In Group Two, 50 percent (4) of the programs could not meet the basic standards and the other four could meet the basic standards. None of the programs in Group Two could meet the advanced standards. In Group Three, 40 percent (2) programs could not meet the basic standards, but 60 percent (3) met the advanced standards. In Group Four, 43 percent (3) could not meet the basic standards and 57 percent (4) met the advanced standards. In Group Five, 40 percent (2) could not meet the basic standards, 20 percent (1) met the basic standards, and the other two met the advanced standards.

Filmstrip or Combination Filmstrip Slide Projectors. DAVI basic standards require one filmstrip projector for every ten teaching stations. To meet the advanced standards, one filmstrip projector must be provided for each five teaching stations. Among the universities and colleges in Group One, 36 percent (4) had programs that could not meet the basic standards, 18 percent (2) met the basic standards, and 46 percent (5) met the advanced standards. In Group Two, 38 percent (3) could not meet the basic standards, 25 percent (2) met the basic standards, and three programs met the advanced standards. In Group Three, 20 percent (1) met the basic standards and the other 80 percent (4) met the advanced standards. In Group Four, 57 percent (4) could not meet the basic standards ards, 29 percent (2) met the basic standards, and 14 percent (1) met the advanced standards. In Group Five, all five insitutions met the advanced standards.

Sound Filmstrip Projectors. The DAVI standards indicate that for a media program to meet the basic standards, one sound filmstrip projector must be provided for every 15 teaching stations and the advanced standards require one filmstrip projector per every ten teaching stations. According to the data reported by the 36 institutions, all 36 could not meet the basic standards for sound filmstrip projectors.

Projectors, 3½" X 4". To meet the DAVI basic standards, one projector should be provided for each auditorium. One projector, equipped with arc or similar power, per auditorium is required for an advanced program. One of the colleges in Group Four indicated that they could meet the basic standards. The other 35, which included all of the groups, could not meet the basic standards.

Filmstrip Viewers. The DAVI basic standards indicate that an institution must provide five to ten filmstrip viewers at each filmstrip depository and ten to 20 at each filmstrip depository to meet the advanced standards. The data reported by the different groups indicated that 64 percent (7) of Group One could not meet the basic standards, 27 percent (3) met the basic standards, and only 9 percent (1) institution had a program that could meet the advanced standards. All eight of the institutions in Group Two could not meet the basic standards and 80 percent (4) of Group Three could not meet the basic standards, while 20 percent (1) could meet the basic standards. Seventy-one percent (5) of the institutions in Group Four could not meet the basic standards and the other two programs met the basic standards. All five institutions in Group Five could not meet the basic standards.

Classroom Projectors, 10" X 10". One projector must be provided for every four teaching stations to meet the DAVI basic standards and one per teaching station to meet the advanced standards. In Group One, 9 percent (1) institution could not meet the basic standards, 82 percent (9) met the basic standards, and 9 percent (1) met the advanced standards. In Group Two, 37 percent (3) could not meet the basic standards, 50 percent (4) met the basic standards, and 13 percent (1) met the advanced standards. In Group Three, all five institutions met the basic standards, three institutions met the basic standards, and 14 percent (1) met the advanced standards. In Group Five, 40 percent (2) could not meet the basic standards.

Overhead Projectors, 10" X 10" Auditorium. In order for a university or college to meet the DAVI basic or advanced standards, they must provide an appropriate number of large group instructional areas with auditorium type overhead projectors. The investigator found that in Group One, 9 percent (1) of the programs could not meet the basic standards, 45 percent (5) met the basic standards, and five met the advanced standards. From Group Two, 75 percent (6) could not meet the basic standards and the other 25 percent (2) met the basic standards. In Group Three, 60 percent (3) could not meet the basic standards, 20 percent (1) met the basic standards, and the other 20 percent (1) met the advanced standards. In Group Four, 43 percent (3) could not meet the basic standards and 57 percent (4) met the advanced standards. All five institutions in Group Five could not meet the basic standards.

Opaque Projectors. The DAVI standards indicate that in order for an institution to meet the basic standards it must provide three to six opaque projectors per institution and eight to 12 per institution to meet the advanced standards. The data from Group One indicated that 27 percent (3) could not meet the basic standards, 45 percent (5) met the basic standards, and three institutions met the advanced standards. In Group Two, 88 percent (7) could not meet the basic standards and 12 percent (1) could meet the basic standards. In Group Three, all five institutions could not meet the basic standards. In Group Four, 71 percent (5) could not meet the basic standards and 29 percent (2) met the basic standards. In Group Five, 80 percent (4) institutions could not meet the basic standards and 20 percent (1) met the basic standards.

TV Receivers. If a program is to meet the basic standards it must provide one TV receiver for each 24 viewers where programs are

available or projection TV is needed. For advanced standards, they need to provide one per teaching station, but no more than 24 viewers per set. Based on these requirements, the data indicated that in Group One, 91 percent (10) could not meet the basic standards and 9 percent (1) met the basic standards. In Group Two, all eight programs could not meet the basic standards. In Group Three, 80 percent (4) could not meet the basic standards and one program met the basic standards. In Group Four, 86 percent (6) could not meet the basic standards and one program met the basic standards. In Group Five, all five of the independent junior colleges could not meet the basic standards. This was one of the few areas where none of the 36 institutions could meet the advanced standards.

Record Players. One record player must be provided for each 25 teaching stations to meet DAVI standards for a basic program and one for every 15 stations to meet the advanced standards. When DAVI standards were applied to the five groups the results indicated that 27 percent (3) of Group One could not meet the basic standards, 18 percent (2) met the basic standards, and 55 percent (6) met the advanced standards. In Group Two, 12 percent (1) could not meet the basic standards and 88 percent (7) met the advanced standards. In Group Three, 20 percent (1) met the basic standards and the other four institutions met the advanced standards. In Group Four, 14 percent (1) could not meet the basic standards ards, 28 percent (2) met the basic standards, and 58 percent (4) met the advanced standards. In Group Five, 20 percent (1) met the basic standards and 80 percent (4) met the advanced standards.

Tape Recorders. DAVI basic standards require one tape recorder for each five teaching station and the advanced standards require one for every two teaching stations. The analysis of the equipment data indicated

that 9 percent (1) of Group One could not meet the basic standards, 73 percent (8) met the basic standards, and 18 percent (2) met the advanced standards. Thirty-eight percent (3) of Group Two could not meet the basic standards, 25 percent (2) met the basic standards, and 38 percent (3) met the advanced standards. In Group Three, 20 percent (1) could not meet the basic standards, one program met the basic standards, and 60 percent (3) met the advanced standards. In Group Four, 57 percent met the basic standards and 43 percent (3) met the advanced standards. In Group Five, 20 percent (1) could not meet the basic standards, one institution met the basic standards, and 60 percent (3) met the advanced standards.

Projector Carts. The DAVI basic standards require one projector cart per three to six pieces of equipment and one for each two to four pieces of equipment to meet the advanced standards. In Group One, 9 percent (1) met the basic standards and 91 percent (10) met the advanced standards. In Group Two, 25 percent (2) met the basic standards, two programs could not meet the basic standards, and 50 percent (4) met the advanced standards. In Group Three, all five institutions could not meet the basic standards. In Group Four, 29 percent (2) could not meet the basic standards while 71 percent (5) met the advanced standards. In Group Five, 60 percent (3) could not meet the basic standards and 40 percent (2) met the advanced standards and 40 percent (2) met the advanced standards.

<u>Video-Tape Recorders</u>. The DAVI standards indicate that one video-tape recorder per institution is required to meet the basic standards.

For an advanced standing, one video-tape recorder is required for each

TV production unit. In Group One, 18 percent (2) could not meet the basic standards and 82 percent (9) met the basic standards. In Group Two, 50

percent (4) could not meet the basic standards and the other four programs

met the basic standards. In Group Three, 40 percent (2) could not meet the basic standards, two programs met the basic standards, and 20 percent (1) met the advanced standards. In Group Four, 43 percent (3) could not meet the basic standards and 57 percent (4) met the basic standards. In Group Five, 60 percent (3) could not meet the basic standards and 40 percent (2) met the basic standards.

Closed Circuit Television. The DAVI standards for closed circuit television are not as well defined as some of the other pieces of equipment. They simply indicate one studio per institution capable of distribution of programming to each teaching station. However, it does not indicate what basic and advanced requirement should be. Based on the number of units available to each institution, the investigator found the following results concerning the five groups.

In Group One, 45 percent (5) were not equipped with a closed circuit television studio. The other 55 percent (6) were equipped with a studio. All eight of the institutions in Group Two and all five in Group Three were not equipped with a closed circuit television studio.

In Group Four, 71 percent (5) institutions were not equipped with a closed circuit television studio and 29 percent (2) were equipped with a closed circuit television studio. In Group Five, 80 percent (4) were not equipped with a studio and 20 percent (1) was equipped with a studio.

AM-FM Radio Receivers. The DAVI basic standards require three

AM-FM receivers in a central location. One receiver is required for each

classroom building to meet the advanced standards.

According to these standards, 80 percent (9) of Group One could not meet the basic standards and 18 percent (2) met the basic standards.

However, all eight of the institutions in Group Two, all five in Group Three, all seven in Group Four and five in Group Five could not meet the basic standards. This indicates that only two of the 36 institutions has programs that could meet the basic standards for radio receivers.

<u>Projection Screens.</u> The DAVI standards require one projection screen for each teaching station at least 70" X 70" with provision for keystone elimination plus one portable screen per building. In addition, there should be one suitable screen for auditoriums.

Based on these standards, the results reported by the 36 institutions indicated that none of the universities and colleges have media programs that could be considered to be basic or advanced.

Electronic Learning Labs. The basic requirements of the DAVI standards are one learning lab per institution and the advanced standards requires that more than one per institution be provided. The data reported by Group One indicated that 18 percent (2) could not meet the basic standards and the other 82 percent (9) met the basic standards. In Group Two, 50 percent could not meet the basic standards and the other four programs met the basic standards. Of Group Three, 60 percent (3) could not meet the basic standards and 40 percent (2) met the basic standards. In Group Four, 43 percent (3) could not meet the basic standards and 57 percent (4) met the basic standards. In Group Five, 60 percent (3) could not meet the basic standards.

Light Control. The DAVI standards did not develop basic or advanced standards for light control. According to the standards, every classroom should have adequate light control. Adequate in this instance means the light can be controlled to the extent that all types

of projected media can be utilized effectively. Table 16 shows the total number of classrooms with light control facilities as reported by the total number of institutions in each of the five groups.

These 19 areas of media equipment are the only ones for which basic standards were developed by the DAVI. However, there are several pieces of media equipment that are equally important to a media program. This group of media equipment, commonly referred to as local production equipment, is so varied from one institution to another that it is difficult if not impossible to develop standards that can be applied to all universities and colleges.

In collecting the data for this study, the investigator simply asked whether these institutions had this equipment. No effort was made to determine how much equipment they contained in each of the areas. Table 18 presents the results of the data collected. The percentage and number of the colleges in each of the five groups are provided for each of the local production equipment areas.

Dry Mount Press and Tacking Iron. The analysis of the data reported by the 36 institutions indicates that 82 percent (9) of Group One, 25 percent (2) of Group Two, 80 percent (4) of Group Three, 43 percent (3) of Group Four, and 20 percent (1) of Group Five provided a dry mount press and tacking iron as part of their local production equipment.

Paper Cutters. All 11 of the institutions in Group One, 38 percent (3) of Group Two, all five in Group Three, 71 percent (5) in Group Four, and 20 percent (1) in Group Five provided paper cutters.

TABLE 18 NUMBER AND PERCENTAGE OF OKLAHOMA INSTITUTIONS PROVIDING CERTAIN TYPES OF MEDIA PRODUCTION EQUIPMENT

		Num	ber a	and P	ercen	tage	by G	roup	s	
Type of Materials		G_1	G _:	2	G ₃		G ₄		G.	5
	(N	=11)	(N:	=8)	(N=	:5)	(N=	:7)	(N=	=5)
	%	No.	%	No.	%	No.	%	No.	%	No.
Drymount Press and Tacking Iron	82	9	25	2	80	4	43	3	20	1
Paper Cutter	100	11	38	3	100	5	71	5	20	1
Transpanency Produc- tion Equipment	100	11	50	4	100	5	57	4	60	3
16 mm Motion Pic. Camera	82	9	25	2	0	0	71	5	20	1
8 mm Motion Pic. Camera	82	9	25	2	20	1	71	5	40	2
35 mm Still Camera	100	11	50	4	80	4	57	4	80	4
Polaroid Camera	73	8	38	3	40	2	43	3	40	2
Equipped Dark Room	64	7	50	4	80	4	86	6	40	2
Spirit Duplicator	91	10	50	4	60	3	71	5	60	3
Primary Typewriter	82	9	38	3	20	1	43	3	20	1
Copy Camera	82	9	38	3	20	1	57	4	40	2
Light Box	100	11	13	1	20	1	57	4	20	1
Slide Reproducer	64	7	13	1	0	0	57	4	20	1
Film Splicer	100	11	25	2	20	1	100	7	40	2
Tape Splicer	100	11	13	1	20	1	100	7	40	2
Mech. Lettering Device	91	10	25	2	20	1	57	4	40	2
2nd Transparency Production Equipment	82	9	38	3	0	0	43	3	20	1

 G_1 = state-owned universities and senior colleges G_2 = state-owned junior colleges G_3 = community junior colleges G_4 = independent senior colleges G_5 = independent junior colleges

Transparency Production Equipment. All 11 institutions in Group One, 50 percent (4) in Group Two, all five in Group Three, 57 per cent (4) in Group Four, and 20 percent (1) in Group Five provided transparency production equipment as a part of their media program.

