ERIC REPORT RESUME

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SELF-EVALUATIVE CHECKLIST AND CRITERIA FOR EVALUATING EDUCATIONAL
MEDIA PROGRAMS.
FULTON, W.R.
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*SELF EVALUATION, *INSTRUCTIONAL MATERIALS, *ADMINISTRATIVE POLICY,
*MEASUREMENT INSTRUMENTS, *SCHOOLS, HIGHER EDUCATION,
PROGRAM EVALUATION, NORMAN, OKLAHOMA

AN ATTEMPT WAS MADE TO DEVELOP TWO FORMS OF A SELF-EVALUATIVE
CHECKLIST--ONE FOR EVALUATING EDUCATIONAL MEDIA PROGRAMS IN HIGHER
EDUCATION INSTITUTIONS, AND ANOTHER FOR EVALUATING PROGRAMS IN
SCHOOL SYSTEMS. THE PROCEDURES USED IN THE STUDY WERE DEVELOPMENTAL
IN DESIGN. THEY REQUIRED THE DEVELOPMENT OF CRITERIA UPON WHICH TO
BASE AN EVALUATIVE INSTRUMENT, DEVELOPMENT OF THE INSTRUMENT, AND
THE FORMATION OF SUPPORTIVE MATERIALS. CONSULTANTS WERE SELECTED TO
ASSIST IN THE DEVELOPMENTAL PHASES. EVALUATIVE CHECKLISTS WERE PILOT
TESTED IN 15 SCHOOLS AND INSTITUTIONS FOR THE PURPOSE OF
ESTABLISHING VALIDITY. AFTER REVISION, ON THE BASIS OF INITIAL
TESTS, THE LISTS WERE FIELD TESTED IN A LARGE NUMBER OF SCHOOLS AND
INSTITUTIONS LOCATED IN ALL MAJOR GEOGRAPHICAL AREAS OF THE COUNTRY.
REVISIONS WERE MADE IN LIGHT OF THE FINDINGS, AND A FINAL DRAFT
PREPARED OF THE CHECKLISTS, CRITERIA, AND INVENTORY CHECK SHEET.
BASED ON THE EXPERIENCE GAINED, THE FOLLOWING MAJOR CONCLUSIONS WERE
REACHED--(1) THE CHECKLISTS APPEARED TO BE VALID, AND (2) USE OF THE
INSTRUMENTS SHOULD PERMIT SCHOOL AND INSTITUTION ADMINISTRATORS TO
INFER ADEQUACY OF THEIR MEDIA PROGRAMS. A NUMBER OF RECOMMENDATIONS
WERE MADE CONCERNING FUTURE USE OF THE INSTRUMENTS. (JC)

SELF-EVALUATIVE CHECKLIST AND CRITERIA

FOR

EVALUATING EDUCATIONAL MEDIA PROGRAMS

BY

W. R. Fulton
University of Oklahoma
Norman, Oklahoma

OFFICIAL FILE COPY

SELF-EVALUATIVE CHECKLIST AND CRITERIA

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FOREWORD

This report describes a study which resulted in the development of
two forms of a self-evaluative checklist, one for evaluating educational
media programs in higher education institutions of varying sizes and
types, and the other for evaluating programs in school systems of varying
sizes. The study also resulted in the development of two lists of criteria,
one relating to educational media programs in higher education institutions
of varying sizes and types, and the other relating to programs in school
systems of varying sizes.

The study was conducted at the University of Oklahoma pursuant to a
contract with the United States Office of Education beginning June 26,
1964, and ending December 31, 1965. The original contract was to have
terminated on August 27, 1965, but was extended to permit the collation
of existing standards relating to educational media programs.

The information is presented in four broad categories: (1) a descrip-
tion of the background and nature of the problem; (2) a description of the
procedures used to develop the criteria and self-evaluative checklist and
supportive materials; (3) the final draft of the criteria and the self-
evaluative checklist; and (4) a bibliography and appendices.

A research study of this magnitude is not possible without the assis-
tance and cooperation of many individuals. Grateful acknowledgement is
extended to officials of the United States Office of Education, members
of the Department of Audiovisual Instruction of the NEA, Teaching Films
Custodians, Inc., those persons in schools and colleges who participated
in the pilot and field testing of the instrument, and especially to the

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consultants who wrote descriptive papers and otherwise participated in the development of the instrument and whose names appear elsewhere in this report.

W. W. Fulton
University of Oklahoma
Norman, Oklahoma
January, 1966

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I. INTRODUCTION

This section includes a description of the problem of this study; its purposes, objectives and background; a list of working definitions of terms; a brief description of the general procedures used to solve the problem; and an identification of the major products of the project.

Background and Need for the Study

During recent years there has been a marked increase in the development of educational media programs in school systems and higher education institutions throughout the United States. Frequently these developments have been in response to immediate needs within an educational institution rather than part of a long-range, organized plan.

Educational media programs vary markedly from one institution to another. Some faculty members need fewer media because of the nature of their teaching fields. Others have greater need for media because of their methods of teaching. Some use media at a high level of sophistication while the level of utilization of others may be less sophisticated. These and other factors help to determine whether or not an educational media program is adequate for a given situation.

The educational administrator is likely to be at a loss to assess the adequacy of his educational media program or to formulate plans for improving the organization, administration, and financing of educational media services without some kind of guidelines. A common recourse for the administrator is to seek consultative assistance from his state education agency, a professional agency, or from a similar institution presumed to

have the type of media program desired by the administrator for his own situation.

For a consultant to be of real assistance to the educational administrator, it is highly desirable to provide him with an accurate description of the current status of the educational media program in the situation to be studied. Such a description could be obtained through the use of an evaluative instrument, if such an instrument were developed and made available to educational administrators.

An educational administrator is often unable to obtain the consultative assistance that he needs to undertake a complete evaluation of an educational media program. Obviously this problem could be alleviated if an evaluative instrument were developed which could be self-administered by administrators in school systems and higher education institutions.

The changing status of an educational media program is not likely to be known, nor are ongoing efforts to improve a program likely to be undertaken without continuous evaluation. Such continuous evaluation would be greatly facilitated if an instrument were developed for use by educational administrators in various types of educational institutions in studying their own educational media programs.

Statement of the Problem

The problem of this study was to develop and validate one or more self-administering and self-evaluating instruments that could be used to appraise the status of educational media programs in school systems of varying sizes and in higher education institutions of varying sizes and types.

Objectives of the Study

The objectives of this study were: (1) to develop one or more evaluative instruments that could be self-administered by personnel in school systems and higher education institutions; (2) to develop the instrument or instruments in a manner that would permit administrators in school systems and higher education institutions to infer with validity the adequacy of their educational media programs by interpreting their responses to the evaluative instrument; and (3) to develop the instrument or instruments in a way that would provide a basis for isolating areas where changes may need to be made in educational media programs.

Definition of Terms

Project staff refers to personnel who worked regularly on the study as it was conducted, including the director and principal investigator, an evaluation specialist, a graduate assistant and a secretary.

Consultants refers to a panel of practitioners in the field of educational media who were selected to assist with the developmental phases of the project.

The terms Educational media and media are used interchangeably to refer to all equipment, materials, and services traditionally called "audiovisual materials" as well as to newer media such as television, overhead projectuals, teaching machines, and programed materials.

Educational media services refers to all efforts to make educational media available to faculty, staff, and students and to assist them in using these media.

Educational media program refers to the total efforts of a school

system or higher education institution to provide educational media and services to its faculty, staff, and students.

Evaluation refers to the appraisal of an educational media program by making value judgments about the elements of the program.

Self-evaluation refers to the appraisal of an educational media program by officials of the school system or higher education institution whose program is evaluated.

The terms *higher education institution* and *institution* are used interchangeably to refer to colleges and universities of all sizes and types.

The terms *school system* and *school* are used interchangeably to refer to educational units that provide and administer educational programs for any combination of grade levels from kindergarten through junior college.

Building refers to a component of a school system, such as an elementary or secondary attendance unit, where educational experiences are provided for a combination of grade levels or subject areas.

Department refers to an administrative unit within a higher education institution that provides educational experiences within a subject area, a group of subject areas, or a professional area, including all administrative units commonly called "colleges" or "schools" in multi-purpose universities.

General Procedures

The procedures used in this study were developmental in design. They required the development of criteria on which to base an evaluative instrument, the development of an evaluative instrument, and the formation of

supportive materials. Although a detailed description of these procedures is presented in Section II of this report, a brief overview of these procedures is presented here.

1. Existing literature was reviewed and used to develop an annotated bibliography, a tentative list of criteria, and a tentative list of common elements of educational media programs.

2. A panel of consultants was selected to assist in the developmental phases of the project.

3. Consultants prepared and submitted papers describing what each considered to be characteristics of desirable educational media programs.

4. Program characteristics included in papers submitted by the consultants were collated and coded to show what characteristics of media programs were considered as desirable by the consultants and to show the number of consultants who mentioned each characteristic.

5. Criteria included in papers submitted by the consultants were listed and collated to show what consultants considered to be optimum criteria of desirable educational media programs and to show the number of consultants who mentioned each criterion.

6. A consultant workshop was held in which the consultants and project staff identified and agreed on major elements of desirable educational media programs, developed and agreed on a list of criteria relating to desirable educational media programs, and developed a format that could be used in the development of a self-evaluative instrument.

7. A first draft of an instrument in the form of a self-evaluative checklist was prepared by the project staff and submitted to the consultants for their individual comments and suggestions.

8. Revised drafts of the checklist were prepared on the basis of suggestions and recommendations made by the consultants.

9. Supportive materials consisting of an inventory check sheet and a collation of existing standards were formulated with the idea of possibly including them with the evaluative checklist.

10. The evaluative checklist was pilot tested in fifteen schools and institutions for the purpose of further establishing its validity.

11. The evaluative checklist was revised on the basis of the results obtained by the pilot test.

12. The evaluative checklist was field tested in a large number of schools and institutions located in all major geographic areas of the country to determine whether it could be self-administered and to test its validity further.

13. Revisions were made on the basis of information obtained by the field test, resulting in the final draft of the evaluative checklist, criteria, and inventory check sheet.