Motion Picture Camera, 16 mm. A 16 mm motion picture camera was provided by 82 percent (9) of Group One, 50 percent (4) of Group Two, all five of the institutions in Group Three, 57 percent (4) in Group Four, and 60 percent (3) in Group Five.

Motion Picture Camera, 8mm. In Group One, 82 percent (9) institutions provided an 8 mm motion picture camera as part of their local production equipment. This item was also provided by 25 percent (2) of Group Two, none of Group Three, 71 percent (5) of Group Four, and 40 percent (2) of Group Five.

Still Cameras, 35 mm and Instamatic. In Group One, all 11 institutions provided still cameras as part of their media program.

Fifty percent (4) of Group Two, 80 percent (4) of Group Three, 57 percent of Group Four, and 80 percent (4) of Group Five also provided this item as part of their local production equipment.

Polaroid Cameras. A polaroid camera was provided by 73 percent (8) of Group One, 38 percent (3) of Group Two, 40 percent (2) of Group Three, 43 percent (3) of Group Four, and 40 percent (2) of Group Five.

Equipped Dark Room. An equipped dark room for the development of film and printing of pictures was provided by 64 percent (7) of Group One, 50 percent (4) of Group Two, 80 percent (4) of Group Three, 86 percent (6) of Group Four, and 40 percent (2) of Group Five.

Spirit Duplicator. Ninety-one percent (10) of Group One,
50 percent (4) of Group Two, 60 percent (3) of Group Three, 71 percent
(5) of Group Four, and 60 percent (3) of Group Five provided a spirit duplicator as part of their local production equipment.

Primary Face Typewriter. A primary face typewriter is provided by 82 percent (9) of Group One, 38 percent (3) of Group Two, 20 percent (1) of Group Three, 45 percent (3) of Group Four, and 20 percent (1) of Group Five.

Copy Camera. In Group One, 82 percent (9) institutions provided a copy camera. This item was also provided by 38 percent (3) of Group Two, 20 percent (1) of Group Three, 57 percent (4) of Group Four, and 40 percent (2) of Group Five.

Light Box. Another part of the local production equipment is a light box. This item was provided by all 11 institutions in Group One, 13 percent (1) of Group Two, 20 percent (1) of Group Three, 57 percent (4) of Group Four, and 20 percent (1) of Group Five.

Slide Reproducer. In Group One, 64 percent (7) of the institutions provided a slide reproducer for their media program. A slide reproducer was provided by 13 percent (1) of Group Two, 57 percent (4) of Group Four, and 20 percent (1) in Group Five. A slide reproducer was not provided by any of the institutions in Group Three.

Film Splicer. All of the institutions in Group One provided a film splicer. Twenty-five percent (2) of the institutions in Group Two, 20 percent (1) in Group Three, all of those in Group Four, and 40 percent (2) in Group Five provided a film splicer as part of their local production equipment.

Tape Splicer. All 11 institutions in Group One and all seven in Group Four provided a tape splicer as part of their local production equipment. However, only 13 percent (1) of Group Two, 20 percent (1) of Group Three, and 40 percent (2) of Group Five provided this item.

Mechanical Lettering Device. Ninety-one percent (10) of Group One, 25 percent (2) of Group Two, 20 percent (1) of Group Three, 57 percent (4) of Group Four, and 40 percent (2) of Group Five provided a mechanical lettering device for their media program.

Second Type of Transparency Production Equipment. A second type of transparency production equipment was provided by 82 percent (9) of Group One, 38 percent (3) of Group Two, none of Group Three, 43 percent (3) of Group Four, and 20 percent (1) of Group Five.

Summary of Analysis of Equipment Data

When the data reported by the five groups were analyzed using the DAVI equipment standards, it was observed that 12 of the 19 areas showed institutions meeting the advanced standards. The 12 areas were 16 mm motion picture projectors, 8 mm motion picture projectors, 2" X 2" slide projectors, filmstrip projectors, filmstrip viewers, classroom overhead projectors, auditorium overhead projectors, opaque projectors, record players, tape recorders, projector carts, and video-tape recorders.

In the area of 16 mm motion picture projectors, 82 percent of Group One, 38 percent of Group Two, 20 percent of Group Three, and 60 percent of Group Five met the advanced standards. More institutions met the basic standards than did not meet the basic standards in this area.

The advanced standards for 8 mm motion picture projectors were met by 46 percent of the state-owned universities and senior colleges, 25 percent of the state-owned junior colleges, 60 percent of the community junior colleges, and 14 percent of the independent senior colleges. More institutions did not meet the basic standards than did meet the basic standards for 8 mm motion picture projectors.

More institutions did not meet the basic standards than met the basic or advanced standards for 2" X 2" slide projectors. Fourty-six percent of Group One, 60 percent of Group Three, 57 percent of Group Four, and 40 percent of Group Five reported meeting the advanced standards in this area.

Group One showed that 46 percent of the institutions met the advanced standards in filmstrip projectors. Thirty-eight percent of Group Two, 80 percent of Group Three, 14 percent of Group Four, and all of Group Five met the advanced standards for filmstrip projectors. More institutions from each group met the basic standards than did not meet the basic standards for filmstrip projectors.

Only three institutions met the DAVI advanced standards for classroom overhead projectors. One institution from the state-owned universities
and senior colleges, one from the state-owned junior colleges, and one
from the independent senior colleges met the advanced standards. More
institutions from each group met the basic standards, than did not meet
the basic standards for overhead projectors.

Forty-six percent of the institutions in Group One, 20 percent of the institutions in Group Three and 57 percent of the institutions in Group Four met the advanced standards for auditorium overhead

projectors. More institutions from all groups did not meet the basic standards than did meet the basic standards for auditorium projectors.

In the area of opaque projectors, only three institutions in Group One could meet the advanced standards. Nine of the 36 institutions met the basic standards and the remaining institutions did not meet the basic standards for opaque projectors.

More institutions met the advanced standards for record players than any of the remaining areas of equipment. Fifty-five percent of Group One, 88 percent of Group Two, 80 percent of Group Three, 58 percent of Group Four, and 80 percent of Group Five met the advanced standards for record players.

Each group had institutions meeting the advanced standards for tape recorders. Sixty percent of the community junior colleges, and 60 percent of the independent junior colleges met the advanced standards for tape recorders. The advanced standards for tape recorders were also met by 43 percent of the independent senior colleges, 37 percent of the state-owned junior colleges, and 18 percent of the state-owned universities and senior colleges. More institutions reported meeting the DAVI standards than not meet the basic standards in the area of tape recorders.

Twenty-one of the institutions met the advanced standards for projector carts. Ninety-one percent of Group One, 50 percent of Group Two, 71 percent of Group Four, and 40 percent of Group Five met the advanced standards. Three of the 36 institutions met the basic standards while 12 institutions could not meet the basic standards for projector carts.

Of the 36 institutions reporting, one community junior college met the advanced standard for video-tape recorders. More institutions met the basic standards than did not meet the basic standards for video tape recorders.

None of the institutions could meet the advanced standards in the areas of radio receivers, projection screens, television receivers, $3\frac{1}{2}$ " X 4" projectors, and sound filmstrip projectors. No institution met the basic or advanced standards for projection screens and sound filmstrip projectors.

All five of the groups reported some type of local production equipment, however, Group Three had three areas in which they reported no equipment. These areas were the 16 mm motion picture camera, the slide reproducer, and the second type of transparency producer. Group One, the state-owned universities and senior colleges, are the strongest of the five groups in all areas. However, Group Four, the independent senior colleges were better equipped with photography and dark room equipment than were the state-owned universities and colleges.

Analysis of the Educational Media Budgets

The capital expenditures used to operate educational media programs included in this study appeared to be important. The official DAVI standards which contain guidelines for the media budget were too vague to be applied to the media budgets as reported by the universities and colleges.

Tables 19 through 23 present the budgets for each group of institutions as they relate to purchases of new equipment, additional

materials, and the total media budgets as reported for the academic year 1971-72. The total media budgets consist of purchases to replace worn out equipment, purchases of new equipment, purchases of materials, rental of equipment, rental of materials such as films, and other expenditures such as office supplies, equipment parts, and repairs. The educational media budgets do not include salaries, building construction or remodeling, closed circuit television installations, or electronic learning centers. The budget figures for Group One are presented in Table 19.

TABLE 19

EDUCATIONAL MEDIA BUDGET EXPENDITURES
REPORTED BY STATE-OWNED UNIVERSITIES
AND SENIOR COLLEGES
(N = 11)

	Budg	et Area	
Institution Number	Purchase of New Equipment	Materials Purchases	Total Educational Media Budget
1	\$2,719	\$ 406	\$ 4,534
2	2,000	500	11,000
3	500	2,500	3,000
4	6,247	11,776	21,562
5	not reported	1,400	4,800
6	1,000	2,000	5,700
7	16,200	8,900	16,305
8	3,500	1,000	5,175
9	300	800	5,600
10	2,000	150	2,850
11	8,000	18,000	8,860
Mean Value	$\overline{X} = $4,246$	$\overline{X} = $4,312$	$\overline{\overline{X}} = \$11,762$

The budget for state-owned universities and senior colleges is shown in Table 19. The institutions reported an average budget of \$4,246 spent for the purchase of new equipment, however, one institution did not report a budget for the purchase of new equipment. A mean value of \$4,313 was spent for the purchase of new materials, and \$11,762 was the average expenditure for the total educational media budget.

TABLE 20

EDUCATIONAL MEDIA BUDGET EXPENDITURES
REPORTED BY STATE-OWNED
JUNIOR COLLEGES
(N = 8)

	Budg	get Area	
Institution Number	Purchase of New Equipment	Materials Purchases	Total Educational Media Budget
1	\$ 1,831	\$ 3,427	\$ 5,408
2	600	not reported	600
3	3,000	750	6,350
4	180	1,585	2,14 3
5	200	1,500	1,900
6	not reported	not reported	not reported
7	9,000	600	10,350
8	92,150	not reported	100,084
Mean Value	$\overline{X} = $15,280$	$\overline{X} = $1,572$	$\bar{X} = $18,119$

The educational media expenditures reported by state-owned junior colleges shows an average expenditure for new equipment of \$15,280. One college did not report a budget for equipment. Three of

the colleges did not report a budget for the purchase of materials, but of the five reporting there was an average expenditure of \$1,577. The average expenditure for the total budget was \$18,119.

TABLE 21

EDUCATIONAL MEDIA BUDGET EXPENDITURES
REPORTED BY COMMUNITY
JUNIOR COLLEGES
(N = 5)

Budget Area					
Institution Number	Purchase of New Equipment	Materials Purchases	Total Educational Media Budget		
1	not reported	\$ 50	\$ 150		
2	\$9 ,2 45	not reported	30,067		
3	150	6,872	7,547		
4	2,000	700	5,000		
5	not reported	100	600		
Mean Value	$\bar{x} = $3,798$	$\bar{X} = \$1,931$	$\overline{X} = $8,673$		

The community junior colleges reported an average expenditure of \$3,798 for new equipment, although two colleges did not report the budget for equipment purchases. Four of the five colleges reported an average expenditure of \$1,931 for materials and five community junior colleges reported an average expenditure of \$8,673 for the total educational media budget.

Table 22 shows the average expenditure for the educational media budget reported by the independent senior colleges which was \$2,270 for new equipment, \$2,125 for materials, and \$7,704 for their total budget.

TABLE 22

EDUCATIONAL MEDIA BUDGET EXPENDITURES REPORTED BY INDEPENDENT SENIOR COLLEGES

(N = 7)

	Budge	et Area	
Institution Number	Pur c hase of New Equipment	Materials Purchases	Total Educational Media Budget
1	not reported	not reported	not reported
2	not reported	not reported	\$ 1,400
3	\$ 700	\$ 900	5,000
4	600	1,500	4,600
5	1,000	100	2, 175
6	8,500	6,000	32,500
7	550	not reported	550
Mean Value	$\overline{X} = \$2,270$	$\bar{X} = \$2,125$	$\bar{X} = \$ 7,704$

The budget for the independent junior colleges is shown in Table 23. Four colleges reported a mean value of \$1,829 spent for the purchase of new equipment. The mean value reported by four institutions for the purchase of materials was \$281 and four colleges reported a total budget average of \$2,852.

The mean value of the capital expenditures for operation and how the media budget was developed are important to the present study.

Table 24, constructed from the qualitative data, presents a breakdown of the development of the media budget as reported by all institutions.

TABLE 23

EDUCATIONAL MEDIA BUDGET EXPENDITURES REPORTED BY INDEPENDENT JUNIOR COLLEGES

(N = 5)

	Bu d ge	t Area	
Institution Number	Pu rchase of New Equipment	Materials Purchase s	Total Educational Media Budget
1	\$1,932	\$ 222	\$2, 154
2	not reported	not reported	not reported
3	50 0	500	2,900
4	200	100	800
5	4,683	300	5,553
Mean Value	$\bar{X} = \$1,829$	x = \$281	$\bar{X} = \$2,852$

Although the state-owned junior colleges had the largest average media budget, 25 percent (2) of the institutions reported that there was no provision for the development of a separate educational media budget. Thirty-eight percent (3) of the colleges reported that each instructional department developed its own educational media budget without consulting an educational media specialist. Twenty-five percent (2) colleges reported that the budget of the media program reflected the needs of most instructional units. However, some departments had their own media budgets which had no relationship to the educational media program. One state-owned junior college reported that their media budget reflected the media needs of the entire institution and that it

TABLE 24

DEVELOPMENT OF THE EDUCATIONAL MEDIA BUDGET REPORTED BY OKLAHOMA INSTITUTIONS

			Numl	er a	nd Pe	rcen	tage	Ву G	roup	
Budget Program	G	L	G ₂	2	Gg	}	G _Z	,	G	5
Element	(N=	=11)	(N=	=8)	(N=	5)	(N=	=7)	(N=	=5)
	%	No.	%	No.	%	No.	%	No.	%	No.
There is no provision for the development of a separate media budget.	9	1	2 5	2	40	2	29	2	40	2
Each instructional department develops its own media budget without consulting a media specialist.	9		38	3	20	1	13	1	20	1
The budget of the media program reflects the media needs of most instructional units. However, some departments have their own media budget which have no relationship to the media program.	55	6	25	2	20	1	29	2	40	2
The budget of the educational media program reflects the media needs of the entire institution and is developed by professional media staff in consultation with departmental administration.	29	3	12	1	20	1	29	2	0	0

G₁ = state-owned universities and senior colleges
G₂ = state-owned junior colleges
G₃ = community junior colleges
G₄ = independent senior colleges
G₅ = independent junior colleges

was developed by professional media staff in consultation with departmental administrators.

Sixty-three percent of the state-owned junior colleges reporting indicated that either no provisions were made for a separate media budget or each instructional department developed its own. Provisions were made for a separate media budget for the media program to meet the needs of the entire institution by 37 percent (3) of the state-owned junior colleges.

The state-owned universities and senior colleges had the second largest average media budget of the five groups reporting. Fifty-five percent (6) of the institutions in Group One reported that the budget of the educational media program reflected the needs of most instructional units. However, some departments had their own media budgets which had no relationship to the educational media program. The budgets of the educational media programs in Group One reflected the media needs of the entire institution and was developed by professional media staff in consultation with departmental administrators in 29 percent (3) of the institutions. One of the institutions reported that there was no provision for the development of a separate media budget, and one institution reported that each instructional department developed its own media budget without consulting with an educational media specialist.

The budgets for the educational media programs of the stateowned universities and senior colleges was developed as a separate media budget designed to meet the needs of the entire institution by 82 percent (9) of the institutions reporting. Only 18 percent (2) of the institutions made no provisions for a separate media budget for their media programs.

The average total educational media budget for the community junior colleges exceeded each of the average budget of the independent colleges. Forty percent (2) of the colleges reported that there were no provisions for the development of a separate educational media budget. One of the colleges reported that each instructional department developed its own educational media budget without consulting an educational media specialist. The budgets of the educational media programs in Group Three reflected the media needs of most instructional units. However, one of the institutions reported that some of the departments have their own media budgets which have no relationship to the educational media program. One of the community junior colleges reported that the development of their media budget reflected the media needs of the entire institution and was developed by the professional media staff in consultation with departmental administrators.

Of the seven independent senior colleges reporting, 29 percent (2) indicated that there was no provision for the development of a separate media budget. One of the colleges in Group Four reported that each instructional department developed its own media budget without the help of an educational media specialist. Twenty-nine percent (2) reported that the development of the media budget for the educational media program reflected the media needs of most instructional units. However, some departments had their own media budgets which had no relationship to the educational media program. In the development of the media budget, 29 percent (2) colleges reported that the

budget of the media program reflected the media needs of the entire institution and was developed by the professional media staff in consultation with departmental administrators. Fifty-eight percent (4) of the seven independent senior colleges indicated that the media program budget was developed as a separate media budget designed to meet the needs of the entire institution.

None of the independent junior colleges' media budgets were developed by the professional media staff in consultation with departmental administrators to meet the needs from the media programs. Forty percent (2) colleges reported that their media budget reflected the media needs of most instructional units, but some departments have their own media budgets which had no relationship to the educational media program. One of the independent junior colleges reported that each instructional department developed its own educational media budget without consulting an educational media specialist. Forty percent (2) of the colleges reported that there was no provision for the development of a separate educational media budget.

Sixty percent (3) of Group Five reported that the budgets developed for the independent junior colleges had no relationship to the educational media program. However, 40 percent (2) of the colleges indicated that the development of the media budget for the media program did reflect the needs of most instructional units. This included the development of media budgets within some departments which had no relationship to the media program.

Summary of the Budget Data Analysis

In summary, the budget information reported by the five groups of universities and colleges indicated that Group Two, state-owned junior colleges, have the highest average total budget expenditure and Group Five, the independent junior colleges have the lowest budget expenditure. However, one point should be made concerning the budget figures reported in the data. Since the number of colleges in each group was quite small, 11 in the largest and five in the smallest, and the range of budget figures was extremely large, an average figure does not really give a true indication of the amount of money spent by the institutions within any one group.

For instance, in the state-owned junior colleges the least expenditure was \$600 and the largest expenditure was \$100,084. The range of budget expenditures in Group One, the state-owned universities and senior colleges, was from \$2,850 to \$21,562. The lowest expenditure in Group Three, community junior colleges, was \$150 and the highest was \$30,067. In Group Four, the independent senior colleges, the lowest total budget expenditure was \$550 and the highest was \$32,500. The lowest total budget expenditure in Group Five, the independent junior colleges, was \$600 and the highest was \$5,553. Perhaps these ranges will give the reader a clearer prospective of the total amount of budget expenditures being expended by each of the group of universities and colleges.

In an attempt to relate the total budget expenditure for the purchase of new equipment, materials purchase, and total educational media budget to the quality of the educational media program, the

investigator calculated a correlation between the dollars reported by the individual institutions and the quality of the educational media program. Three correlations resulted from these calculations.

The first correlation between the amount spent for the purchase of new equipment and the quality of the educational media program was computed to be .6703. This was a high correlation and significant beyond the .01 level. However, the next correlation between the materials purchases and the quality of the educational media program was computed to be .7142. This too was significant beyond the .01 level. The third correlation between the total educational media budget expenditure and the quality of the educational media program was computed to be .8262. This was significant beyond the .001 level. These correlations indicate that there is a definite relationship between the amount of money spent on the educational media program and the adjudged quality of that program.

Perhaps the most interesting aspect of the educational media budget is the way in which that budget is developed. The data reported in Table 24 indicate that most of the institutions in Group One (55 percent) have a budget which 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. Twentynine percent in Group One indicated that the budget reflected the media needs of the entire institution and is developed by the professional media staff in consultation with departmental administrators.

The largest number of institutions in Group Two (38 percent) indicated that each instructional department developed its own media

budget without consulting an educational media specialist. In Group Three, two (40 percent) of the institutions indicated that their were no provisions for the development of a separate educational media budget within their institutions. This same pattern was true for the institutions in Groups Four and Five. Although two of the seven institutions in Group Four indicated that there were no provisions for the development of a separate educational media budget, 29 percent indicated that the budget 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 same percentage indicated that the budget reflects the media needs of the entire institution and is developed by the professional media staff in consultation with departmental administrators.

A synthesis of the budget information for Oklahoma universities and colleges indicated that there was a definite lack of uniformity in the development of budget programs, and the simple refusal of some to report the information necessary for completing the questionnaire.

Evaluation of the Qualitative Status of Educational Media Programs

The qualitative status and functions of educational media programs appeared to be important in an evaluation of media programs in Oklahoma universities and colleges. Twenty-one elements relating to the qualitative status of the media programs are presented on the profile sheets in Figures 3 through 7. The qualitative evaluation was based on the Evaluative Checklist, which appears in Appendix A.

Figure 3 shows a profile of the strengths and weaknesses of state-owned universities and senior colleges. The institutions in in Figure 3 were not weak on any of the 21 elements of the media program. The state-owned universities and senior colleges were classified as neither weak nor strong on the following program elements:

Storage and Retrieval of Media Information
Production of Media
Physical Facilities in Existing Classrooms
Ways of Reporting Financial Needs

Method Used to Develop Media Budget

elements of the media program, as shown in Figure 3.

Consultative Services in Media Utilization

The institutions in Group One were strong on the following

Commitment to the Media Program

Commitment to Media as an Integral Part of Instruction

Commitment to Providing Media Facilities

Commitment to Financing the Media Program

Commitment to Staffing the Media Program

In-service Education in Media Utilization

Faculty-student Use of Media

Involvement of Media Staff in Planning

Location and Accessibility of Media Information

Dissemination of Media Information

Availability of Educational Media

Maintenance of Media Materials and Equipment

Figure 3

PROFILE OF THE STRENGTHS AND WEAKNESSES OF STATE-OWNED UNIVERSITIES AND SENIOR COLLEGES (N = 11)

	•		Neither Weak Nor	
	Element of the Media Program	Weak	Strong	Strong
I-B I-C I-D	Commitment to the Media Program . Commitment to Media as an integral Part of Instruction Commitment to Providing Media Facilities Commitment to Financing the Media Program			
 ΤΤ_Δ	Consultative Services in			
II-B	Media Utilization			
 TTT_A	Location and Accessibility			
III-B III-C III-D	of Media			
III-F	Materials and Equipment Production of Media			
IV-A	Physical Facilities in			
IV-B	Existing Rooms			
V-A	Way of Reporting Financial			
V-B V-C	Needs			

Basis for Short and Long Range Budget Allocations
Educational Media Staff

A qualitative profile of the strengths and weaknesses of state-owned junior colleges is shown in Figure 4. The institutions in Group Two were classified as weak on the following elements of the media program.

Consultative Services in Media Utilization
In-service Educationa in Media Utilization
Involvement of Media Staff in Planning
Production of Media

Physical Facilities in New Classrooms

The state-owned junior colleges in Group Two were neither weak nor strong on the following elements of the media program.

Commitment to the Media Program

Commitment to Media as an Integral Part of Instruction

Commitment to Financing the Media Program

Commitment to Staffing the Media Program

Faculty-student Use of Media

Location and Accessibility of Media

Dissemination of Media Information

Availability of Educational Media

Storage and Retrieval of Media Information

Maintenance of Materials and Equipment
Physical Facilities in Existing Classrooms
Ways of Reporting Financial Needs

Basis for Short and Long Range Budget Allocations

Figure 4

PROFILE OF THE STRENGTHS AND WEAKNESSES OF STATE-OWNED JUNIOR COLLEGES (N = 8)