Outcomes of the Study

The primary purpose of this study was accomplished through the development of an evaluative checklist in two forms, one form for use in higher education institutions of all sizes and types, the other for use in school systems of all sizes. The development of these two forms of the checklist required the preparation of two lists of criteria relating to educational media programs for these two types of educational institutions. To make it more convenient for the administrator to use the evaluative checklist, an inventory check sheet was designed to determine the current status of educational media programs.

II. DEVELOPMENT OF THE SELF-EVALUATIVE CHECKLIST AND CRITERIA

This section describes the procedures used to develop, refine, and validate the evaluative instrument. It also describes the procedures used to develop criteria relating to educational media programs that served as a basis for developing the instrument. The procedures used to formulate an inventory check sheet and a collation of quantitative standards are also included in this section.

Annotation of the Literature

Standard library research procedures were used to locate periodicals, textbooks, research reports and unpublished manuscripts related to educational media programs. From approximately two hundred publications which were reviewed, fifty-two which pertained directly to educational media programs and which appeared to be directly related to this project were included in an annotated bibliography. The annotated bibliography provided a quick reference to publications pertaining to educational media programs and proved useful throughout the project.

A review of the literature was also useful in formulating the organizational structure of the evaluative instrument. A tentative list was made of the elements of educational media programs that appeared most often in the literature. These elements clustered around seven categories, each of which appeared to represent a major aspect of educational media programs. These categories were (1) Institutional or school system educational media services; (2) Educational

media services - curriculum and instruction; (3) The educational media center; (4) Physical facilities for educational media; (5) Production of instructional materials; (6) Budget and finance of the educational media program; and (7) Educational media staff. The most frequently mentioned program elements were then listed under the major categories of which each seemed a part.

A tentative list of criteria was also formulated from the literature. The most frequently mentioned criterion statements which appeared to relate to educational media programs were listed under the categories identified above.

Selection of Consultants

Twelve consultants were selected to assist the project staff in the preparation and refinement of the evaluative instrument and the criteria. Two principal qualifications were required of the consultants: (1) that he be currently engaged as a practitioner in the educational media field; and (2) that he be knowledgeable about and thoroughly familiar with the size and type of educational institution which he represented.

The executive staff and officers of the Department of Audiovisual Instruction (DAVI) of the National Education Association were asked to nominate persons whom they considered to be qualified to represent each of the four sizes and types of educational institutions listed below. The Steering Committee of the Consultant Service Committee of DAVI was also asked to nominate persons as consultants on the project. These two groups nominated persons to represent each of the four sizes and types of institutions and provided biographical information for

each nominee.

The project director and the project evaluation specialist collaborated in the selection of consultants from these two lists of nominees. The biographical information was carefully considered and selection was made of the twelve nominees who seemed best qualified to represent the following sizes and types of educational institutions: (1) large multi-purpose universities, (2) single purpose colleges, (3) large school systems, and (4) small school systems.

The twelve persons invited to serve as project consultants were advised of the purposes of the project, the duties of the project consultants, and the size and type of institution each was invited to represent. Having accepted the invitation, consultants were given three specific assignments: (1) to prepare a description of the characteristics of an effective educational media program for the size and type of institution he had agreed to represent; (2) to assist in the development of criteria by participating in a consultant workshop; and (3) to review and make suggestions regarding subsequent drafts of the criteria and the instrument.

Papers Submitted by Consultants

Each project consultant prepared and submitted a paper describing an effective educational media program for the size and type of educational institution he represented. These papers provided the project staff with a comprehensive list of what the consultants considered to be desirable educational media program characteristics.

The characteristics included in the papers were coded and collated so as to reflect the number of characteristics mentioned by consultants

and the number of consultants who mentioned each characteristic. Characteristics, hereafter referred to as program elements, mentioned by the consultants were grouped under the major categories of educational media programs listed on pages 7 and 8. Each consultant was assigned a code number that identified him and the size and type of institution he represented. This code number was entered beside each program element mentioned in the consultant's paper when it was entered in the collations. Thus it was possible to identify quickly the source of each program element in the collations. The collations also showed the number of consultants who mentioned each element. Four sets of collations were prepared, one for each size and type of educational institution included in the study.

The papers submitted by the consultants also contained many statements of criteria. The criteria were likewise coded and collated according to the same procedures used to code and collate the characteristics. Four collations of criterion statements were prepared, corresponding to the four sizes and types of educational institutions included in the study.

Consultant Workshop

A consultant workshop was held on the campus of the University of Oklahoma during the week of December 14, 1964. The three major purposes of the workshop were (1) to identify the essential elements of educational media programs in educational institutions of various sizes and types; (2) to formulate criteria relating to educational media programs; and (3) to develop a format for an instrument that would reflect these criteria and could be used to evaluate educational media programs.

The following steps were followed in accomplishing these purposes:

1. Elements thought to be common to educational media programs in the four sizes and types of educational institutions were identified and agreed on by the consultants.

2. Criteria that related to these elements were formulated and agreed on by the consultants.

3. A format was developed for the construction of checklists that would reflect these criteria and provide a means of evaluating educational media programs.

Identification of Program Elements

The first task accomplished in the workshop was the identification of program elements thought to be common to educational media programs in educational institutions of various sizes and types. Emphasis was placed on identifying elements about which judgments should be made in evaluating the effectiveness of an educational media program.

Collations that had been made by the project staff from a review of existing literature and from the papers submitted by the consultants were reviewed and compared. Each element included in these collations was considered in its relation and significance to the over-all educational media program in school systems and in higher education institutions of various sizes and types. Consultants worked in four groups according to the size and type of institution each represented. Consultants identified, formulated, and organized four tentative lists of program elements, one for each of the sizes and types of educational institutions. The four lists were then compared in a general session attended by all consultants.

The elements of educational media programs listed by the consultants for both large and small school systems were found to be almost

identical. The same was true of elements listed for programs in
single-purpose colleges and in large universities. Minor differences
were, however, found to exist between elements listed for educational
media programs in school systems and those in higher education institu-
tions. Moreover, there seemed to be no common terminology for ex-
pressing elements that were basically the same for these two types of
educational institutions. Consultants representing small and large
school systems were, therefore, able to compile a list of elements
common to educational media programs in all school systems. Likewise,
consultants representing single-purpose colleges and multi-purpose
universities were able to compile a list of elements common to educa-
tional media programs in all higher education institutions.

Elements of educational media programs in higher education insti-
tutions were organized under the major categories of which each seemed
a part. The elements, as listed by the consultants who represented
colleges and universities, are as follows:

I. Institutional Educational Media Services

    A. Commitment to the media program

    B. Commitment to educational media as an integral part of
        instruction

    C. Commitment to providing educational media facilities

    D. Commitment to financing the educational media program

    E. Commitment to staffing the educational media program

II. Educational Media Services - Curriculum and Instruction

    A. Consultant services in educational media utilization

    B. Media services to educational preparation programs

    C. Faculty-student use of educational media

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D. Involvement of media staff in planning

III. The Educational Media Center

    A. Location and accessibility of educational media

    B. Dissemination of media information

    C. Availability of educational media

    D. Storage and retrieval of media

    E. Maintenance of media

    F. Production of media

IV. Physical Facilities for Educational Media

    A. Media facilities in existing classrooms

    B. Media facilities in new classrooms

V. Budget and Finance of the Educational Media Program

    A. Reporting financial needs

    B. Basis for budget allocations

    C. Development of media budget

VI. Educational Media Staff

    A. Institutional media staff

Elements of educational media programs in school systems were like-
wise organized under the major categories of which each seemed a part.
The elements, as listed by the consultants who represented large and
small school systems, are as follows:

I. School System Educational Media Services

    A. Commitment to the media program

    B. Commitment to educational media as an integral part of
       instruction

    C. Commitment to providing educational media facilities

    D. Commitment to financing the educational media program

E.   Commitment to staffing the educational media program

II.   Educational Media Services - Curriculum and Instruction

   A.   Consultant services in educational media utilization

   B.   Inservice education in educational media

   C.   Faculty-student use of educational media

   D.   Involvement of media staff in planning

III.   The Educational Media Center

   A.   Location and accessibility of educational media

   B.   Dissemination of media information

   C.   Availability of educational media

   D.   Storage and retrieval of media

   E.   Maintenance of media

   F.   Production of media

IV.   Physical Facilities for Educational Media

   A.   Media facilities in existing classrooms

   B.   Media facilities in new classrooms

V.   Budget and Finance of the Educational Media Program

   A.   Reporting financial needs

   B.   Basis for budget allocations

   C.   Development of media budget

VI.   Educational Media Staff

   A.   School system media staff

   B.   Building media staff

Only two of the above program elements were different for school systems and higher education institutions. One of these pertains to teacher education in the utilization of educational media. This element concerns preservice preparation of teachers in colleges and universities

and inservice education of teachers in school systems. The other
element that was different for two types of educational institutions
was that of building media staff members. This element concerns, for
the most part, the building coordinators in school systems, and no
equivalent of this position appears to exist in most colleges and
universities.

Attempts to describe or expand on the components and character-
istics of these program elements revealed serious inadequacies in
terminology. Neither the project staff nor the consultants were able
to find common terminology for describing program elements in school
systems and higher education institutions. For example, if one refers
to an "institution" this does not seem appropriate nomenclature for a
school system, nor does the term "school system" appropriately identify
a college or university.

These two factors, inadequacies in terminology and the slight
degree of differences in the elements of educational media programs in
the two types of educational institutions, appeared to necessitate the
development of separate forms of the evaluative instrument. On these
bases, a decision was made to develop tentatively two forms of the instru-
ment, one for use in colleges and universities and the other for use in
school systems. It was further decided that after two tentative forms
had been developed, intensive efforts would be made to identify common
terminology that might facilitate the consolidation of the two forms.

Development of Criteria

The next task accomplished in the workshop was the formulation of
tentative criteria relating to desirable educational media programs.

The collations of criterion statements from existing literature and from papers submitted by the consultants were reviewed. Statements of criteria thought to be of little importance were deleted and others considered by the consultants to be of importance were added. Two tentative lists of criteria were thus compiled for use as a basis for developing an evaluative instrument. One list related to educational media programs in school systems and the other to programs in colleges and universities.

These two lists of criteria were, as in the case of the tentative list of program elements, largely necessitated by differences in terminology. The list for educational media programs in school systems appeared to relate to schools of all sizes and the list for higher education appeared to relate to institutions of all sizes and types. Differences in terminology and slight differences in content, however, stymied attempts to consolidate them into one list of criteria that would relate to educational media programs in both school systems and higher education institutions.

Development of the Format

The last task undertaken in the consultant workshop was the development of a format for the evaluative instrument. The first consideration was the selection or development of a format that would permit the evaluator to make value judgments as to how well his educational media program related to the criteria that had been formulated. Several formats were presented and considered by the consultants. Among them were formats of the traditional "inventory checklist" type that included compendiums of arbitrary values from which a score could be derived ranging

from poor to superior. Consultants experimented with several such formats by writing sample items for various elements of educational media programs. The "descriptive judgmental approach" was finally adopted because the project staff and consultants considered it most likely to provide a framework within which valid evaluative judgments could be made.

This format called for a checklist consisting of descriptions of educational media program elements presented in such a way that the evaluator could judge elements of his own program by comparing them to these descriptions. Descriptions were written for three levels of adequacy. The "higher" level reflected the criteria that had been formulated as a basis for the development of the evaluative instrument. The "middle" description fell below these criteria and the "lower" description was one in which an educational media program existed but fell far below the criteria. Sample items constructed by the consultants according to this format demonstrated that such a format might be used for a self-evaluative instrument. The consultants recommended that the project staff undertake to construct the instrument developed as a part of this project according to this or a similar checklist format.

Formulation of the First Draft

Following the workshop the project staff proceeded to formulate tentative drafts of two forms of an evaluative checklist, one form for use in higher education institutions and the other for use in school systems. The most critical task involved in this phase of the project was the writing of descriptive statements for each item of the evaluative checklist. One item, consisting of three descriptive statements,

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was formulated for each program element that had been selected for inclusion in the evaluative instrument.

The three descriptive statements included in each item corresponded to three levels of operation ranging from weak to strong; however, they were not so identified in the main body of the evaluative checklist. The "higher" statements reflected the optimum criteria, thereby describing programs considered by the consultants to be strong. The "middle" statements described programs considered neither strong nor weak, and the "lower" statements described programs considered to be weak. Thus the evaluator could ascertain the strength or weakness of elements of his own program by comparing it to these descriptive statements.

It seemed apparent to the project staff that elements of some educational media programs could not be accurately related to one of the three descriptive statements. It therefore seemed necessary to enable the evaluator to judge his program as falling above or below any of the statements. This required a sufficient number of check points included under each item to allow the evaluator to judge his program as falling precisely on one of the descriptive statements, or above or below any of the statements.

Therefore under each item nine spaces were provided for the evaluator to check. Three spaces were situated at the left of each descriptive statement in the checklist, as shown by the following example:

1 2 3   There is no full-time director of the media program.

X R 6   There are a full-time director and some clerical and technical assistants.

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7 8 9 There are a full-time director and an adequate number of clerical and technical assistants.

Thus the evaluator could select the statement that described his program best and then check whether it was precisely like that description, above the description, or below the description.

For example, an evaluator whose program has a full-time director, some clerical assistants, but no technical assistants would select the middle statement as most nearly representing his situation. Finding that his situation is slightly below that statement because of the lack of technical assistance, he would check the square labeled number four.

For optimum evaluative purposes the evaluator needs to be able to interpret the information obtained by the use of the evaluative checklist. It appeared that this could best be accomplished by enabling the evaluator to compare the relative strength of all elements included in the checklist. The project staff experimented with the development and use of several types of summarizing devices such as scales, tables and profiles. It was decided that a profile would serve this purpose best.

A profile sheet was formulated that permitted the evaluator to depict his judgments as to the strength or weakness of each item of the evaluative checklist. It enabled him to depict the "peaks" and "valleys" of attainment for his educational media program. It was thought that such a profile would allow the evaluator to interpret readily the strengths and weaknesses of the various elements of his educational media program, thereby identifying areas needing further development or innovation.

Refinement of Subsequent Drafts

First drafts of the form of the checklist for use in higher educa-
tion institutions and the form for use in school systems were closely
examined and all apparent inconsistencies corrected. Revised drafts
were prepared and presented to the consultants for their individual
comments and suggestions. Consultants made several suggestions rela-
tive to terminology, content, and construction of the items of the
checklist.

Revised drafts incorporating these suggestions were prepared.
Those drafts were also submitted to each consultant for individual
review and each responded favorably to the content and construction
of these revised drafts of each form of the evaluative checklist. A
decision was made to pilot test this revision of the checklist.

Formulation of Supplemental Information and Materials

For optimum evaluative purposes it was thought that an evaluator
might need to have at his disposal certain information not included in
the evaluative checklist. In order for him to make meaningful judg-
mental responses to all items of the evaluative checklist it appeared
that the following kinds of supplemental information would be helpful:

1. Criteria relating to optimum educational media programs.

2. Information concerning the current status of the program
   being evaluated.

3. Information pertaining to the quantitative status of
   desirable educational media programs.

It appeared that the criteria that had been developed as a basis
for the evaluative checklist might be helpful if included with the
checklist and studied by the evaluator. It was thought that these

criteria could, if used with the checklist, suffice for the information listed in Item 1 above.

Formulation of the Inventory Check Sheet

It appeared that an inventory sheet could be formulated that, if used by the evaluator, would yield the kind of information mentioned in Item 2 above. An inventory check sheet was formulated with the view of including it with the evaluative check sheet.

Formulating the inventory check sheet required listing many types of educational media and services that a school system or higher education institution might have. These were arranged in a format that would allow an evaluator systematically to gather and study information pertinent to the current status of his media program. A sufficient number of items was included in the check sheet to make it comprehensive enough to be used by institutions and school systems of all sizes and types.

Items of educational media were listed and arranged in the inventory check sheet in categories according to their common characteristics. Educational media services were listed and categorized in a like manner. Open-end items were included in all places where an institution or school system might possess media items not listed in the check sheet.

The inventory check sheet includes five sections relating to (1) the identification of the institution or school system being inventoried; (2) an inventory of the physical facilities provided for the use of educational media in instruction; (3) an inventory of all equipment and materials owned by the institution or school system; (4) an inventory of the educational media center; and (5) an inventory of

educational media services provided for teachers, other staff members, and students, and an inventory of the financial status of the educational media program.

It was thought that information concerning the current status of an educational media program as revealed by this inventory would help an evaluator to make the judgments required in the completion of the evaluative checklist. The inventory check sheet developed as a part of this project appears in Appendix A.

Collation of Standards

The third kind of supplemental information, identified as Item 3 on page 20, relates to quantitative standards for educational media programs. It was found that many sets of standards existed, but no one set of standards had been scientifically developed, tested, and made available for use with the evaluative checklist. It was thought that a collation of existing standards might yield the desired information. The accumulation and collation of a great number of existing quantitative standards required several months of additional work by the project staff. An extension of the completion date of the contract was granted by the United States Office of Education to permit the accomplishment of this phase of the project.

Many sets of standards from a wide variety of sources were accumulated and analyzed. Standards currently in use by school systems and higher education institutions were collected and collated. Quantitative standards were obtained from administrators in charge of educational media programs in state departments of public instruction. A total of eighteen state departments of public

instruction provided lists of standards. Fourteen advised that their states had not developed such standards, and eighteen did not reply to requests for quantitative standards.

Standards were also obtained from public schools and higher education institutions. Professional organizations supplied several sets of standards that they had formulated. Others were located in textbooks, periodicals, and other professional publications. A total of forty-six sets of standards were included in this collection.

These standards varied widely in format, in organization, and in basic units for tabulating ratios. Some expressed only minimum quantities, while others suggested quantities for two and three levels of operation. Bases for tabulation included ratios per teacher, per pupil, per teaching station, and per institution.

The following four basic areas of educational media programs were generally covered by the standards: (1) instructional equipment requirements, (2) media center space requirements, (3) media staff requirements, and (4) finances for the media program.

Standards were organized according to specific items that make up these four areas. These included items of equipment and materials, space requirements for various media functions, professional, clerical and technical media personnel, and financial requirements for media programs. A sheet was designed and used to record each suggestion made for each of the items. Information recorded for each such suggestion included the specific quantity and ratio suggested, the level of operation for which the suggestion was made, the source of the suggestion, and the type of institution (elementary school, high school college, etc.) for which the suggestion was made. Each sheet, therefore,

showed all suggestions for a specific equipment, staff, space, or
financial requirement.

Suggested requirements were converted to a common base for tabu-
lation of quantative ratios and the suggestions were organized into
ranges in an attempt to make the collations usable. Three ranges were
somewhat arbitrarily developed, but arranged so as to correspond as
nearly as possible to the three levels of operation and development
expressed in many of the standards. These three ranges are listed
in three columns in the final draft of the collation. The total of
the three ranges, from the lowest expression in the left column to
the highest expression in the right, corresponds to the total range
of all suggestions collated. The range within each column corre-
sponds to the levels of operation generally listed in the standards
that were collated.

Suggestions made in the standards for elementary and secondary
schools were similar enough to be included in a single collation.
Those made for colleges and universities, however, varied from those
for school systems to the extent that it was necessary to prepare a
separate collation for higher education institutions.

The format and organization of this collation were selected to
show the lower and higher limits of quantitative standards in use
today by schools and higher education institutions. The three ranges
were used to show the range of quantities suggested in many of the
standards for educational media programs at various levels of oper-
ation and development.

The collations of quantitative standards for educational media
programs in higher education institutions and in school systems are

included in Appendices B and C.

A close examination of these collations by the project staff, the
consultants, and others in the educational media field revealed serious
shortcomings in the usability of the collations. Standards included
in the collations varied widely, resulting in ranges so wide that they
became meaningless. A school might have almost any number of an item
and still fall within one of these ranges. Schools of the same size
might be equipped with widely differing amounts of media and still
fall within the same range of the collations. For these reasons, it
is thought that the collations have little meaning and can serve no
useful purpose if included with the evaluative checklist.