			Neither	
	mt	1	Weak Nor	0.
	Element of the Media Program	Weak	Strong	Strong
Τ_Δ	Commitment to the Media Program .			
	Commitment to Media as an inte-		1	1
עייגנ	gral Part of Instruction			1
T-C	Commitment to Providing		1 1	
. 0	Media Facilities		{ [
T-D	Commitment to Financing the			
	Media Program			
I-D				1
	Media Program			1
		~~~~~		
II-A	Consultative Services in			
	Media Utilization			
II-B	In-service Education in			
	Media Utilization	1		
	Faculty-Student Use of Media			
II-D	Involvement of Media Staff			
	in Planning			
				†
111-A	Location and Accessibility			
777 D	of Media		l T	
III-B	Information			ĺ
TTT_C			<b>†</b>	
TTT-0	Availability of Educational Media			
III-D				
エエエーカ	Media Information			
III-E			i I	İ
TTT-12	Materials and Equipment			
ים_דדד	Production of Media			
 				ļ
A-VI	Physical Facilities in			1
<b></b>	Existing Rooms			}
IV-B	Physical Facilities in			
	New Classrooms			1
				<b>†</b>
V-A	Way of Reporting Financial			
	Needs		<b>\</b>	1
V-B	Basis for Short and Long-Range			
	Budget Allocations		<b>!</b>	
V-C	Method Used to Develop			1
	Media Budget			1
77T A	Educational Modic Ctoff			1
V T -A	Educational Media Staff	I	<u> </u>	.1

Method Wsed to Develop Media Budget
Educational Media Staff

The state-owned junior colleges did not show any areas of strength of the elements of the media program.

Figure 5 shows the profile of the strengths and weaknesses of the community junior colleges in Group Three. The institutions were generally weak on one of the elements: Commitment to the Media Program. The community junior colleges were neither weak nor strong on the remainder of the elements of the media program and did not show strength on any of the elements.

A profile of the strengths and weaknesses of the independent senior colleges in Group Four is shown in Figure 6. The institutions were not classified as weak in any of the elements and they were neither weak nor strong in all 21 of the elements.

The independent junior colleges of Group Five, as shown in Figure 7, were weak on the following two elements of the media program.

Consultative Services in Media Utilization

In-service Education in Media Utilization

The institutions were neither weak nor strong on the remaining elements.

The qualitative profile sheets presented the strengths and weaknesses in each of the 21 program elements. The state-owned universities and senior colleges were the only institutions that reported strong elements of the media program. When the data was grouped, as shown in Figure 3, 14 of the 21 elements were reported strong and none of the elements were reported as weak.

Figure 5

## PROFILE OF THE STRENGTHS AND WEAKNESSES OF COMMUNITY JUNIOR COLLEGES

(N = 8)

<del></del>			Neither	
	Element of the Media Program	Weak	Weak Nor Strong	Strong
I-B I-C I-D	Commitment to the Media Program .  Commitment to Media as an integral Part of Instruction  Commitment to Providing Media Facilities  Commitment to Financing the Media Program			
II-A	Consultative Services in Media Utilization			}
II-B	In-service Education in Media Utilization			
	Faculty-Student Use of Media Involvement of Media Staff in Planning			
III-A	Location and Accessibility of Media			
III-B	Dissemination of Media Information			
III-C	Availability of Educational Media			
III-D	Storage and Retrieval of Media Information			
III-E	Maintenance of Media Materials and Equipment			
III-F	Production of Media			 
IV-A	Physical Facilities in Existing Rooms			
IV-B	Physical Facilities in New Classrooms			
V-A	Way of Reporting Financial			]
<b>V-</b> B	Needs			
V-C	Budget Allocations Method Used to Develop Media Budget			
VI-A	Educational Media Staff			

### Figure 6

## PROFILE OF THE STRENGTHS AND WEAKNESSES OF INDEPENDENT SENIOR COLLEGES

(N = 7)

			NT - 2 4.1	<del> </del>
			Neither Weak Nor	
	Element of the Media Program	Weak	Strong	Strong
<del></del>	Dienere of the Rock frogram	Weak	<u> </u>	I
I-A	Commitment to the Media Program .			1
I-B	Commitment to Media as an inte-			1
	gral Part of Instruction			
I-C	Commitment to Providing		}	
T D	Media Facilities		}	
T-D	Commitment to Financing the			1
T_D	Media Program			}
I-D	Media Program			
II-A	Consultative Services in			}
	Media Utilization			<b>{</b>
II-B	In-service Education in			(
~~ ^	Media Utilization		}	į
	Faculty-Student Use of Media		<b>,</b>	
TT-D	Involvement of Media Staff in Planning			
	TH 1 TOWNTING			
III-A	Location and Accessibility			1
	of Media			1
III-B	Dissemination of Media			
	Information		1	
III-C	Availability of Educational			
	Media		}	
111-D	Storage and Retrieval of Media Information		1	
III-E				
777-7	Materials and Equipment			
III-F	Production of Media			
IV-A	Physical Facilities in			İ
	Existing Rooms		i	
IV-B	Physical Facilities in		]	]
	New Classrooms		•	
ν	Way of Reporting Financial			
V -17	Needs			]
<b>V-</b> B	Basis for Short and Long-Range			
, _	Budget Allocations			
V-C	Method Used to Develop			]
	Media Budget			
VI-A	Educational Media Staff		L	L

### Figure 7

# PROFILE OF THE STRENGTHS AND WEAKNESSES OF INDEPENDENT JUNIOR COLLEGES (N = 5)

I-A Commitment to the Media Program .  I-B Commitment to Media as an integral Part of Instruction  I-C Commitment to Providing Media Facilities	ong
I-A Commitment to the Media Program .  I-B Commitment to Media as an integral Part of Instruction  I-C Commitment to Providing Media Facilities	ong
I-B Commitment to Media as an integral Part of Instruction  I-C Commitment to Providing  Media Facilities	
I-C Commitment to Providing  Media Facilities	
Media Program	
I-D Commitment to Staffing the Media Program	
II-A Consultative Services in	
Media Utilization	
Media Utilization	
II-C Faculty-Student Use of Media	
II-D Involvement of Media Staff in Planning	
III-A Location and Accessibility	
of Media	
Information	
Media	
Media Information	
Materials and Equipment	
III-F Production of Media	
IV-A Physical Facilities in	
Existing Rooms	
IV-B Physical Facilities in New Classrooms	
V-A Way of Reporting Financial Needs	
V-B Basis for Short and Long-Range	
Budget Allocations	
Media backer	
VI-A Educational Media Staff	

The state-owned junior colleges reported more weak elements than any other group of institutions. Six of the 21 elements of the media program were listed as weak and none of the elements were reported as being strong.

In the community junior colleges, only one media element was weak and the remaining 20 media elements were neither weak nor strong.

As shown in Figure 6, the independent senior colleges reported all 21 program elements as being neither weak nor strong.

The independent junior colleges reported weak program elements in two areas:

Consultative Services in Media Utilization

In-service Education in Media Utilization,

The remaining 19 media elements were classified as neutral, neither weak nor strong, while none of the elements were considered to be strong.

### Additional Qualitative Information

A loss of information developed as a result of grouping the responses from each institution. When the responses recorded on the Evaluative Checklist were plotted on the profile sheet shown in Appendix B, the data were further reduced for obtaining a total qualitative score for each of the 36 institutions. For each item assigned 1, 2, 3, or 4, a rank of 1 was assigned. For each item assigned 5, 6, 7, or 8, a rank of 2 was assigned and a rank of 3 was assigned for each item rated as 9, 10, 11, or 12. The range of the qualitative scores was free to vary from 21, the weakest possible, to 63, the strongest

possible. However, the averaging of the qualitative scores on each of the items caused the distribution of ratings to appear as midpoints and reduced the extreme ratings of each item. The overall mean ratings (averages) for the five groups give more information than the profiles shown in Figures 3 through 7. The qualitative scores were averaged for each institution and the group means and standard deviations are presented in Table 25.

As reported on the profile sheet, the state-owned universities and senior colleges were the only institutions reporting strong elements of the media program. When the qualitative scores were averaged for the group, the mean was 53.55 with a standard deviation of 10.53.

Group Two, state-owned junior colleges, reported more weak elements than any other group of institutions. When their qualitative scores were recorded and averaged, the mean was 37.50 with a standard deviation of 12.75.

The community junior colleges reported one weak media element and no strong elements. A mean of 39.00 and a standard deviation of 13.62 was recorded from their qualitative scores.

The independent senior colleges reported no weaknesses nor strengths on the media elements. All 21 elements were classified as neither weak nor strong. The mean qualitative score was computed to be 42.14 with a standard deviation of 13.78.

The mean qualitative score for the independent junior colleges was 39.80 with a standard deviation of 14.24. The profile sheet for the independent junior colleges showed weak media elements in two areas. The remaining 19 elements were neither weak nor strong.

TABLE 25

AVERAGE QUALITATIVE SCORES FOR EACH INSTITUTION AND THE MEANS AND STANDARD DEVIATIONS OF QUALITATIVE DATA FOR EACH GROUP

Institution Number	Qualitative Score	$\overline{x}$	SD
Group 1: 1	<b>2</b> 5		
2	58		
3	6 <b>2</b>		
4	58		
5	58		
6	54		
7	59		
8	6 <b>2</b>		
9	56		
10	47		
11	50	5 <b>3.</b> 55	10.53
Group 2: 1	37		
2	<b>2</b> 1		
<b>3</b> 4	50		
4	54		
5 6	27		
	23		
7	40		
8	48	37.50	<b>12.</b> 75
Group 3: 1	30		
2	58		
3	29		
4	49		
5	29	39.00	13.62
Group 4: 1	28		
2	29		
<b>2</b> 3	50		
4	54		
5	40		
5 6	63		
7	31	42.14	13.78
Group 5: 1	44		
2	32		
Group 5: 1 2 3	23		
4	39		
5	61	39.80	14.24
		$\overline{X} = 43.83$	SD = 13.64

While the mean values yield more information than the profiles, an accurate picture of the distribution of the five groups can only be achieved by showing the number and percentage of each group as they were assigned to the three strength categories. A distribution of the five groups is presented in Table 26.

The loss of information resulting from the grouping of responses can readily be seen in Table 26. Item II-B, Media Services to Educational Preparation Programs, shows that only 9 percent (1) of Group One was classified as weak, one was reported as neutral, and 82 percent (9) were classified as strong. However, the profile in Figure 3 showed all 11 of the institutions to be classified as neutral on Item II-B.

This is a typical result of grouping responses on the qualitative instrument. Perhaps a better way of reporting the numbers and percentages would be as shown in Table 26 instead of the summary profiles shown in Figures 3 through 7.

TABLE 26

NUMBER AND PERCENTAGE OF INSTITUTIONS IN EACH GROUP THAT WERE IN THE WEAK, NEITHER WEAK NOR STRONG, AND STRONG RANGES FOR EACH MEDIA PROGRAM ELEMENT

	Weak													Neither Weak Nor Strong											Strong										
	G ₁		G ₂		G3		G4		G ₅		G ₁		G ₂		G3		G4		G5		G1		G2		G ₃		G4			5					
	(N=11)			(N=8)		(N=5)		(N=7) % No.		(N=5)		(N=11)		(N=8)		(N=5) % No.		=7)	(N=5)		(N=11)		(N=8)		(N=5)		(N=7)		_	=5)					
	<u>"</u>	No.	7.	No.	<u>"</u>	No.	<del>-</del> %	NO.	7.	No.	7.	No.	%	No.	<del>~"-</del>	No.	<del>,                                    </del>	No.	7,	No.	%	No.	<u>%</u>	No.	<del>"</del>	No.	,	No.	*	No					
<u>-A</u> . Commitment to he Media Program	9	1	50	4	60	3	43	3	60	3	0	0	38	3	20	1	14	1	20	1	91	10	13	1	20	1	43	3	20	1					
-B. Commitment to ducational Media																																			
s an Integral Part f Instruction	9	1	38	3	40	2	43	3	40	2	18	2	25	2	20	1	14	1	40	2	73	8	38	3	40	2	43	3	20	1					
-C. Commitment to roviding Media acilities	9	1	38	3	40	2	14	1	20	1	27	3	63	5	20	1	71	5	80	4	64	7	0	0	40	2	14	1	0	0					
<u>-D</u> . Commitment to inancing Media rogram	18	2	38	3	20	1	43	3	20	1	27	3	13	1	40	2	14	1	20	1	55	6	50	4	40	2	43	3	60	3					
<u>-E</u> . Commitment to edia Program	9	1	50	4	40	2	43	3	60	3	78	9	25	2	20	1	29	2	0	0	73	8	25	2	40	2	29	2	40	2					
<u>I-A</u> . Consultative ervices in Media tilization	9	1	63	5	60	3	14	1	60	3	27	3	25	2	0	0	57	4	20	1	64	7	13	1	40	2	29	2	20	1					
<u>I-B</u> . In-service ducation in Media tilization	9	1	63	5	60	3	43	3	60	3	9	1	38	3	20	1	29	2	20	1	82	9	0	0	20	1	29	2	20	1					
<u>I-C.</u> Faculty- tudent Use of edia	0	0	25	2	20	1	0	0	20	1	18	2	50	<u>.</u>	40	2	71	5	<u> -0</u>	2	82	5	25	2	40	2	29	2	40	2					

1	۰	
Į	١	٥
1	١	

	Tabl	e 26	Con	tinu		eak							Ne	ither	Wea	k Nor	Str	ong			_				Stro	ng				
	G ₁ (N=11)				G3 (N≈5)		G4 (N=7)		G ₅ (N=5)		G1 (N=11)			2 =8)	G (N	3 -5)		i=7)	G (N	5 <b>=</b> 5)	G1 (N=11)		G2 (N=8)		G3 (N≠5)		G ₄ (N=7)			5 (=5)
	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	7,	No.	7,	No.	%	No.	7,	No.
II-D. Involvement of Media Staff in Planning	0	0	63	5	60	3	29	2	60	3	18	2	25	2	0	0	57	4	20	1	82	9	13	ı	40	1	14	1	20	1
III-A. Location and Accessibility	18	2	63	5	40	2	43	3	40	2	0	0	13	1	20	1	29	2	20	1	82	9	25	2	40	1	29	2	40	2
III-B. Dissemina- tion of Media Information	9	1	13	1	40	2	14	1	20	1	9	ı	50	4	40	2	43	3	40	2	82	9	38	3	20	1	43	3	40	2
III-C. Availability of Media	9	1	38	3	20	1	29	2	20	1	18	2	25	2	40	2	43	3	80	4	73	8	38	3	40	2	29	2	0	0
III-D. Storage and Retrieval of Media	0	0	38	3	40	2	29	2	20	1	11	1	63	5	60	3	57	4	60	3	27	3	0	0	0	0	14	1	20	1
III-E. Maintenance of Media	0	0	50	4	20	1	29	2	40	2	27	3	38	3	80	4	29	2	40	2	73	8	13	ı	0	0	43	2	20	1
III-F. Production of Media	9	1	38	3	20	1	57	4	0	0	27	3	63	5	80	4	29	2	80	4	64	7	0	0	0	0	14	1	20	1
VI-A. Physical Facilities in Existing Classrooms	9	1	50	4	60	3	29	2	40	2	82	9	50	4	20	1	57	4	40	2	9	1	0	0	20	1	14	1	20	1
VI-B. Physical Facilities in New Classrooms	0	0	63	5	40	2	29	2	40	2	55	6	38	3	60	3	43	3	40	2	45	5	0	0	0	0	29	2	40	2
<u>V-A</u> . Reporting Financial Needs	9	1	25	2	80	4	0	0	20	1	36	4	38	3	20	1	86	6	60	3	55	6	38	3	0	0	14	1	20	1
<u>V-B</u> . Basis for Budget Allocations	9	1	25	2	20	1	29	2	20	1	18	2	25	2	60	3	43	3	60	3	73	8	50	-	20	1	29	2	20	1
	l cont	1nue	d or	the	foll	lowin;	l g pag	e	L		.		l		l		l <b>.</b>		1		J		٠		1		l			

	Table 26 Continued											Neither Weak Nor Strong											Strong									
	G ₁ (N=11)		-		G ₃ (N=5)		G ₄ (N=7)		G ₅ (N=5)		G ₁ (N=11)		G2 (N=8)		G3 (N=5)		G4 (N=7)		G5 (N=5)		G ₁ (N=11)		G ₂ (N=8)		G3 (N=5)		G ₄ (N=7)		G ₅ (N=6			
	%	No.	7,	No.	%	No,	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%_	No.	%	No.	7,	No.	7,	No.	7,	No.		
'-C. Development of ledia Budget	9	1	25	2	60	3	43	3	60	3	45	5	38	3	0	0	29	2	20	1	45	5	35	3	40	2	29	2	20	1		
L-A. Educational edia Staff	9	1	38	3	60	3	29	2	40	2	18	2	38	3	20	1	29	2	40	2	73	8	25	2	20	1	43	3	20	1		

 $G_1$  = state-owned universities and senior colleges

G₂ = state-owned junior colleges

G₃ = community junior colleges

G₄ = independent senior colleges

G₅ = independent junior colleges

#### CHAPTER V

### SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

The data relating to the educational media programs in 36 of the 40 Oklahoma universities and colleges were analyzed by testing five hypotheses. Four of the 40 institutions surveyed reported that they did not have an educational media program. Fulton's Evaluative Checklist was used to collect the data regarding the quality of the educational media program and the Educational Media Inventory Check Sheet was used to collect the data relating to the quantity of the educational media programs. These instruments appear in Appendices A and E.

The immediate purpose of this study was to test the hypotheses stated in Chapter I and to analyze the additional data which was collected. The intermediate purpose was to perform a general appraisal of the educational media programs in Oklahoma's universities and colleges and the ultimate purpose was to formulate recommendations for the improvement of educational media programs of Oklahoma's universities and colleges.

Evaluative judgments concerning three major aspects of the quantity of the educational media programs and evaluative judgments concerning the six major aspects related to the quality of the educational media programs were determined from an analysis of the data.

The three major aspects for the quantity of the media programs were:

(1) media personnel and supporting personnel of the media program; (2) equipment as it relates to the media program; and (3) materials related to the media program. The six major aspects of the quality of the educational media programs were: (1) commitment of the institutions to the provisions of a wide variety of educational media services; (2) the relationship of the educational media program to the instructional program; (3) institutional educational media center; (4) physical facilities which are provided for the utilization of educational media in instruction; (5) budget and financial support provided for the media program; and (6) the educational media staff.

Five institutional categories were used for purposes of analysis and evaluation. The five categories were: (1) state-owned universities and senior colleges; (2) state-owned junior colleges; (3) community junior colleges; (4) independent senior colleges; and (5) independent junior colleges.

The qualitative evaluation was based on criteria developed by Fulton which appear on the <u>Evaluative Checklist</u> in Appendix A, and the quantitative evaluation was based on the DAVI standards developed by Faris and Sherman which appear in Appendix D.

### Major Findings

The results of testing the five hypotheses and performing the additional analyses of the quantitative and qualitative data are synthesized in the following major findings:

- 1. As shown in Table 2, no significant differences were found between the qualitative and quantitative data reported by all state-owned universities and colleges and all independent colleges.
- 2. No significant difference was found between the qualitative data reported by all universities and senior colleges and all junior and community colleges as shown in Table 3. A significant difference was found between the quantitative data reported by these same institutions.
- 3. Table 4 shows a significant relationship between the quantitative and qualitative data reported by all Oklahoma universities and colleges.
- 4. In Table 5 it is shown that a significant relationship was found between the higher quality educational media programs and the position of the immediate supervisor of the educational media director in all Oklahoma universities and senior colleges.
- 5. No significant relationship was noted between the qualitative data reported by the junior and community colleges and the position of the immediate supervisor of the media director. These results are shown in Table 6.
- 6. The higher quality media programs, as shown in Table 25, had full-time media directors and support personnel as reported by the personnel data shown in Tables 7 through 11.
- 7. The data reported in Table 13 show that only two of the 36 institutions had all the materials necessary for a basic media program rating as determined by the DAVI standards.

- 8. The equipment data reported in Table 17 showed that none of the 36 institutions had the necessary media equipment in all 19 areas to merit a basic rating according to DAVI standards.
- 9. A high positive correlation was found between the overall budget expenditures of the 36 institutions and the overall qualitative rating of their educational media program (r = .8262, p < .01). This result is shown on page 102.
- 10. While there was no significant difference among the qualitative data reported by the five groups of institutions, Table 26 shows the highest qualitative data were reported by the state-owned universities and senior colleges and the lowest qualitative data were reported by the state-owned junior colleges.
- 11. According to the data reported in Table 26, the weakest area reported on the qualitative data instrument by the 36 institutions was in media utilization and in-service education for instructors.
- 12. The second weakest area reported on the qualitative data instrument by the 36 institutions, as shown in Table 26, was their lack of commitment to the educational media program.
- 13. The qualitative data reported by the 36 institutions shown in Table 24 indicats that most media budgets were developed without adequate planning or involvement of professional media personnel.
- 14. The qualitative data analysis shown in Table 26 indicates that the media programs' personnel, equipment, and materials were not well located (geographically) nor readily accessible to instructors in relationship to the rest of the ongoing educational processes.

#### Conclusions

- 1. Services provided from the educational media program, in the areas of media utilization and in-service education to instructors, are not generally provided.
- 2. Many Oklahoma universities and colleges do not regard the educational media program as an integral part of the instructional program and therefore fail to give their media programs the necessary support it needs for proper operation.
- 3. When the educational media programs are organized under the auspices of the university or college library, the dean of instruction or the college president is usually the educational media director's immediate supervisor.
- 4. Generally the physical facilities of the media programs are not readily accessible to the institution's instructors. A low rate of media utilization could be the result of improper location and/or accessibility of educational media.
- 5. Media personnel are not generally available when and if the instructors need their expertise. Many of the media directors are given little or no released time for performance of their duties.
- 6. Most educational media program budgets are not developed as an integral part of the total educational program.
- 7. Many institutions do not have a sufficient quantity of materials and equipment to meet DAVI standards. The 36 institutions are better supplied with media equipment than with media materials, even though two of the 36 institutions did meet the basic standards for materials established by DAVI.

- 8. The results of this survey indicate that the quality of an educational media program is related to the quantity of personnel, equipment, and materials associated with the educational media program.
- 9. It is desirable to have a centrally located media program which provides services from one central location.
- 10. There is some evidence to support the conclusion that if the institutions that have weak programs had stronger administrative commitments their programs could be stronger. Likewise the same inference might exist in the other program elements.

### Recommendations

An analysis of the data reported by the 36 institutions in this study support the following recommendations:

1. That Oklahoma institutions of higher learning implement an educational media program.

Four of the 40 institutions surveyed reported that they did not have an educational media program.

 That a full-time media director and a full-time secretary should be provided for each institution's educational media program.

This study indicated that the highest quality media programs had a full-time educational media director and a full-time secretary.

3. The educational media director's immediate supervisor should be either the dean of instruction or the president of the institution.

According to the data reported by the 36 institutions, there was a significant relationship between the quality of the educational media program and the media director's immediate supervisor.

4. Substantial increases should be made in the total number of media staff members.

A total of 69 media staff members were reported by the 36 institutions. The 11 state-owned universities and senior colleges accounted for 37 of these 69 employees and consequently were rated as having the strongest media programs of the five groups.

5. Efforts should be made to facilitate the purchase of instructional materials.

Only two institutions could meet the basic DAVI standards for four types of instructional materials and only six institutions could meet the advanced standards for two types of instructional materials.

6. Media directors should develop standards for instructional materials which were not included in the DAVI standards.

Standards were not available for instructional materials other than 16 mm films (college and elementary titles), filmstrips, and recordings.

7. Efforts should be made to maintain a balance of materials and equipment.

The study indicated that the 36 institutions were better equipped with instructional equipment than materials.

8. Additional instructional equipment should be purchased for the media program.

According to the study, no institution had the equipment in all 19 areas to meet the basic DAVI equipment standards.

9. Media personnel should develop standards for media production equipment.

Standards have not been developed for media production equipment. Therefore, institutions do not have any guidelines to follow when developing a media production center.

> 10. The media budget should be developed to reflect the media needs of the entire institution. The budget should be developed and defended by professional media personnel.

Only seven of the 36 institutions reported having their media budgets developed to reflect the media needs of the institution. These seven institutions indicated that their budgets were developed and defended by professional media personnel.

11. Additional finances should be appropriated to the media program to improve its quality.

The study showed that there was a high positive correlation between the total educational media budget (r = .8262) and the quality of the educational media program.

12. Junior colleges should make additional efforts to improve the quality of their educational media programs.

Qualitative data reported by the 36 institutions showed that the junior colleges, especially the state-owned, had the weakest media programs.

13. More in-service training programs should be conducted in educational media, especially in the area of media utilization.

Media utilization was the weakest element reported by the 36 institutions.

14. More effort should be made by university and college administrators to achieve a greater commitment to the support of the educational media program.

A high percentage of the 36 institutions indicated that the commitment by administrators to the media program was a weak element.

15. Physical facilities should be arranged to improve the location and accessibility of educational media to the total instructional staff.

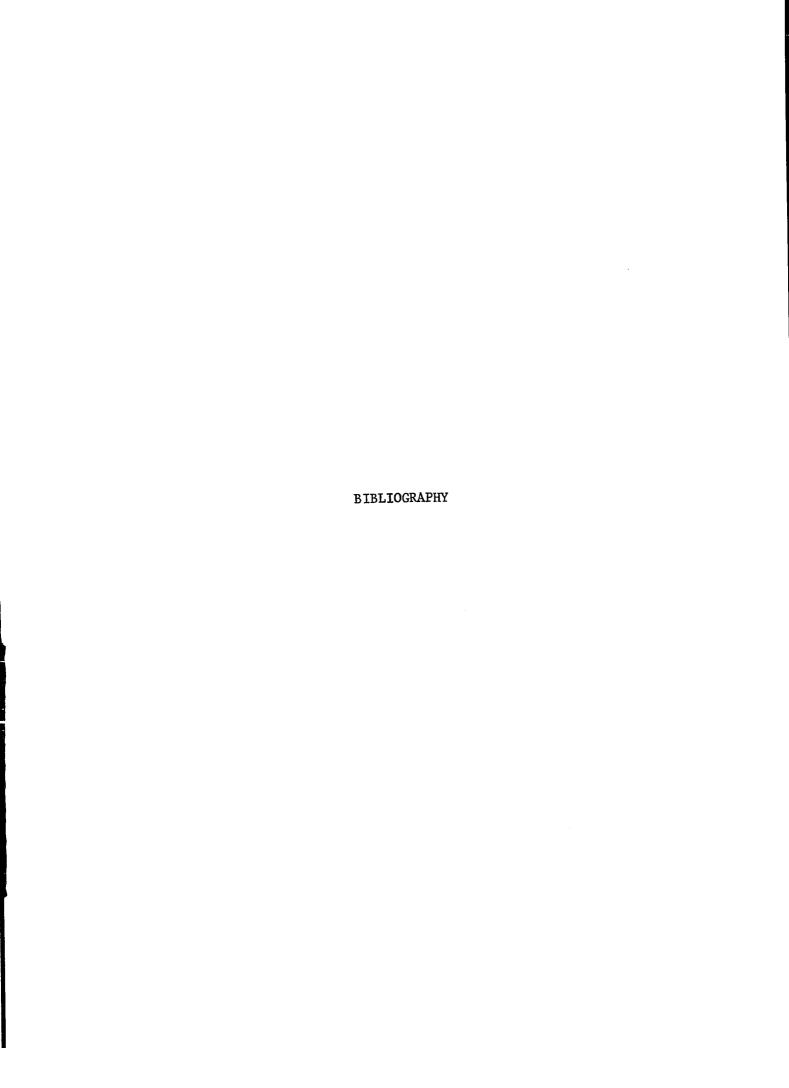
Of the 21 qualitative media program elements, location and accessibility of the educational media program was one of the second weakest elements checked by the 36 institutions.

### Implications for Further Research

This study was based on the status of the educational media programs in Oklahoma's universities and colleges during the academic year 1971-72. Changes are occurring in the area of educational media in institutions of higher learning. These changes consequently will change the status of the educational media programs surveyed in this study. The following studies would produce additional findings which could be helpful to the improvement of educational media programs in Oklahoma's universities and colleges.

- Internal and external evaluations of educational media programs in Oklahoma's universities and colleges should be made periodically to detect changes in the media programs and to make recommendations for future improvements.
- A study should be made to determine the quality of the educational media program as rated by the educational

- media director and the quality of the educational media program as rated by the faculty in institutions of higher learning.
- 3. A study should be conducted to measure the instructors' competencies and utilization practices as they relate to the quality of the educational media programs in institutions of higher learning.
- 4. Theoretically, the media program is a sub-system of the total educational system that functions as an integral part of the total system within the institution. A study should be made to investigate institutions of higher learning to determine to what level the media program functions as an integral part of instruction within the total educational system of the institution.



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# 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.

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## INTRODUCTION TO CHECKLIST

The Evaluative Checklist which follows has been revised from an instrument developed by W. R. Fulton. 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 conductive to proper use of educational media, 5) the media program is adequately finance, 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 "audiovisual materials" and all of the newer media such as television, overhead projectuals, 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.

¹The 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 12 spaces.

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

#### EXAMPLE:

- 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 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.

Α.	${\tt Commitment}$	to the Media Program
_1		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 administor 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.
	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.
В.	Commitment	of 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	<u>8 9</u>	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.
_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.	Commit	ment	to Providing Educational Media Facilities
1_		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 insti- tution gives very little attention to media utilization at the time classroom buildings are planned.
_ 7	8	9_	The institution provides most new and remodeled class- rooms 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.	Commit	tment	to Financing the Educational Media Program
1_	2	3	Finances for the educational media program are not included in the budget.
4		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.
	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.
Ε.	Commi	tment	to Staffing the Educational Media Program
1		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 process.

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. (	Consul	tative	e Services in Educational Media Utilization
1		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.
	8	9	Educational media personnel are usually available and are called on for consultative assistance in the use of educational media.
10		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.
в. 1	Media	Servi	ces to Educational Preparation Programs.
_1_		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 specialist.
	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 preservice 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.
C. E	acult	y-Stu	lent Use of Educational Media
_1_		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.
	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 appro- priate media for individual and group study as well as for class presentations.
D. 7	In <b>v</b> olv	ement	of Media Staff in Planning
_1_		3	There are no professional educational media staff available, therefore they cannot be involved in planning for the use of educational media.
4	5	<u> </u>	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. Locati	ion and	d 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 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. Disser	minati	on of Media Information
_1_2_	3	Information concerning educational media is never dis- seminated to prospective users as a matter of policy, but occasionally information concerning educational media might be secured upon request.
45_	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.

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10 11 12	Information concerning educational media is frequently disseminated to the faculty, students, and staff as a matter of policy.
C. Availability	y of Educational Media
1 2 3	Educational media is practically nonexistent and responsibility for obtaining such materials rests 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 come, first serve" 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.
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 repaired and cleaned when complaints regarding their operable condition are made by users.
7 8 9	Educational media is 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 product 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 of the 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.