Pilot Test of the Self-Evaluative Checklist

The purpose of the pilot test was to determine on a limited scale
whether the checklist, as written, was valid as a self-evaluating and
self-interpreting instrument: Was it clear and usable in the evalu-
ation of educational media programs? More specifically, the pilot
test was conducted to determine whether respondents could understand
each item in the checklist, could respond intelligently to each item,
and could interpret the results of each response. If so, it was
reasonable to assume that the evaluative checklist items were valid.

The checklist was pilot tested using a restricted sample of
school systems and higher education institutions that differed in
size and geographic location. Six school systems located in the
midwestern, eastern, central, and western regions of the United States
were used for the pilot test sample. Higher education was represented
by five small colleges and four large multi-purpose universities

located in these same regions. These higher education institutions differed in purpose as well as in size and location.

The following are the school systems and higher education institutions used in the pilot test:

Large school system:
  San Diego City Schools, San Diego, California
  San Diego County Schools, San Diego, California

Small school systems:
  Boulder Valley Public Schools, Boulder, Colorado
  Liverpool Central Schools, Liverpool, New York
  Garden City Public Schools, Garden City, New York
  La Crosse Public Schools, La Crosse, Wisconsin

Large multi-purpose universities:
  University of Colorado, Boulder, Colorado
  Syracuse University, Syracuse, New York
  University of Wisconsin, Madison, Wisconsin
  University of Delaware, Newark, Delaware

Colleges and small universities:
  Colorado State College, Greeley, Colorado
  Hofstra University, Hempstead, New York
  Wisconsin State University, La Crosse, Wisconsin
  San Diego State College, San Diego, California
  Long Beach State College, Long Beach, California

To perfect the techniques to be used by the observing staff member for pilot testing the checklist, a "dry run" was made at Southeastern State College, Durant, Oklahoma, and in the Ardmore, Oklahoma, public schools. Minor revisions were made in the original techniques as a result of these tests. The revised techniques, as used in the pilot test, were as follows:

1. Institutions were selected for the pilot test to be conducted by the project director and the research assistant.

2. Meetings were arranged with the chief school officer in school systems, with the president or his assistant in charge of academic affairs in colleges and universities, and with the administrator in charge of the educational media program.

3. The chief administrative officer or his assistant and the administrator in charge of the educational media program were briefed on the purposes of the project and of the pilot test.

4. Each was given a copy of the checklist and asked to self-administer it using only the instructions provided with the checklist.

5. The chief administrative officer completed Part I of the checklist and the administrator of the educational media program completed the remaining parts.

6. Conferences with each of these administrative officers followed and included interviews relative to the following aspects of the checklist:

   a) Clarity of instructions.

   b) Degree to which level statements in the checklist described the situation in the educational media program being evaluated.

   c) Degree to which the judgments made in completing the evaluation reflected the value of the educational media program in helping the school system or institution to reach its instructional goals.

   d) Completeness of coverage of the educational media program being evaluated.

   e) Over-coverage of any element of the educational media program being evaluated.

   f) Vocabulary usage not appropriate in the geographic area where the checklist was being tested.

   g) Advisability of having the chief administrative officer complete Part I.

   h) Adequacy of the profile sheet as a means of interpreting the results of the evaluation.

7. The interviews also dealt with the following questions relative to the supportive information:

   a) Is the inventory check sheet helpful in making the judgments required in self-administering the evaluative checklist?

   b) Are the criteria statements helpful in making these judgments?

c) Are the selected criteria statements included in the body of the checklist helpful in making these judgments?

d) Would a list of quantitative standards be helpful in making these judgments?

Revisions were made in the checklist items where the need was evidenced by the pilot tests. These changes were minor and did not change the over-all structure of the checklist or of any item included in the checklist.

It was concluded from the pilot tests that the checklist apparently was usable in the evaluation of educational media programs in educational institutions of various sizes and types, that an evaluator could respond intelligently to each item in the checklist, and that one could infer the adequacy of an educational media program by studying the results of the completed checklist. To complete the validation process a larger sample of schools and institutions was used in a field test.

Field Test of the Self-Evaluative Checklist

A field test was conducted to determine whether the evaluative checklist could be self-administered with understanding by administrators in school systems and higher education institutions, that is, whether it was valid as a self-administering and self-interpreting evaluative instrument.

A total of 129 higher education institutions and 150 school systems were invited to participate in the field testing. They included colleges and universities of varying sizes and types located in all geographic areas of the United States, and both large and small school systems evenly distributed across the United States. At least three

school systems in each of the 48 continental states were invited to participate in the field testing.

The superintendent of each of the 150 school systems and the president of each of the 129 colleges and universities were contacted relative to their institutions' participation in the field test. The chief administrative officers in 73 school systems and 97 higher education institutions indicated that their schools and institutions would participate in the field testing. These 170 schools and institutions comprised the field test sample for the project.

The school sample included school systems ranging in size from 1,600 to 293,000 enrollment. Forty-two states were represented in the school sample. The higher education sample included institutions ranging from small single-purpose colleges to large multi-purpose universities and included both public and privately supported institutions.

The packet of materials sent to each school and institution in the field test sample included the Self-Evaluative Checklist, the Criteria Relating to Educational Media Programs, the Inventory Check Sheet, a response sheet especially prepared for use in the field test, and a cover letter. Respondents were asked to complete and return the Self-Evaluative Checklist and response sheet.

The response sheet designed for use in the field test contained items intended to determine whether all items on the evaluative checklist were understandable and to identify any that were not clear. It also contained items to determine whether the lists of criteria were helpful in making judgments required in completing the self-evaluative checklist.

Data obtained from the response sheet were organized according to size and type of school system and higher education institution. Four categories used for this analysis were (1) multi-purpose universities; (2) single-purpose colleges; (3) large school systems with enrollments of 15,000 or more; and (4) small school systems with enrollment of less than 15,000. Results of the responses of schools and institutions in each of these categories are shown in Tables I and II.

Thirty-four multiple purpose universities returned completed response sheets. Twenty-three, or 68 per cent, reported that all items on the self-evaluative checklist were clear and understandable. Thirty, or 88 per cent, stated that the list of criteria was helpful in responding to the self-evaluative checklist.

Seventeen single-purpose colleges returned completed response sheets. Fourteen, or 82 per cent, reported that all items on the self-evaluative checklist were clear and understandable. All respondents in single-purpose colleges stated that the list of criteria was helpful in responding to the checklist.

Twenty-one large school systems returned completed response sheets. Sixteen, or 76 per cent, reported that all items on the self-evaluative checklist were clear and understandable. Eighteen, or 85 per cent, stated that the list of criteria was helpful in responding to the checklist.

Sixteen small school systems returned completed response sheets. Thirteen, or 81 per cent, reported that all items on the self-evaluative checklist were clear and understandable. Fifteen, or 95 per cent, stated that the list of criteria was helpful in responding to

the evaluative checklist.

This means that a total of eighty-eight schools and institutions returned completed response sheets. Sixty-six, or 75 per cent, reported that all items on the self-evaluative checklist were clear and understandable. Eighty, or 91 per cent, stated that the lists of criteria were helpful in responding to the evaluative checklist.

The items mentioned most frequently as not being clear to respondents were two items in Section IV of the Self-Evaluative Checklist. These items deal with physical facilities provided for the use of educational media in existing classrooms and in new classrooms. This section was revised to clarify what appeared to be probable causes of these misunderstandings. Additional criterion statements were included with the section and both items in the section were rewritten.

It was also noted that fifteen of the twenty-two respondents to whom items were not clear also failed to understand and follow instructions for completing the Self-Evaluative Checklist. Instructions were, therefore, rewritten to clarify misunderstandings that appeared to result from unclear instructions.

It should also be noted that the percentage of understanding goes up and the validity of the instrument is further enhanced when certain questionable responses are withdrawn from the sample. For example, if the fifteen responses that demonstrated a misunderstanding of instructions were withdrawn from the sample, the percentage of those responding positively to clarity of checklist items would be raised to 90 per cent. Most of the remaining 10 per cent who responded negatively did so only in regard to the items of Section IV which were subsequently revised.

Of all respondents, 91 per cent stated that the lists of criteria were helpful in making responses to the Self-Evaluative Checklist. All respondents in single-purpose colleges and 95 per cent in small school systems found these criteria helpful. This seems to indicate a need for these criteria by all schools and institutions with a very pronounced need by small schools and single-purpose colleges.

An analysis of the responses on the Self-Evaluative Checklist, though not a part of the validation procedures, yielded interesting findings relative to the status of media programs in the field test sample. The responses on the checklist were organized according to the four sizes and types of educational institutions identified on page 30. Tables III, IV, V, and VI depict these responses and include profiles of modal values shown for each item of the Self-Evaluative Checklist.

Twenty-six multi-purpose universities returned properly completed evaluative checklists. It is interesting to note, as depicted in Table III, that some universities fell at each of the three levels of adequacy on all checklist items. All modal values were in the upper and middle level of adequacy, indicating fairly high media program attainment by universities in the field test sample.

Similar findings were evidenced by an analysis of checklist returns from twenty-one single-purpose colleges, as shown in Table IV. Some colleges fell at each of the three levels of adequacy on all items of the checklist except items I-B and II-C. Only on item IV-A did a modal value appear in the lower level of adequacy, and this item was bi-modal with modal values in both the lower and middle levels of adequacy. All other modal values were in the upper and middle levels of adequacy.

Fifteen of the twenty-two checklist items showed modal values in the upper level of adequacy, indicating an even higher level of media program attainment among colleges than was found in universities in the field test sample.

Checklist returns from twenty-eight large school systems revealed similar findings, as shown in Table V. Some large schools fell at each of the three levels of adequacy on all checklist items except items I-A, I-B, II-C, and III-B. Modal values appeared at higher levels of adequacy among large school systems than among any of the other three sizes and types of educational institutions included in the field test. Modal values on all checklist items were within the middle and upper levels of adequacy, with modal values for seventeen of the twenty-two items in the upper level of adequacy. This clearly indicated a high level of media program attainment among large school systems included in the field test sample as measured by the self-evaluative checklist.