## 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 Fac	cilities 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 A	AND FINANCE OF THE EDUCATIONAL MEDIA PROGRAM
the institu- needs. The goals, and	he educational media program should be based on both tion's long-range goals and immediate educational budget should reflect a recognition of long-range be sufficient to support an adequate media program instructional improvement.
A. Reporting F	inancial 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 B	udget Allocations
1 2 3	The budget does not usually contain an allotment for educational media.
4 5 6	The educational media budget is based on an arbitrary allotment of funds irrespective of need.

7 8 9	The budget is based almost entirely on immediate needs, though some consideration is given to long-range goals.
10 11 12	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
1 2 3	There is no provision for the development of a separate educational media budget.
4 5 6	Each instructional department develops its own educational media budget without consulting an educational media specialist.
7 8 9	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.
10 11 12	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.

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1 2 3	No person has been assigned to look after the media program. Utilization of educational media is entirely the responsibility of the user.
4 5 6	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.
7 8 9	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

10 11 12	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.
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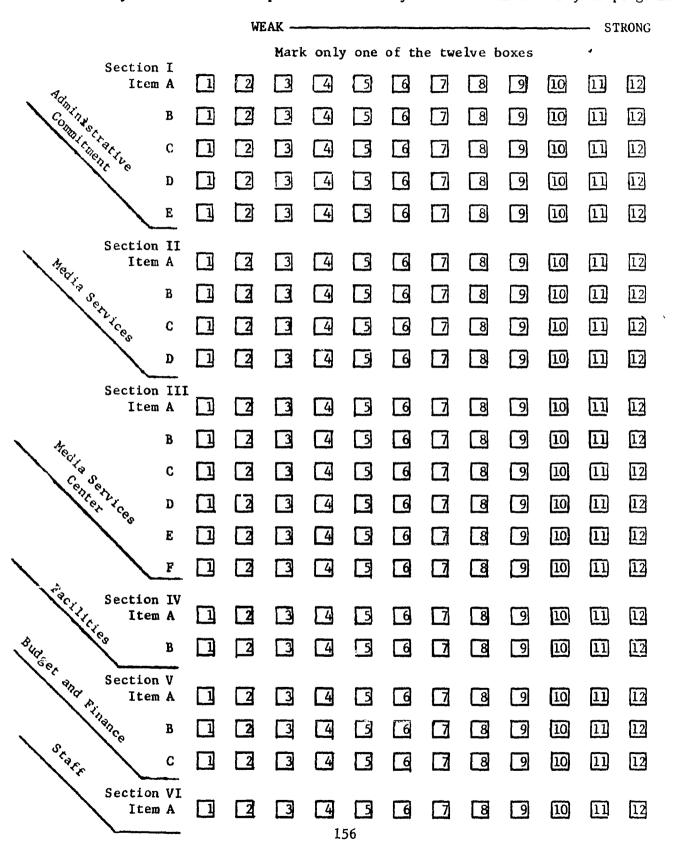
Nam	e of Institution
Per	son in charge of Educational Media Organization:
1.	Name
2.	Title

APPENDIX B

PROFILE SHEET

### PROFILE SHEET

To develop a Profile image of your program, transfer your mark from each item of the Evaluative Checklist to this sheet. Connect the marked squares by straight lines. Then turn the sheet to a horizontal position. This will pictorially demonstrate the "peaks" and "valleys" of attainment for your program.



## APPENDIX C

CRITERIA RELATING TO EDUCATIONAL MEDIA PROGRAMS IN COLLEGES AND UNIVERSITIES

## CRITERIA

## RELATING TO

## EDUCATIONAL MEDIA PROGRAMS

IN

## COLLEGES AND UNIVERSITIES

W. R. Fulton University of Oklahoma Norman, Oklahoma

These criteria were developed as 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.

## CRITERIA RELATED TO AN EDUCATIONAL MEDIA PROGRAM

The criteria listed below were empirically derived from two primary sources. First, many of them were derived from the literature dealing with various aspects of educational media programs. This source consisted of more than 150 articles, books, and monograms. Second, others were derived from papers written by twelve outstanding educational media specialists currently engaged in directing programs in various parts of the country. Each was given a special assignment to write a description of what he considered to be a model media program. They represented both large and small public schools and large and small institutions of higher education.

Although the list is fairly comprehensive, it is not intended to be all inclusive. No claim is made for the validity of these criteria. Nevertheless, they should serve as useful guidelines for evaluating an educational media program by assisting in making subjective judgments about specific aspects of an on-going program.

## I. INSTITUTIONAL EDUCATIONAL MEDIA SERVICES

## A. Commitment to the Media Program.

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 an independent service unit that operates at the same level as other major instructional services.

An institution's educational media program should provide media and services compatible with modern-day instructional technology.

An institution's educational media program should be directed toward the improvement of instruction in a modern educational program.

The educational media program should occupy an important position in an institution's organizational plan.

An institution's edufational media functions and services should be coordinated under a single supervisory unit, generally called an "Educational Media Center."

An institution should have clearly defined policies, procedures, and plans for its educational media program, including immediate short-range, and long-range goals.

An institution's administrative line and staff relationships should be such that teachers and media personnel have a sense of administrative support.

Institutional lines of communications and responsibilities should be clearly established to define the relationship to the director of the educational media program to other staff members and to establish channels through which he should communicate in order to realize the objectives of the media program.

Institutional administrators should utilize the consultative assistance of national, state, county, or local media specialists in evaluating the media program and in planning future action.

Liaison should be maintained with state and national public institutions or agencies to make it possible for an institution to participate in cooperative projects that enrich or stimulate the local media program.

B. Commitment to Educational Media as an Integral Part of Instruction

The philosophy of an educational media program should be congruent with the philosophy and objectives of the institution in which it exists.

An institution should engage in a continuous evaluation of its educational media program as it relates to the instructional program.

An institution should provide sufficient leadership and technical assistance to insure that all faculty members have easy access to appropriate educational media for all learning situations.

Adequate channels for disseminating information about educational media and their potentialities should be maintained throughout an institution.

Faculty members hould be encouraged to experiment with educational media as a means of increasing instructional effectiveness.

The educational media program in a multiple-purpose institution should provide media and services for a wide variety of curricula in the various specialized colleges, technical colleges, and liberal arts colleges of the university.

Long-range institutional goals should include the development and implementation of instructional systems involving automation approaches to the flow of information and ideas.

C. Commitment to Providing Educational Media Facilities

New classroom buildings constructed by an institution should provide for the full use of all presently owned educational media and for the installation and use of new media as such are developed and made available.

There should be a long-range institution-wide plan which provides for the adaptation of old classrooms for effective use of educational media.

An educational media center should be provided with adequate physical facilities for optimum service to an institution.

Housing should be provided for the educational media services in which offices and work areas meet the normal standards of the institution for activities of a similar nature.

## D. Commitment to Financing the Educational Media Program

An institution's educational media program should be adequately financed through an independent budget.

The budget of an educational media program should reflect the needs of the entire institution.

The manner in which an educational media budget is administered should be determined by clear cut institutional policies concerning allocations, income, and expenditures.

The budget of an educational media program should be based on both the institution's long-range goals and its immediate educational needs.

The budget of an institution's educational media program should be sufficient to support an adequate media program for optimum instructional improvement.

## E. Commitment to Staffing the Educational Media Program

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.

An institution should have a sufficient number of non-professional media staff members to relieve the faculty and professional media staff of all routine clerical and technical tasks.

The director os an institution's educational media program should be directly responsible to the administrative officer in charge of academic affairs.

An institution's educational media program should be directed by a per with a good educational background who has special preparation as an educational media specialists.

## II. EDUCATIONAL MEDIA SERVICES - CURRICULUM AND INSTRUCTION

The services and materials provided through an educational media center should be integral parts of curriculum and instruction.

The use of educational media should be encouraged when such use contributes to the improvement of instruction.

The faculty should be kept informed on new developments in materials, equipment and the technology of instruction.

Educational media personnel should participate in curriculum planning and development, and in the implementation of curriculum improvement, particularly as it relates to the integration of educational media into the total instructional process.

The director of an educational media program should participate in policy making decisions relating to the use of educational media and with the help of well trained professional and technical assistants, provide consultative services to all institutional programs that make use of media.

Continuous inservice education in the use of educational media should be carried on as a means of improving instruction.

Continuous inservice education should be carried on in such areas as the selection and use of materials, experimentation with the use of new instructional devices, materials and techniques, and the importance and value of educational media in 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 research projects in which educational media are used.

The educational media director and the professional media staff should be readily available for consultation to all institutes in which educational media are used.

If an institution extends services to schools and agencies beyond its campus, the professional media personnel should be available for consultative assistance in workshops, institutes and conferences for school teachers, librarians and media personnel.

An educational media program should include a consultative function with staff members competent to render advise to faculty, administration, staff, campus organizations, and outside agencies in the selection, acquisition, preparation, production, utilization, and evaluation of educational media.

The administrator in charge of an educational media program should work in close cooperation with a faculty committee and/or an educational media evaluation team, in periodic evaluations of the media program.

Professional media personnel should be available to assist faculties in planning and implementing graduate and undergraduate preparation programs for teachers, librarians, and media specialists. Opportunities should be provided for pre-service teachers to develop abilities and skills in the use of all types of educational media.

If an institution has a graduate program for the training of educational media specialists, it should provide for at least three levels of performance: (1) coordinator of media services in a department or building, (2) director of a central service center in a school system or college, and (3) positions of wide policy responsibility and college teaching and research assignments.

## III. THE EDUCATIONAL MEDIA CENTER

An educational media center should be organized around the concept of offering a wide variety of services and media to all instructional and administrative units of the institutions, with leadership, consultative help, and other services provided by professional media specialists and other media center personnel.

An instructional program should be supported by an adequate supply of educational media and a system of making them accessible to the faculty and students.

An educational media center should provide such media services as procurement, maintenance, and production of appropriate educational media to support the instructional program.

There should be a definite plan for evaluating and selecting new materials and equipment and for evaluating the effectiveness of presently owned items.

The quality and types of educational media necessary for effective support of an instructional program should be determined by the level of utilization of the institution's faculty.

Educational media services to campus departments should include consultative services, acquisition of materials, storage of materials, circulation (pick-up and delivery) of materials, maintenance and inspection of materials and equipment, and dissemination of information about educational media.

There should be definite plans for involving faculty members in continuous evaluations of the effectiveness of presently owned media.

There should be a definite plan for replacement of worn out or obsolete equipment.

An institution should provide centralized services for maintaining all educational media owned by the institution.

Equipment selection and procurement should be based on recommendations of teachers, consultants, and maintenance personnel.

All educational media should be examined and/or previewed before being purchased by the institution.

Necessary special services and equipment such as still and motion picture photography, time-lapse photography, reaction recording equipment, and microphotography equipment should be provided when needed in some types of research.

Unique materials needed for specific teaching and learning situations should be produced locally. Such media include magnetic tapes, graphics of all kinds, mounting and display boards, photo copies, overhead transparencies, films, filmstrips, slides, study prints, laminations, specialized photographic materials such as time-laspe sequences and microphotography, and special visual materials for use by administrative officials.

An educational media center should have facilities for producing such original materials as photographs, slides, filmstrips, overhead projection materials, drawings, illustrations, cartoons, charts, maps, graphs, display and exhibits, set and costume design, lettering, animation, models, and motion pictures.

A production unit should have a minimum staff consisting of a director, secretary, photographer, and artist.

The quality and variety of educational media provided for the instructional program should be based on demonstrated need, availability, and utilization patterns.

If an institution is large and complex, the main media center should be supplemented by sub-centers. The services provided by the main media center should be comprehensive and its services should include all those which the sub-centers are not equipped to provide. Duplication of effort should be held to a minimum.

When educational media are available only from the main media center they should be delivered to the point of use at regularly scheduled intervals.

All frequently used educational media should be automatically placed in media sub-centers in colleges, departments, and/or administrative units on a long-time loan when the need is established.

Educational media should be cleaned and inspected after each use and in no case should media go for more than a year without cleaning and inspection for evidence of damage or need for replacement.

If an institution has need for complete motion picture production services, there should be facilities for the production of black and white or color 16 mm motion picture films with optical sound,

and/or 8 mm black and white or color films with magnetic sound, and a motion picture laboratory should be provided for processing black and white and color film.

There should be a central photographic production service available to all departments and administrative units which produces all kinds of still photographic materials, including student identification pictures and scientific photographs.

If an institution has need for complete recording and professional type high-speed re-recording, such facilities and equipment should be made available and provisions made for duplicating tapes for radio broadcasts and for learning centers and language laboratories.