In the fifteen small school systems that returned completed checklists, such clear-cut statements of existing conditions can not be made as shown in Table VI. Modal values occurred in all three levels of adequacy. Modal values were in the upper level of adequacy on four checklist items with one of these items being bi-modal, having values in both the upper and middle levels of adequacy. Modal values appeared in the lower level of adequacy on nine checklist items with two of these items being bi-modal, having values in the lower and middle levels of adequacy. The remaining nine items had modal values in the middle level of adequacy. These data indicate that the level of media program attainment in the small schools included in the field

test sample was lower than that in the other three sizes and types
of educational institutions. It cannot be concluded, however, on
the basis of checklist returns, that the level of media program
attainment among these small schools was either weak or strong. It
is noted that most items in Section II, dealing with media services
for curriculum and instruction, and in Section III, dealing with the
media center, showed modal values in the lower levels of adequacy.
This seems to indicate possible weaknesses in these two areas of
media program attainment among small schools included in the field
test sample.

This analysis of the data yielded by the Self-Evaluative Check-
list returns from schools and institutions included in the field test
sample demonstrates that a much wider sampling is required before
clear-cut statements can be made regarding the status of educational
media programs in the United States.

Validation of the Instrument

The procedures and developmental aspects of the project were
designed to facilitate the validity of the Self-Evaluative Checklist.
The procedures which were taken to enhance the validity of the
checklist as it was developed included (1) the careful selection of
the panel of consultants, (2) the provision for descriptive papers
from each consultant, (3) the careful review and collation of these
papers, (4) the careful review and annotation of the literature,
(5) the workshop in which the consultants participated, (6) the
screening of the first and subsequent drafts of the evaluative check-
list by the consultants, (7) the careful rewriting of the items on

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the checklist, and (8) the pilot testing of the checklist.

The procedures listed above rendered what was believed to be validity of the evaluative checklist, but did not determine whether it could be self-administered. A field test was conducted in order to check this factor, and at the same time to test the validity further through responses from a larger sample than that used in the pilot test.

The results of the field test indicated that the instrument can be self-administered and interpreted with understanding. Respondents 'n both the school systems and higher education institutions included in the field test sample indicated that they had no difficulty in administering the Self-Evaluative Checklist or in interpreting the results of their responses to the instrument.

TABLE 1 - FIELD TEST RESPONSES RELATIVE TO CLARITY OF SELF-EVALUATIVE CHECKLIST ITEMS

Type of Institution	All items clear and understandable		One or more items not clear or understandable	
	Number	Per cent	Number	Per cent
Multiple Purpose Universities	23	68	11	32
Single Purpose Universities	14	82	3	18
Large School Systems	16	76	5	24
Small School Systems	13	81	3	19
All Institutions in Sample	66	75	22	25

TABLE 2 - FIELD TEST RESPONSES RELATIVE TO USEFULNESS OF CRITERIA RELATING TO EDUCATIONAL MEDIA PROGRAMS

Type of Institution	Criteria Were Useful		Criteria Were Not Useful	
	Number	Per cent	Number	Per cent
Multiple Purpose Universities	30	88	4	12
Single Purpose Colleges	17	100	0	0
Large School Systems	18	89	3	11
Small School Systems	15	95	1	5
All Institutions in Sample	80	91	8	9

TABLE 2 - FIELD TEST RESPONSES OF MULTI-PURPOSE UNIVERSITIES
ON ITEMS OF THE SELF-EVALUATIVE CHECKLIST

Weak ————————————————→ Strong

Item	1	2	3	4	5	6	7	8	9
I-A	0	1	1	1	2	0	15	6	2
I-B	0	0	1	1	7	4	3	10	2
I-C	0	2	0	3	10	6	5	2	0
I-D	0	0	0	3	4	5	11	4	1
I-E	0	1	0	1	3	3	12	7	1
II-A	0	1	1	4	4	0	7	7	4
II-B	1	1	2	2	5	6	4	5	1
II-C	0	2	1	2	6	8	5	3	0
II-D	1	1	0	3	4	8	6	4	0
III-A	0	2	2	2	1	5	5	10	1
III-B	0	0	2	0	7	7	4	6	1
III-C	0	1	3	1	6	6	3	7	1
III-D	0	0	4	2	6	8	5	2	1
III-E	0	1	0	0	5	4	7	5	6
III-F	2	1	1	2	6	3	4	5	3
IV-A	0	4	4	3	10	4	2	1	0
IV-B	0	2	2	5	7	7	4	1	0
V-A	1	0	2	3	8	3	6	5	0
V-B	0	0	1	1	11	4	5	6	0
V-C	0	2	2	2	8	7	4	3	0
VI	0	0	1	0	3	3	11	8	2

The profile shows modal values for items of the checklist. Items having bi-modal values are profiled at a point mid-way between modal values.

TABLE 4 - FIELD TEST RESPONSES OF SINGLE-PURPOSE UNIVERSITIES

ON ITEMS OF THE SELF-EVALUATIVE CHECKLIST

Item	Weak 1	2	3	4	5	6	7	8	Strong 9
I-A	2	1	0	1	2	1	9	7	0
I-B	0	0	0	3	6	3	0	8	3
I-C	2	0	0	1	6	4	4	5	1
I-D	0	0	0	5	3	0	5	7	3
I-E	0	2	0	4	2	1	6	8	0
II-A	1	5	3	0	1	1	6	6	0
II-B	1	3	1	0	2	2	2	8	4
II-C	0	1	0	1	7	5	4	5	0
II-D	1	4	1	0	5	6	2	6	0
III-A	1	2	1	0	3	0	7	9	0
III-B	1	0	0	0	5	3	4	10	0
III-C	0	2	2	2	4	5	3	7	0
III-D	1	4	2	2	4	3	2	5	0
III-E	1	1	0	0	3	1	7	7	3
III-F	3	0	0	3	4	1	4	7	1
IV-A	2	4	4	3	4	1	2	3	0
IV-B	1	3	2	2	2	7	3	1	0
V-A	0	2	1	5	6	2	2	4	1
V-B	2	0	1	3	9	3	2	3	0
V-C	0	5	0	1	4	1		2	2
VI	0	2	0	4	1	1	8	7	1

The profile shows modal values for items of the checklist. Items having
bi-modal values are profiled at a point mid-way between modal values.

TABLE 5 - FIELD TEST RESPONSES OF LARGE SCHOOL SYSTEMS
ON ITEMS OF THE SELF-EVALUATIVE CHECKLIST

Weak ⟶ Strong

Rank Item	1	2	3	4	5	6	7	8	9
I-A	0	0	0	2	3	1	15	8	0
I-B	0	0	0	1	5	5	9	9	0
I-C	1	1	1	2	4	5	7	4	4
I-D	0	1	0	3	3	1	6	13	2
I-E	0	2	1	2	2	2	14	6	0
II-A	0	3	3	2	5	3	4	6	3
II-B	1	0	1	3	7	4	3	8	2
II-C	0	0	0	0	5	5	11	8	0
II-D	0	1	3	3	4	2	6	7	3
III-A	0	0	2	4	3	2	12	6	0
III-B	0	0	0	2	4	2	5	10	6
III-C	0	1	2	3	8	8	4	1	2
III-D	2	2	1	6	5	7	5	1	0
III-E	0	2	1	0	1	1	3	10	11
III-F	1	3	1	5	10	4	4	0	1
IV-A	1	1	3	2	11	8	2	1	0
IV-B	0	2	1	5	3	2	4	10	2
V-A	0	0	3	1	3	4	6	10	2
V-B	0	1	0	2	7	3	4	10	2
V-C	2	0	0	3	1	4	6	12	1
VI-A	0	0	1	1	1	4	13	8	1
VI-B	0	2	2	4	14	6	1	0	0

The profile shows modal values for items of the checklist. Items having bi-modal values are profiled at a point mid-way between modal values.

Weak ⟶ Strong

Item \ Rank	1	2	3	4	5	6	7	8	9
I-A	3	1	1	5	2	0	2	1	0
I-B	0	0	1	4	3	3	1	2	1
I-C	2	2	0	2	6	1	0	1	1
I-D	1	2	0	2	2	3	2	3	0
I-E	1	4	2	4	3	0	1	0	0
II-A	7	2	1	0	1	1	2	1	0
II-B	2	6	2	1	0	2	2	0	0
II-C	1	0	0	1	3	3	3	4	0
II-D	3	4	0	3	2	2	0	1	0
III-A	3	0	0	4	0	5	2	1	0
III-B	0	0	1	2	5	3	0	3	1
III-C	0	4	1	1	3	3	1	2	0
III-D	1	3	3	1	3	3	0	1	0
III-E	2	1	6	0	1	0	3	1	1
III-F	3	4	3	2	0	1	2	0	0
IV-A	2	2	5	1	2	1	1	1	0
IV-B	2	2	2	1	3	3	2	0	0
V-A	0	2	2	4	3	1	2	1	0
V-B	2	1	1	2	5	2	1	1	0
V-C	0	2	2	2	3	1	4	1	0
VI-A	4	3	1	1	1	1	4	0	0
VI-B	3	0	1	2	7	1	1	1	1

The profile shows modal values for items of the checklist. Items having bi-modal values are profiled at a point mid-way between modal values.

III. THE SELF-EVALUATIVE CHECKLIST AND CRITERIA

This section describes the organization and content of two forms of a Self-Evaluative Checklist, one for use in higher education and the other for use in school systems. It also includes a description of the organization of the criteria upon which the Self-Evaluative Checklist is based.

The Self-Evaluative Checklist for Colleges and Universities

The Self-Evaluative Checklist for colleges and universities is organized according to the major categories of educational media programs and the elements that make up these categories as described below. Each section or major category is preceded by selected statements of criteria which relate to items included in the section.

Major Categories

Section I of the checklist, "Institutional Educational Media Services," deals with the commitment of administrators and faculty to the educational media program. Five items included in this section serve as a general overview of the other five sections of the check- list. These five items are (a) Commitment to the Media Program, which deals with administrative commitment to the organization and develop- ment of a media program; (b) Commitment to Educational Media as an Integral Part of Instruction, which concerns the quantity and variety of educational media and services provided for faculty members to use in the instructional program; (c) Commitment to Providing Educational Media Facilities, which deals with the provision of the kinds of instructional facilities needed to make use of educational media in

instruction; (d) Commitment to Financing the Educational Media Program, concerning the sources of funds used for educational media, the adequacy of these funds, and the preparation of the educational media budget; and (e) Commitment to Staffing the Educational Media Program, dealing with the provision of personnel for the educational media program.

Section II of the checklist, "Educational Media Services - Curriculum and Instruction," concerns the relationship of educational media and services to curriculum and instruction. This section includes four items: (a) Consultative Services in Educational Media Utilization, which deals with the functions of professional media personnel as consultants to faculty members on matters concerning the utilization of educational media in instruction; (b) Media Services to Educational Preparation Programs, which deal with the participation of media personnel and with the provision of media and services for use in preservice preparation of teachers; (c) Faculty-Student Use of Educational Media, which concerns the degree to which and the manner in which faculty members and students use educational media in teaching and learning; and (d) Involvement of Media Staff in Planning, which concerns the participation of the professional media staff in planning those parts of the instructional program where educational media are used.

Section III of the checklist, "The Educational Media Center," includes six items:(a) Location and Accessibility of Educational Media, which deals with the presence and location of the main educational media center and sub-centers in buildings, colleges, or departments; (b) Dissemination of Media Information, which concerns the manner in which information about educational media is disseminated to faculty, other staff members, and students; (c) Availability of Educational

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Media, which deals with the quantity of educational media and the manner
in which it is distributed to users; (d) Storage and Retrieval of Media,
which concerns the adequacy of storage space and facilities in the main
media center and sub-centers, and with the system used to locate and
retrieve media; (e) Maintenance of Media which deals with procedures
taken to clean and repair all educational media owned by the institu-
tion; and (f) Production of Media, which deals with designing, construct-
ing, and preparing educational media needed in the instructional program.

Section IV of the checklist, "Physical Facilities for Educational
Media," concerns the physical facilities that are available in the
classrooms for the use of educational media. This section includes
two items: (a) Media Facilities in Existing Classrooms, which concerns
the manner in which older or presently constructed classroom structures
are being planned, modified, and equipped for the use of educational
media; and (b) Media Facilities in New Classrooms, which deals with
planning and equipping new classroom structures for the use of educa-
tional media.

Section V of the checklist, "Budget and Finance of the Educational
Media Program," includes the following items: (a) Reporting Financial
Needs, which concerns the regularity with which the status and needs
of the educational media program are reported to administrative officers;
(b) Basis for Budget Allocations, which deals with policies concerning
budget allocations, income sources, and budget practices; and (c) Devel-
opment of Media Budget, which concerns the responsibility of educational
media personnel for the development of the media budget and the degree
to which the budget meets the educational media needs of the institution.

Section VI of the checklist, "Educational Media Staff," consists of one item dealing with the provision of an educational media staff for the institution, including professional, clerical and technical personnel.

The following is the final draft of the Self-Evaluative Checklist developed for use in colleges and universities:

EVALUATIVE CHECKLIST

***

AN INSTRUMENT FOR SELF-EVALUATING

AN

EDUCATIONAL MEDIA PROGRAM

IN

COLLEGES AND UNIVERSITIES

W. R. Fulton
University of Oklahoma
Norman, Oklahoma

INTRODUCTION

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

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

The term "educational media" as used in this instrument means all equipment and material traditionally called "audio-visual materials" and all of the newer media such as television, overhead projectuals, and programed 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.

EVALUATIVE CHECKLIST

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 the middle space to the left of that statement. If you feel that the situation at your institution is below what is described, mark the lower numbered space; if above, mark the higher numbered space. In any case mark only one space.

EXAMPLE:

_1_ _2_ _3_ There is no full-time director of the media program.

_X_ _5_ _6_ There is a full-time director in charge of the media program.

_7_ _8_ _9_ There are a full-time director and a sufficient number of clerical and technical personnel.

I. INSTITUTIONAL EDUCATIONAL MEDIA SERVICES

CRITERIA

- An institution should have a program of media services administered through an educational media center, and sub-centers if such are needed, which provide the faculty with an adequate supply of appropriate instructional materials.

- The educational media center should be a separate service unit that operates at the same level as other major institutional services.

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

- There should be a sufficient number of professional media staff members to administer the educational media program and to provide consultative services to an institution's entire faculty.

A. Commitment To The Media Program

_1_ _2_ _3_ The institution's educational media program 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.

__4__ __5__ __6__ 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.

__7__ __8__ __9__ The institution has an educational media program including a media center and necessary sub-centers directed by an educational media specialist who reports directly to the administrative officer in charge of instruction. He is provided with facilities, finances, and staff essential in meeting the media needs of the instructional program.

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

__1__ __2__ __3__ The institution has some educational media and services for faculty members who request them, but the faculty is not particularly encouraged to use the services.

__4__ __5__ __6__ 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.

__7__ __8__ __9__ The institution provides quantity and variety of educational media and services needed by all instructional units and encourages the faculty to use media as integral parts of instruction.

      C.   Commitment To Providing Educational Media Facilities

__1__ __2__ __3__ Although some new and remodeled facilities provide for the use of some types of educational media, the institution gives very little attention to media utilization at the time classroom buildings are planned.

__4__ __5__ __6__ The institution provides most new and remodeled classrooms with light control and other facilities necessary for the use of some types of educational media.

__7__ __8__ __9__ All new classrooms are equipped for the greatest possible use of educational media and are designed to permit adaptation for the use of new developments in media. Old classrooms are being modified as fast as possible to provide for effective use of media.

      D.   Commitment to Financing the Educational Media Program

__1__ __2__ __3__ 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.

__4__ __5__ __6__ 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.

__7__ __8__ __9__ 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.

B. Commitment to Staffing the Educational Media Program

__1__ __2__ __3__ The responsibility for educational media services is
assigned to various institutional staff members whose
primary commitments are in other institutional jobs.

__4__ __5__ __6__ The responsibility for educational media services is
delegated to a person who has had some training in edu-
cational media. He is provided some clerical and techni-
cal assistance.

__7__ __8__ __9__ Leadership and consultative services are provided by an
educational media specialist and a qualified professional
staff, all of whom have faculty status. An adequate
clerical and technical staff is also provided.

II. EDUCATIONAL MEDIA SERVICES - CURRICULUM AND INSTRUCTION

CRITERIA

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

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

● The faculty and the professional media staff should cooperate
in planning and developing the parts of the instructional pro-
gram that make provisions for the use of educational media.

● Professional educational media personnel should be readily
available for consultation on all instructional problems where
media are concerned.

A. Consultative Services in Educational Media Utilization

__1__ __2__ __3__ 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.

__4__ __5__ __6__ Educational media personnel are usually available and are
called on for consultative assistance in the use of educa-
tional media.

__7__ __8__ __9__ Educational media professional personnel work as a part
of their regular assignments with faculty members in
analysing teaching needs and in designing, selecting, and
using educational media to meet these needs.

B. Media Services to Educational Preparation Programs

__1__ __2__ __3__ The educational media program provides some media services
for teacher preparation programs, but the department or
college of education depends on its own leadership for
planning media experiences in preparation programs for
prospective teachers and media specialists.

__4__ __5__ __6__ 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.

__7__ __8__ __9__ Professional media personnel participate in the pre-service
training of teachers through appropriate assignment to
teach professional courses and by serving in a consultative
capacity to the education faculty. The educational media
service center provides necessary media and services not
otherwise available to the instructional program in educa-
tion.

C. Faculty-Student Use of Educational Media

__1__ __2__ __3__ Only a few faculty members make any use of educational
media in their classrooms. Students rarely use media in
class presentations.

__4__ __5__ __6__ Quite a few faculty members make occasional use of educa-
tional media in their classrooms. Students occasionally
use media in class presentations.

__7__ __8__ __9__ 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. Involvement of Media Staff in Planning

__1__ __2__ __3__ The professional educational media staff is seldom
involved with the faculty in planning for the use of
educational media.

__4__ __5__ __6__ The professional educational media staff is occasionally
involved with the faculty and staff in planning and pro-
ducing materials for use in the instructional program.

__7__ __8__ __9__ 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 instruc-
tional and administrative units of an institution, with leader-
ship, consultative help, and other services provided by pro-
fessional 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 acces-
sible to the faculty and students.

● The educational media center should provide such media services
as procurement, maintenance, and production of appropriate educa-
tional media to support the instructional program.

A. Location and Accessibility of Educational Media

__1__ __2__ __3__ 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.

__4__ __5__ __6__ The location of the main educational media center is such
that media are not very accessible to the faculty, but
the main center is supplemented by sub-centers which
duplicate some of the services of the main center.

__7__ __8__ __9__ The location of the main educational media center and the
presence of necessary sub-centers make media highly acces-
sible to all instructional units. Both the main center
and the sub-centers are fully equipped to support a
quality instructional program.

B. Dissemination of Media Information

_1_ _2_ _3_ Information concerning educational media is seldom disseminated to prospective users, and there are no definite plans or channels for such dissemination.

_4_ _5_ _6_ Information concerning educational media is disseminated to the faculty and staff on an occasional basis or when requested.

_7_ _8_ _9_ Information concerning educational media is frequently disseminated to the faculty, students, and staff as a matter of policy.

C. Availability of Educational Media

_1_ _2_ _3_ 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 served" basis, and the media must be picked up by the user.

_4_ _5_ _6_ There is sufficient quantity of educational media to make it possible for them to be delivered on relatively short notice.

_7_ _8_ _9_ 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_ Media storage facilities are available but are inadequate for some type of media, and personnel have difficulty in locating and retrieving specific items.

_4_ _5_ _6_ 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.

_7_ _8_ _9_ Adequate storage space, including space for future expansions, is provided for 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_ Educational media are cleaned and repaired when complaints regarding their operable condition are made by users.

__4__ __5__ __6__ Educational media are repaired and cleaned whenever the maintenance staff has the time to do so.

__7__ __8__ __9__ All educational media are inspected after each usage and are cleaned and repaired on a r_gular basis, or when inspection indicates the need.