Graphic materials production facilities and services should be available in one location with sub-facilities available where needed for the production of graphs, charts, animations, art work, transparency originals and silk-screen plates. It may also be desirable to provide for the production of specialized materials such as medical and dental illustrations, teaching models, and scientific exhibits.

In order to achieve a high level of utilization all educational media should be made highly accessible to each faculty member, either by delivery from the media center to the point of use, or by the establishment of sub-centers (long-time loans) in each department or building.

Frequently used low cost media such as filmstrips, slides, and certain recorded materials should be permanently located in appropriate departments, buildings, and in some cases in the classrooms in which they are to be used.

All media sub-centers should be adequately staffed with personnel appropriately trained for the level of performance they are expected to render.

The central classification and cataloging system should permit rapid location of media needed for the specific teaching-learning situations.

### IV. PHYSICAL FACILITIES FOR EDUCATIONAL MEDIA

Housing facilities for an educational media center should be sufficient in size and arrangement to facilitate the efficiency and effectiveness of media services to all institutional functions. The facilities should provide for such specialized activities as storage, handling, maintenance, and circulation control of media.

An educational media specialist should be consulted about specifications relating to media when plans are made for the construction of new buildings and the remodeling of old ones.

In order to avoid having to move classes to special rooms to make use of educational media, each classroom in an institution should be equipped with essential facilities for effective use of appropriate educational media, including telecasts, projected materials, recordings, and self-instructional devices

Every classroom should be equipped with full light control, electrical outliets, forced ventilation, and educational media storage space.

Every classroom should be equipped with permanently installed bulletin boards, chalkboards, a projection screen, and map rails as needed for instruction.

An institution that has a need for its own motion picture film processing facilities should have a processing laboratory, a printing room, a processing control room, a negative storage room with humid ity control, and office space as required.

An institution that has a need for still photographic production and processing facilities should have darkrooms, printing and finishing room, storage space, copy room, and microfilm copy room.

All institutions should have facilities for the production of graphic materials which include a studio, drawing tables, graphic and art equipment and supplies, a silk screen production area, mechanical printing devices, and office space as required.

The materials production services should be provided with space for the following work activities: (1) office, (2) conference room, (3) photography studie, (4) at least one darkness, and (5) a graphics studio.

An institution that has a need for its own film production facilities should have production stages with ceilings at least 16 feet high with lights, a shop for the production and storage of sets, sound recording rooms, an animation room, preview and conference rooms, and office space as required.

Adequate housing should be provided for such production activities as graphic production, sound recordings, still photography, motion pictures photography, television, and radio.

Professional personnel should be provided office space with sufficient privacy for consultations and conferences.

An educational media center should have preview rooms where educational media can be examined and evaluated.

## V. BUDGET AND FINANCE OF THE EDUCATIONAL MEDIA PROGRAM

Long-range budget planning should provide for improvements to be made gradually until the full media program goals are realized.

An educational media program should operate from a central budget which is prepared and defended by representatives of the educational media services.

An educational media program should be financed entirely from regularly appropriated instructional funds.

The budget of an educational media program should be based on both the institution's long-range goals and immediate educational media needs.

The budget of an educational media center should provide for increased scope of services, expansion of services to meet increased enrollments, and the needs created by the addition of new structures.

There should be a definite plan for gaining administrative and community support for the media program. The plan should include evaluation of the program, determination of media needs, long and short range planning, and presenting facts about media needs to administrators and governing boards.

All costs relating to procurement or production of materials, purchase of equipment, and employment of staff for use in the institution's program should be completely subsidized through a centralized budget.

Faculty members should be able to use educational media from the media center without any more restrictions than those imposed on the book library.

The selection of all materials and equipment for purchase by the educational media center should be based on pre-determined specifications formulated by the media staff.

An institution should have clear-cut policies concerning allocation, income, and charges against the educational media budget.

Provision should be made in the educational media budget for the systematic replacement of obsolete or worn-out media.

Long-range financial plans should include provisions for the expansion of media services as required by the improvement of quality and scope of the instructional program.

### VI. EDUCATIONAL MEDIA STAFF

Educational media personnel should work within the framework of job descriptions and policies relating to institutional media activities and these should be clear to the media administrator, his superior officer, and the entire media staff.

Professional educational media personnel should possess a high degree of sensitivity to the potential of educational media for improving instruction and an awareness of new developments, new techniques, new equipment and new materials.

In institutions where needed the professional media staff should include specialists in photography, graphics, sound recordings, and programmed materials, film librarians, and television staff members.

Professional media staff members hould be active in professional organizations, particularly those representing the area of their specialization.

Professional media staff members hould have advanced degrees with specialization in the media area in which they work.

There should be at least one person in each department whose primary responsibility is implementing and coordinating the departmental educational media program.

The educational media center should have adequate non-professional personnel consisting of clerical staff, maintenance technicians, television technicians, distribution clerks, and production technicians.

The director of the educational media program should be well grounded in general education and should have had practical experience in teaching. He should possess a doctors degree or its equivalent, and should have had special training in such areas as the theory of educational communication, curriculum and instructional methods, production of such materials as graphics and photography, programmed learning, research methods, administration, and supervision.

The functions of the director of the educational media program should include: reporting the needs of the media program to the instructional administration, determining budget and financial needs, assisting in the selection, procurement, and maintenance of all materials and equipment, supervising the distribution of media, and providing consultative service to faculty, administration, and other instructional personnel.

In order to wisely select and supervise appropriate personnel, an educational media specialist should have a thorough understanding of such technical fields as television and radio production, photography, curriculum materials production, and graphic materials production.

An educational media specialist should be able to delineate subject matter into teachable concepts; lead the faculty in cooperatively planning the curriculum; organize a media center so that equipment and materials can be coordinated into the teaching program with

dispatch. He should posses administrative ability of a high order; know and be skilled in the use of evaluation techniques; and be able to operate as a research specialist.

An educational media specialist should have skill in the care and operation of all media devices so that he can ably train and supervise operators and maintenance personnel.

An educational media specialist should be able to evaluate emerging innovations for possible introduction into instructional programs and should be able to interpret and promote those innocations that can make significant contributions to teaching and learning.

An educational media specialist should participate by attending local, state, and national educational media conferences, conventions and work shops.

#### APPENDIX D

QUANTITATIVE STANDARDS FOR AUDIOVISUAL PERSONNEL, EQUIPMENT AND MATERIALS

# QUANTITATIVE STANDARDS FOR AUDIOVISUAL PERSONNEL, EQUIPMENT AND MATERIALS IN HIGHER EDUCATION

Developed by Dr. Gene Faris and Dr. Mendel Sherman, Audio-Visual Center, Indiana University, as part of a study conducted under the auspices of United States Office of Education, National Defense Educational Act, Title VII, Part B program.

#### Adopted By

The Department of Audiovisual Instruction, NEA, at the Board of Directors Meeting in Washington, D.C., on October 30, 1965.

and

The Association of Chief State School Audio-Visual Officers at the Executive Board Meeting in Chicago on December 14, 1965.

#### PERSONNEL GUIDELINES (HIGHER EDUCATION)

One full-time audiovisual director with supporting staff is needed as program develops. Director might add personnel in the areas of administration, graphics, film production, audio production, ITV, teaching, etc. Start with full-time secretary and add secretarial help as needed. Many colleges are creating materials centers and consequently the audiovisual program will become a part of this larger organizational pattern. Where this is happening it should be stressed that the recommendations concerning personnel remain the same with the possible addition of a director of the total program who could be an audiovisual communications specialist.

#### MATERIALS GUIDELINES (HIGHER EDUCATION)

	Basic	Advanced	
16 mm films	500 college level titles plus 2 per instructor over 500. In addition, teacher education institutions should have the basic film collection recommended for elementary and secondary schools (1,000).	1,000 college level titles plus 3 per instructor over 500, plus elementary and secondary basic collection in teacher education institutions.	
	OR	OR	
	An average of 3 film rentals per instructor per course.	An average of 5 film rentals per instructor per course.	
Filmstrips	2,000 titles with duplicates as needed.	3,000 titles with duplicates as needed.	
RecordingsTape and Disc but not electronic lab materials	1,000	2,000	

## EQUIPMENT GUIDELINES (HIGHER EDUCATION)

	Basic	Advanced	
16 mm sound projector	<pre>1 per 12 teaching stations (multipurpose institution)</pre>	1 per 8 teaching stations	
	<pre>1 per 8 teaching stations (single purpose institution)</pre>	1 per 5 teaching stations	
8 mm projector	1 to 3 sound projectors per institution	1 per 10 teaching stations	
	Significant changes are occurring in the 8mm medium which do not at present justify quantitative guidelines. Because of the important contributions of these films to individual and small group learning, however, conservative quantities have been suggested. As equipment and materials become more stabilized and as sources expand, schools should increase the quantities beyond the amounts suggested in these guidelines.		
2 X 2 slide pro- jector (automatic)	1 per 10 teaching stations	1 per 6 teaching stations	
Filmstrip or com- bination filmstrip- slide projector	1 per 10 teaching stations	l per 5 teaching stations	
Sound filmstrip projector	1 per 15 teaching stations	1 per 10 teaching stations	
3½ X 4 projector (auditorium)	1 per auditorium	l per auditorium plus <b>ar</b> c or similar power	

	Basic	Advanced	
Filmstrip viewer	5 to 10 at each filmstrip	10 to 20 at each filmstrip depository	
	It is assumed that viewers will be depositories. As this activity increasecured.		
Overhead projector (10 X 10) classroom type	1 per 4 teaching stations	l per teaching station	
Overhead projector Appropriate number for large group instructional are (10 X 10) auditorium type		group instructional areas.	
	An auditorium model overhead merely implies that the machine utilized has sufficient light output and optical capabilities to project a satisfactory image in an auditorium type situation.		
Opaque	3 to 6 per institution	8 to 12 per institution	
TV receivers	<pre>1 per each 24 viewers where pro- grams available (or projection TV as needed</pre>	l per teaching station but no more than 24 viewers per set	
Record players	1 per 25 teaching stations	l per 15 teaching stations	
Tape recorders	1 per 5 teaching stations	l per 2 teaching stations	
Projection carts	1 per 3 to 6 pieces of equipment	1 per 2 to 4 pieces of equipment	
Light control	trol Every classroom should have adequate light control. Adequate is this situation means that light can be controlled to the extent that all type of projected media can be utilized effectively.		

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	Basic	Advanced	
Video-tape recorders	1 per institution	1 per TV production unit	
Closed-circuit TV	I studio per institution capable of distribution of programming to each teaching station.		
£	Many institutions may desire portabuse. Where this is the case, the paddition to the basic recommendation		
Radio-receivers (AM-FM)	3 available in central location	Equivalent of 1 per classroom building	
Projection screens	l per teaching station (at least 70 X 70) with provision for keystone elimination plus l portable screen per building. Suitable screen for auditoriumlarge or small group use.		
Electronic learning lab	1 lab per institution	As program dictate	
Local production equipment	Dry mount press and tacking iron Raper cutter Transparency production equipment 16 mm camera 3 mm camera 35 mm camera Rapid process camera Equipped darkroom Spirit duplicator Primary typewriter Copy camera Light box Film rewind Film splicer Tape splicer	Add to basic list: Slide reproducer Second type of transparency producer Mechanical lettering	

Globes

Maps

Due to the state of the field and the nature of certain media it is extremely difficult, if not impossible, to develop quantitative guidelines for all types of audiovisual materials. The list below includes some of these materials. Even though quantitative guidelines are not recommended at this time for these materials, it must be recognized that they do make a unique contribution to the instructional program and must be made available for instructors' use. Each item listed must be supported with a fair share of the funds expended for media. The overall objective of the media program should be to provide a wide variety of audiovisual materials with no one item dominating the program.

8 mm films 2X2 sildes Study prints Transparencies and transparency masters 3叔4 Slides Dioramas

#### MATERIALS BUDGET

To provide for a well-rounded materials program it is recommended that the basic complement of films, filmstrips, and recordings be considered capital equipment and be purchased with such funds. To provide for the on-going materials program, including maintenance and replacement but not expansion. no less than 1% of the average per pupil cost in the school unit should be spent per year per student. The 1% would include film rentals if no basic film collection is started and subscription television (i.e. MPATI), but would not include salaries, building construction or remodeling, CCTV installations, or electronic learning centers.