F. Production of Media

__1__ __2__ __3__ Limited production facilities are available for faculty members to produce their own materials.

__4__ __5__ __6__ 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.

__7__ __8__ __9__ The educational media personnel produce a variety of educational media not otherwise available, and meet most production demands for such media as films, filmstrips, slides, graphics, and recordings.

IV. PHYSICAL FACILITIES FOR EDUCATIONAL MEDIA

CRITERIA

●Each classroom should be designed for and provided with essential facilities for effective use of appropriate educational media of all kinds.

●Each classroom should be equipped with full light control, electrical outlets, forced ventilation, and educational media storage space.

●Classrooms should be equipped with permanently installed bulletin boards, chalkboards, projection screens, map rails, and storage facilities needed for the particular type of instruction conducted in each room.

A. Physical Facilities in Existing Classrooms

__1__ __2__ __3__ 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.

__4__ __5__ __6__ 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.

_7_ _8_ _9_ All classrooms have been modified and equipped for optimum use of all types of educational media.

     B. Physical Facilities in New Classrooms

_1_ _2_ _3_ 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.

_4_ _5_ _6_ Most new classrooms are provided with physical facilities that make possible optimum use of educational media.

_7_ _8_ _9_ All new classrooms are designed for and equipped with physical facilities that make possible optimum use of all types of educational media by faculty and students.

    V. BUDGET AND FINANCE OF THE EDUCATIONAL MEDIA PROGRAM

CRITERION

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

    A. Reporting Financial Needs

_1_ _2_ _3_ The financial needs of the educational media program are reported to the chief administrative officer in charge of instruction only when immediate expenditures are urgently needed.

_4_ _5_ _6_ The financial needs of the educational media program are regularly reported to the chief administrative officer in charge of instruction.

_7_ _8_ _9_ Regular reports reflecting the status and needs of the educational media program, including facts about inventory, facilities, level of utilization and effectiveness of the media program, are made to the chief administrative officer in charge of instruction.

    B. Basis for Budget Allocations

_1_ _2_ _3_ The educational media budget is based on an arbitrary allotment of funds irrespective of need.

_4_ _5_ _6_ The budget is based almost entirely on immediate needs, though some consideration is given to long-range goals.

__7__ __8__ __9__ 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__ Each instructional department develops its own educational media budget without consulting an educational media specialist.

__4__ __5__ __6__ 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.

__7__ __8__ __9__ 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

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CRITERION

The educational media program should be directed by a well qualified
full-time media specialist who is provided with sufficient personnel,
clerical and technical staff to provide adequate media services to
all institutional programs.
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__1__ __2__ __3__ 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.

__4__ __5__ __6__ 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.

__7__ __8__ __9__ 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.

PROFILE SHEET

To develop a profile image of your program, transfer your mark from each item on the Evaluative Checklist to this sheet. In each part 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.

	WEAK						STRONG		
Section I									
A	1	2	3	4	5	6	7	8	9
B	1	2	3	4	5	6	7	8	9
C	1	2	3	4	5	6	7	8	9
D	1	2	3	4	5	6	7	8	9
E	1	2	3	4	5	6	7	8	9
Section II									
A	1	2	3	4	5	6	7	8	9
B	1	2	3	4	5	6	7	8	9
C	1	2	3	4	5	6	7	8	9
D	1	2	3	4	5	6	7	8	9
Section III									
A	1	2	3	4	5	6	7	8	9
B	1	2	3	4	5	6	7	8	9
C	1	2	3	4	5	6	7	8	9
D	1	2	3	4	5	6	7	8	9
E	1	2	3	4	5	6	7	8	9
F	1	2	3	4	5	6	7	8	9
Section IV									
A	1	2	3	4	5	6	7	8	9
B	1	2	3	4	5	6	7	8	9
Section V									
A	1	2	3	4	5	6	7	8	9
B	1	2	3	4	5	6	7	8	9
C	1	2	3	4	5	6	7	8	9
Section VI									
A	1	2	3	4	5	6	7	8	9

<u>The Self-Evaluative Checklist for School Systems</u>

With the exception of differences in terminology and different content in two items, the two forms of the Self-Evaluative Checklist are identical. One of the exceptions, found in Item B of Section II of the school system form entitled "Inservice Education in Educational Media," deals with the participation of media personnel and with media and services provided for use in the inservice preparation of teachers in media utilization. This item in the higher education form deals with preservice preparation of teachers.

The other exception is Item (c) in Section VI of the school system form, "School System Educational Media Staff," which deals with providing professional, clerical, and technical personnel for each building in the school system. This section in the college and university form contains only the item dealing with the provision of professional, clerical, and technical personnel for the entire institution.

In addition to these exceptions, there are numerous differences in the terminology of many items in the two forms of the checklist. In spite of the two major differences in content and the differences in terminology in the two forms of the checklist, all items in the two forms are considered to be program elements or characteristics which may be found in most educational media programs in school systems and in higher education institutions.

The following is the final draft of the Self-Evaluative Checklist developed for use in school systems:

EVALUATIVE CHECKLIST

******

AN INSTRUMENT FOR SELF-EVALUATING

AN

EDUCATIONAL MEDIA PROGRAM

IN

SCHOOL SYSTEMS

W. R. Fulton
University of Oklahoma
Norman, Oklahoma

INTRODUCTION

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 educa-
tional media programs. These include: 1) administrators and teachers
are committed to the proper use of educational media for instructional
purposes, 2) educational media are an integral part of curriculum and
instruction, 3) an educational media center is accessible to the faculty,
4) the physical facilities are conducive to proper use of educational
media, 5) the media program is adequately financed, and 6) the staff is
adequate and qualified to provide for the educational needs of all
faculty members.

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

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

EVALUATIVE CHECKLIST

DIRECTIONS:

Mark one of the spaces at the left of the statement that most nearly represents the situation in your school system. If a statement accurately describes your school, mark the middle space to the left of that statement. If you feel that the situation at your school is below what is described, mark the lower numbered space; if above, mark the higher numbered space. In any case mark only one space.

EXAMPLE:

1 2 3 There is no full-time director of the media program.

X 5 6 There is a full-time director in charge of the media program.

7 8 9 There are a full-time director and a sufficient number of clerical and technical personnel.

I. SCHOOL SYSTEM EDUCATIONAL MEDIA SERVICES

CRITERIA

*A school system should have a program of educational media services administered through a school media center, and building centers if such are needed, which provides teachers 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 school services.

*A school system 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 teachers throughout the school system.

A. Commitment to the Media Program

1 2 3 The school's educational media program consists of 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 system-wide media activities.

4 5 6 The school'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 educational media training but not enough to qualify him as an educational media specialist. He reports to the administrative officer in charge of instruction.

7 8 9 The school has an educational media program including an educational media center and necessary building media centers directed by an educational media specialist who reports directly to the administrative officer in charge of instruction. He is provided with facilities, finances, and staff essential in meeting the media needs of the instructional program.

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

1 2 3 The school provides some educational media and services for teachers who request them, but teachers are not particularly encouraged to use the services.

4 5 6 A variety of educational media and services are generally available and some attempts are made to acquaint teachers with the services, and to encourage their use.

7 8 9 The school provides the quantity and variety of educational media and services needed by all buildings and encourages teachers to use media as integral parts of instruction.

C. Commitment to Providing Educational Media Facilities

1 2 3 Although some new and remodeled facilities provide for the use of some types of educational media, the school gives little attention to media utilization at the time buildings are planned.

4 5 6 The school provides most new and remodeled buildings with light control and other facilities necessary for the use of some types of educational media.

7 8 9 All new buildings are equipped for the greatest possible use of educational media and are designed to permit adaptation for new developments in media. Old buildings are being modified as fast as possible to provide for effective use of media.

D. Commitment to Financing the Educational Media Program

1 2 3 Finances for the educational media program are inadequate to provide the services that teachers need and are prepared to use. There are no written policies relative to allocations, income sources and charges against the budget.

4 5 6 Finances for the educational media program are sufficient to maintain the status quo, but the current media services are not sufficient to meet the instructional needs. Long-range curriculum plans do not include provisions for financing needed educational media services.

7 8 9 The educational media program is financed entirely from regularly appropriated school funds. The budget reflects to some degree long-range educational media plans and includes provisions for special media for unusual curriculum problems. The budget is prepared, presented, and defended by the director of the media services in the same manner as that of any other budget unit.

E. Commitment to Staffing the Educational Media Program

1 2 3 The responsibility for educational media services is assigned to various staff members whose primary commitments are in other school jobs.

4 5 6 The responsibility for educational media services is delegated to a person who has had some training in educational media. He is provided with some clerical and technical assistance.

7 8 9 Leadership and consultative services are provided by an educational media specialist and a qualified professional staff. An adequate clerical and technical staff is also provided.

II. EDUCATIONAL MEDIA SERVICES - CURRICULUM AND INSTRUCTION

CRITERIA

o A school system should engage in a continuous evaluation of its educational media program as it relates to the instructional program.

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

o 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.

o Professional educational media personnel should be readily available for consultation on all instructional problems where media are concerned.

A. Consultative Services in Educational Media Utilization

1 2 3 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.

4 5 6 Educational media personnel are usually available and are called on for consultative assistance in the use of educational media.

7 8 9 Educational media professional personnel work, as a part of their regular assignments, with teachers in analyzing teaching needs and in designing, selecting, and using educational media to meet these needs.

B. Inservice Education in Educational Media Utilization

1 2 3 Inservice education is left entirely to building instructional units and is limited to their own capabilities and such other resources as they can find.

4 5 6 Professional educational media staff members are available on request to assist teachers and supervisors in inservice education activities relative to the use of educational media.

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7 8 9 Professional educational media staff members are involved in planning and conducting continuous inservice education activities concerned with the selection, development, production, and use of all types of educational media.

C. Faculty-Student Use of Educational Media

1 2 3 Only a few teachers make any use of educational media in their classrooms. Students rarely use media in class presentations.

4 5 6 Quite a few teachers make occasional use of educational media in their classrooms. Students occasionally use media in class presentations.

7 8 9 Most teachers use appropriate educational media in their classrooms. Students use appropriate media for individual and group study, as well as for class presentations.