To provide for an advanced materials program the 1% figure should be increased to 1.5%.

#### EQUIPMENT BUDGET

The capital expenditures necessary to secure the equipment recommended herein should be calculated from the price of the equipment. This figure will necessarily vary from school to school due to the range in equipment prices and the excellence of the equipment programs developed.

### APPENDIX E

INVENTORY CHECK SHEET

#### EDUCATIONAL MEDIA INVENTORY CHECK SHEET

This inventory check sheet is designed to be used as a basis for determining the inventory status of educational media in a college or university. The check sheet is intentionally comprehensive, so that it may be used by institutions of various types and sizes. Obviously, many types of equipment and materials will not be applicable to a given situation, and there is no implication that any one institution should possess all items listed. The completion of the check sheet requires the use of numbers indicating quantities and amounts, check marks in response to questions and short constructed answers. When an item is not applicable to your institution, place an "O" in the space provided for that item. Please provide an answer in each blank space. The term educational media as used in the check sheet refers to all non-book materials commonly called audiovisual materials and equipment plus newer media such as television and programmed materials.

#### I. Institution Identification

Α.	Name of In	stitution:
В.	Location:_	
c.	Person in	charge of the Educational Media Program:
	1. Name:_	<u> </u>
	2. Title:	· · · · · · · · · · · · · · · · · · ·
D.	Date of th	is inventory:
E.		type of organization that most nearly describes the situation stitution:
	( ) 1.	Centralized, with all media services provided from one educational media center.
	( ) 2.	A media center, with sub-centers located in Colleges or Depart ments having a need for such facilities.
	( ) 3.	Decentralized, no main educational media center, i.e., each College or Department has its own center for media services.
F.	Number of	teachers: Full-time Part-time
G.	Current nu	umber of students enrolled on campus:

# II. Inventory of College or University Physical Facilities

pur ser tor	If the Educational Media Program provides services to the entire pus, all classrooms, auditoriums, and buildings used for instructional poses should be recorded. However, if the Educational Media Program vices only one College or Department, record only the classrooms, audiiums, and buildings used for instructional purposes in that College or artment and specify the College or Department served:
Α.	Total number of classrooms:
В.	Total number of auditoriums:
c.	Total number of classrooms equipped with adequate light control. Adequate in this situation means that light can be controlled to the extent that all types of projected media can be utilized effectively:
D.	Total number of buildings used for instructional purposes:
	III. Educational Media Personnel
Α.	
	( ) Yes ( ) No
	If yes, what part of time is spent performing these duties?
	<ul> <li>( ) No released time</li> <li>( ) Some released time, but less than half-time</li> <li>( ) Half-time</li> <li>( ) More than half-time, but not full-time</li> <li>( ) Full-time</li> </ul>
В.	Professional media staff such as Specialists in photography, graphics, film librarians, etc.
c.	Technical personnel such as equipment repairmen, film inspectors, production technicians, etc.
D.	Clerical personnel such as secretaries, filing clerks, distribution clerks, etc.

## IV. Administrative Organization of the Educational Media Program

Α.	Under which administrative organization is the Educational Media administered?	Program
	<ul> <li>( ) 1. Department or College of Education</li> <li>( ) 2. University or College Library</li> <li>( ) 3. Centralized Media Center</li> <li>( ) 4. Extension Division</li> <li>( ) 5. Other: (Please specify)</li> </ul>	
В.	To whom is the Educational Media Director directly responsible?	
	<ul> <li>( ) 1. Department Chairman</li> <li>( ) 2. Dean of Instruction</li> <li>( ) 3. President</li> <li>( ) 4. Librarian</li> <li>( ) 5. Other: (Please specify)</li> </ul>	
	V. Inventory of Materials and Equipment	
Α.	Materials available to instructors from the Educational Media Pr	ogram:
		Number
	1. 16 mm films: college level titles	
	2. 16 mm films: elementary and secondary titles	<del></del>
	3. Filmstrips: college level titles	<del></del> -
	4. Recordings: (disc and tape) college level titles	
	<ol> <li>Regular and super 8 mm films: (exclude clips and loops) college level titles</li> </ol>	•
	6. Regular and super 6 mm film clips: (loops) college level	
	Indicate items of the following that are made available from the program to instructors:	e media
	( ) 1. 2" X 2" slides ( ) 2. 3½" X 4" slides ( ) 3. Study prints (photographs, drawings, etc.) ( ) 4. 10" X 10" overhead transparencies ( ) 5. Three dimensional materials (models, dioramas, specime ( ) 6. Graphic materials (charts, graphs, etc.) ( ) 7. Globes and maps	ens, etc.)

В.	Equ	ipment available to instructors from the Educational Media Pro	ogram:
			Number
	1.	16 mm motion picture projectors	
	2.	Regular and super 8 mm projectors (exclude film clip)	
	3.	Regular and super 8 mm clip projectors (loop)	
	4.	Automatic 2" X 2" slide projectors	
	5.	Filmstrip and combination filmstrip-slide projectors	
	6.	Sound filmstrip projectors	
	7.	3½ X 4" slide projectors suitable for auditoriums	
	8.	Filmstrip viewers	<del>~~</del>
	9.	10" X 10" overhead projectors suitable for classroom	
	10.	10" X 10" overhead projectors suitable for auditorium	
	11.	Opaque projectors	
	12.	Record players	<del></del>
	13.	Audio tape recorders (include cassette recorders)	
	14.	Projection carts (stands or tables)	
	15.	Radio receivers (AM and FM)	
	16.	Projection screens (portable)	
	17.	Projection screens (stationary)	
	18.	Electronic learning labs	-
	19.	Television receivers	-
	20.	Video tape recorders	
	21.	Do you have a closed circuit television system consisting of a studio which distributes programming to classrooms?	-
c.		oduction equipment: Indicate items of the following that are your institution and used to produce materials for instruction	
	(	) 1. Dry mount press and tacking iron ) 2. Paper cutter	

(	)	3.	Transparency production equipment
ì	Ś	4.	16 mm motion picture camera
ì	Ś	5.	8 mm motion picture camera (regular or super 8 mm)
Ì	j.	6.	35 mm still camera (include instamatic)
Ò	)	7.	Polaroid camera
Ċ	)	8.	16 mm motion picture camera 8 mm motion picture camera (regular or super 8 mm) 35 mm still camera (include instamatic) Polaroid camera Equipped darkroom Spirit duplicator Primary typewriter Copy camera
Ò	)	9.	Spirit duplicator
(	)	10.	Primary typewriter
(	)	11.	Copy camera
(	)	12.	Light box
(	)	13.	Slide reproducer
(	)	14.	Film splicer (35 mm, 16 mm, super 8 mm or regular 8 mm)
(	)	15.	Tape splicer
(	)	16.	Mechanical lettering devices
(	)	17.	Second type of transparency production equipment.
			VI. Educational Media Budget

In this section the educational media budget should <u>not</u> include salaries, building construction or remodeling, closed circuit television installations, or electronic learning centers. Item A deals with purchases of equipment for two different purposes: (1) to replace equipment that is being discarded; and (2) to add to the number of equipment owned by the institution. For example, if your institution purchased five projectors and used two to replace worn out equipment, you would list the cost of two projectors under item 1, and the cost of three projectors under item 2.

Α.	Equipment purchases		Anticipated 72- 73 School Year
	1. Purchases to replace obsolete or worn out equipment	\$	\$
	2. Purchases of new equipment	\$	\$
В.	Materials purchases (New materials and replacement or discarded materials)	\$	\$
C.	Rental of equipment (Telelectures, etc.)	\$	\$
D.	Rental of materials (Films, etc.)	\$	\$
E.	Other expenditures (Office supplies, equipment parts, etc.	.)\$	\$
F.	Total educational media budget	\$	\$

# APPENDIX F OKLAHOMA UNIVERSITIES AND COLLEGES

# OKLAHOMA INSTITUTIONS OF HIGHER LEARNING (as of July 1, 1971)

All the generally recognized institutions in Oklahoma, both publicly controlled and independent, doing work on the college level, are listed below. Those indicated by (*) are members of the Oklahoma State System of Higher Education.

#### State-Owned Universities and Senior Colleges

*University of Oklahoma
*Oklahoma State University

*Oklahoma State University
*Central State University

*East Central State College

*Northeastern State College

*Northwestern State College

*Southeastern State College

*Southwestern State College

*Cameron College

*Langston University

*Oklahoma College of Liberal Arts

*Oklahoma Panhandle State College of Agriculture and Applied Science

#### State-Owned Junior College

*Altus Junior College

*Claremore Junior College

*Connors State College of Agriculture and Applied Science

Applied Science

*Eastern Oklahoma State College of Agriculture and Applied Science

*Murray State College of Agriculture and Applied Science

*Northeastern Oklahoma A & M College

*Northern Oklahoma College

*Tulsa Junior College

#### Community Junior Colleges

E1 Reno Junior College
Oscar Rose Junior College
Poteau Community College
Sayre Junior College
Seminole Junior College
South Oklahoma City Junior College

#### Independent Senior Colleges

American Christian College Bethany Nazarene College

#### Independent Senior Colleges (continuted)

Oklahoma Baptist University Oklahoma Christian College Oklahoma City University Oral Roberts University Phillips University University of Tulsa

### Independent Junior Colleges

Bacone College
Bartlesville Wesleyan College
Hillsdale Free Will Baptist College
Midwest Christian College
St. Gregory's College
Southwestern College

#### APPENDIX G

PRELIMINARY CORRESPONDENCE TO PARTICIPANTS



## OKLAHOMA STATE REGENTS FOR HIGHER EDUCATION

## STATE CAPITOL OKLAHOMA CITY, OKLAHOMA

March 29, 1972

TO: Presidents of Institutions in Oklahoma Higher Education

#### Gentlemen:

Mr. Roy Allen, a doctoral graduate student at the University of Oklahoma, has a research project for his dissertation on the subject of educational media in Oklahoma institutions of higher education.

He has visited with several institutional administrators and with members of our staff and me about this research project. We all are convinced that results of the study will hold great potential of useful information to higher education program planners in Oklahoma. He has agreed to make results of the research available to all colleges and universities in the state.

The purpose of this letter is to commend to you Mr. Roy Allen and his what appears to be a most purposeful study of interest to Oklahoma higher education planning. He will be contacting you within a few days requesting your assistance in providing some information about the educational media program of your institution. His request appears to be a worthy one, and I am sure that all administrators will want to give it appropriate consideration and, if you find it possible to do so, to lend him your cooperation in gathering the data which he needs for a full statewide survey of the subject.

Sincerely yours,

E. T. Dunlap Chancellor

ETD/fjs

cc: Mr. Roy Allen

Dr. Leslie Fisher

# APPENDIX H INITIAL CORRESPONDENCE TO PARTICIPANTS

1306 McKinley Norman, Oklahoma 73069

March 31, 1972

Dr. Jacob Johnson, President Oscar Rose Junior College 6420 S. E. 15th Street Midwest City, Oklahoma 73110

Dear Dr. Johnson:

You recently received a letter dated March 29, 1972, from Chancellor E. T. Dunlap regarding my dissertation research study of educational media. The purpose of this study is to evaluate the educational media program of all Oklahoma institutions of higher education.

Your assistance is needed in completing the enclosed Educational Media Inventory Check Sheet. Information from this check sheet will provide data to be used to measure the quantity of your program. Although the check sheet is comprehensive, you should be able to complete it in approximately 30 minutes. Also enclosed, for your completion, is an Evaluative Checklist. This instrument requires 21 responses and should take about 20 minutes of your time. The instrument will be used to measure the quality of your educational media program. You may want to study the enclosed Criteria Relating to Educational Media Programs in Colleges and Universities before completing the Evaluative Checklist.

Please complete the <u>Educational Media Inventory Check Sheet</u> before responding to the <u>Evaluative Checklist</u>. If there are parts of these instruments that are out of your jurisdiction, please forward them to the proper person for completion.

Your assistance in providing a 100 percent return by April 14, 1972, from all Oklahoma colleges and universities will be appreciated. If your institution does not have an educational media program, please indicate this on both instruments. Please return both the <u>Evaluative Checklist</u> and the <u>Educational</u> Media <u>Inventory Check Sheet</u> in the enclosed return envelope.

Thank you for your assistance and a copy of the study will be available to you upon request.

Sincerely,

Roy C. Allen

enclosures

# APPENDIX I FOLLOW-UP CORRESPONDENCE TO PARTICIPANTS

1306 McKinley Norman, Oklahoma 73069

April 14, 1972

Dr. Jacob Johnson, President Oscar Rose Junior College 6420 S.E. 15th Midwest City, Oklahoma 73110

Dear Dr. Johnson:

On March 31 I mailed you two questionnaires for your completion concerning your educational media program. As explained in Chancellor Dunlap's letter of March 29, the results of the study will hold great potential of useful information to higher education planners in Oklahoma. The educational media program evaluation of a specific institution used in the study will not be named in the dissertation.

The response has been exceptionally good, but to this date I have not received the completed questionnaires from your institution; therefore, I am enclosing another set of the questionnaires in the event the original materials did not reach you.

I realize that the materials may have reached you at a very busy time; however, it is indeed important that I receive a 100 percent return by April 22. I will be most grateful for your assistance in achieving this task. If you have mailed the questionnaires, please accept my thanks and disregard this communication.

Sincerely,

Roy C. Allen

RCA:ga

enc.

#### APPENDIX J

ACKNOWLEDGEMENT OF RESPONSE RECEIPT AND APPRECIATION

1306 McKinley Norman, Oklahoma 73069

May 15, 1972

Chancellor E. T. Dunlap
Oklahoma State Regents for
Higher Education
118 State Capitol Building
Oklahoma City, Oklahoma 73105

Dear Chancellor Dunlap:

I am most happy to report that I have received 100 percent participation in my evaluation of the educational media programs in Oklahoma institutions of higher education.

I credit such a fast and complete response to the fact that you were interested and generous enough to extend your support to my efforts. I sincerely appreciate the assistance you and your staff have given me.

Enclosed are copies of letters of appreciation which I have mailed to all college presidents and faculty members who assisted in the evaluation. I have already begun evaluating the data and will provide you with a copy of the findings once completed.

Thank you again for your cooperation.

Sincerely,

Roy C. Allen

RCA:ga

enc.

cc Dr. Leslie R. Fisher

1306 McKinley Norman, Oklahoma 73069

May 5, 1972

Dr. Jacob Johnson President Oscar Rose Junior College 6420 S.E. 15th Street Midwest City, Oklahoma 73110

Dear Dr. Johnson:

I sincerely appreciate your institution's participation in my study of the evaluation of the educational media programs in Oklahoma institutions of higher education. I especially want to thank Dr. John Davis and Mr. Jack Gahman for taking their time in completing the questionnaires. The information was very complete and most helpful.

Sincerely,

Roy C. Allen

RCA:ga

cc Chancellor E. T. Dunlap Dr. John Davis Mr. Jack Gahman