D. Involvement of the Media Staff in Planning

1 2 3 The professional educational media staff is seldom involved with teachers in planning for the use of educational media.

4 5 6 The professional educational media staff is occasionally involved with teachers and supervisors in planning and producing materials for use in the instructional program.

7 8 9 The educational media specialist and his professional staff are usually involved with teachers, supervisors and other curriculum workers 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

o 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 a school system, with leadership, consultative help, and other services provided by professional media specialists and other media center personnel.

o 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.

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

A. Location and Accessibility of Educational Media

1 2 3   The location of the school's educational media center is such that media are not accessible to most teachers. The school's educational media center is not supplemented by building centers where media are placed on long-term loan.

4 5 6   The location of the school's educational media center is such that media are not very accessible to teachers. The school's educational media center is supplemented by a few building centers that provide some media and services not available from the school media center, but merely duplicate others.

7 8 9   The location of the school's educational media center and the presence of necessary building centers make media highly accessible to all instructional units. Both the school's and the buildings' educational media centers are adequately equipped to support a quality instructional program.

B. Dissemination of Media Information

1 2 3   Information concerning educational media is seldom disseminated to prospective users, but there are no definite plans of channels for such dissemination.

4 5 6   Information concerning educational media is disseminated to teachers and staff members on an occasional basis or when requested.

7 8 9   Information concerning all educational media and programs is frequently disseminated to teachers and staff members as a matter of policy.

C. Availability of Educational Media

1 2 3   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 served" basis, and the media must be picked up by the user.

4 5 6   The quantity of educational media and the distribution system makes it possible for media to be delivered to teachers on relatively short notice.

7 8 9   There is a sufficient quantity of educational media and an adequate distribution system to insure the delivery of all media to teachers on any day during the week in which they are requested.

D. Storage and Retrieval of Media

1 2 3   Media storage facilities are available but are inadequate for some types of educational media, and personnel have difficulty in locating and retrieving specific items.

<u>4</u> <u>5</u> <u>6</u> The school's educational media center and all building
centers have enough storage shelves and drawers for cur-
rently owned instructional materials. The retrieval system
is adequate most of the time.

<u>7</u> <u>8</u> <u>9</u> Adequate storage space, including space for future expan-
sion, is provided in the school's educational media center
and in all building centers, with proper humidity control
where needed. The school's educational media center has a
master retrieval system for immediate location of all media.

8. Maintenance of Media

<u>1</u> <u>2</u> <u>3</u> Educational media are cleaned and repaired when complaints
regarding their operable condition are made by users.

<u>4</u> <u>5</u> <u>6</u> Educational media are cleaned and repaired whenever the
maintenance staff has time to do so.

<u>7</u> <u>8</u> <u>9</u> All educational media are inspected after each usage and
are cleaned and repaired on a regular basis or when inspec-
tion indicates the need.

7. Production of Media

<u>1</u> <u>2</u> <u>3</u> Limited production facilities are available for teachers to
produce their own materials.

<u>4</u> <u>5</u> <u>6</u> Educational media personnel, as well as teachers, produce
some educational materials, but the media staff is limited
to the extent that all demands for production cannot be met.

<u>7</u> <u>8</u> <u>9</u> Educational media personnel, as well as teachers, produce a
variety of educational media not otherwise available, and
meet most production demands for such media as films, film-
strips, slides, graphics, and recordings.

V. 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, elec-
trical 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 classroom.

A. Physical Facilities in Existing Classrooms

__1__ __2__ __3__ 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.

__4__ __5__ __6__ 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.

__7__ __8__ __9__ All classrooms have been modified and equipped for optimum use of all types of educational media.

B. Physical Facilities in New Classrooms

__1__ __2__ __3__ 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.

__4__ __5__ __6__ Most new classrooms are provided with physical facilities that make possible optimum use of educational media.

__7__ __8__ __9__ All new classrooms are designed for and equipped with physical facilities that make possible optimum use of all types of educational media by faculty and students.

V. BUDGET AND FINANCE OF THE EDUCATIONAL MEDIA PROGRAM

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

A. Reporting Financial Needs

__1__ __2__ __3__ The financial needs of the educational media program are reported to the administrative officer in charge of instruction only when immediate expenditures are urgently needed.

__4__ __5__ __6__ The financial needs of the educational media program are regularly reported to the administrative officer in charge of instruction.

__7__ __8__ __9__ 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 administrative officer in charge of instruction.

B. Basis for Budget Allocations

1 2 3   The educational media budget is based on an arbitrary allotment of funds irrespective of need.

4 5 6   The educational media budget is based almost entirely on immediate needs, though some consideration is given to long-range goals.

7 8 9   The educational media budget is based on both the immediate needs and the long-range goals of the school and reflect clear-cut policies concerning allocations, income sources, and budget practices.

C. Development of Media Budget

1 2 3   Each building instructional unit develops its own educational budget without consulting an educational media specialist.

4 5 6   The budget of the educational media program reflects the media needs of most building instructional units. However, some buildings have their own media budget which has no relationship to the educational media program.

7 8 9   The budget of the educational media program reflects the media needs of the entire school system and is developed by the professional media staff in consultation with financial officers, principals and other school 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 the entire school system.

A. School System Media Staff

1 2 3   A staff person has been assigned to look after the media program. He performs more as a clerk and a technician than as a professional media person.

4 5 6   A professional media person with some special training is in charge of the educational media program and has some professional, clerical, and technical assistance. He and his assistants are primarily oriented toward the mechanical and technical aspects of the program.

7 8 9   The educational media program is directed by a well qualified media specialist who is provided with sufficient professional, clerical, and technical staff to provide adequate media services from the school media center. Professional media staff members are oriented toward curriculum and instruction.

B. Building Media Staff

1 2 3 Some buildings have a teacher, a clerk, or someone else assigned to help obtain materials and care for equipment, but no released time is granted from other jobs to co-ordinate media activities in the building.

4 5 6 Most buildings have a teacher, or a member of the pro-fessional staff assigned to coordinate media activities, but he has not been given sufficient released time from other school tasks, or enough clerical and technical assistance to permit him to render media services needed in the instructional program.

7 8 9 A full-time professional educational media coordinator serves each building. Buildings that do not have suffi-cient teachers and media utilization to warrant a full-time coordinator share his services. He is provided suffi-cient clerical and technical assistance to supply all media services needed in the building. He reports to the school's educational media director and works closely with the media staff, supervisors, and other curriculum workers.

PROFILE SHEET

To develop a profile image of your program, transfer your mark from each item on the Evaluative Checklist to this sheet. In each part 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.

	WEAK						STRONG		

Section I

A   [1] [2] [3]   [4] [5] [6]   [7] [8] [9]

B   [1] [2] [3]   [4] [5] [6]   [7] [8] [9]

C   [1] [2] [3]   [4] [5] [6]   [7] [8] [9]

D   [1] [2] [3]   [4] [5] [6]   [7] [8] [9]

E   [1] [2] [3]   [4] [5] [6]   [7] [8] [9]

Section II

A   [1] [2] [3]   [4] [5] [6]   [7] [8] [9]

B   [1] [2] [3]   [4] [5] [6]   [7] [8] [9]

C   [1] [2] [3]   [4] [5] [6]   [7] [8] [9]

D   [1] [2] [3]   [4] [5] [6]   [7] [8] [9]

Section III

A   [1] [2] [3]   [4] [5] [6]   [7] [8] [9]

B   [1] [2] [3]   [4] [5] [6]   [7] [8] [9]

C   [1] [2] [3]   [4] [5] [6]   [7] [8] [9]

D   [1] [2] [3]   [4] [5] [6]   [7] [8] [9]

E   [1] [2] [3]   [4] [5] [6]   [7] [8] [9]

F   [1] [2] [3]   [4] [5] [6]   [7] [8] [9]

Section IV

A   [1] [2] [3]   [4] [5] [6]   [7] [8] [9]

B   [1] [2] [3]   [4] [5] [6]   [7] [8] [9]

Section V

A   [1] [2] [3]   [4] [5] [6]   [7] [8] [9]

B   [1] [2] [3]   [4] [5] [6]   [7] [8] [9]

C   [1] [2] [3]   [4] [5] [6]   [7] [8] [9]

Section VI

A   [1] [2] [3]   [4] [5] [6]   [7] [8] [9]

B   [1] [2] [3]   [4] [5] [6]   [7] [8] [9]

Criteria Relating to Educational Media Programs

Criteria relating to desirable educational media programs in two
types of educational institutions, school systems and higher education,
were developed and used as a basis for the development of each form of
the Self-Evaluative Checklist. A description of the procedures used to
develop these criteria is presented in Section II, pages 15 and 16. The
criteria were organized into the two lists that appear on the following
pages. The first list contains criteria that relate to educational
media programs in colleges and universities and the second list includes
criteria relating to programs in school systems.

It should be noted, as in the case of the two forms of the check-
list, that there are differences of content and terminology in the two
lists of criteria. It was necessary to use different terminology and
include different content to make criterion statements included in the
two lists conform to the purposes of the two different types of educa-
tional institutions to which the criteria relate.

Each of these lists is divided into six sections that correspond
to the six sections of the Self-Evaluative Checklist. Criteria are,
therefore, listed under each major category of educational media pro-
grams to which they relate.

University of Oklahoma
Norman, Oklahoma

CRITERIA
RELATING 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 in-
clusive. 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 pro-
vide the faculty with an adequate supply of appropriate instructional mate-
rials.

⊕The educational media center should be an independent service unit that
operates at the same level as other major institutional services.

⊕An institution's educational media program should provide media and ser-
vices 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 educational media functions and services should be coordi-
nated 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 should 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.

o 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

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

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

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

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

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

E. Commitment to Staffing the Educational Media Program

o 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.

o 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.

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

o An institution's educational media program should be directed by a person
  with a good educational background who has special preparation as an edu-
  cational media specialist.

II. EDUCATIONAL MEDIA SERVICES - CURRICULUM AND INSTRUCTION

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

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

o The faculty should be kept informed on new developments in materials, equip-
  ment, 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 consultation 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.

o 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

o 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 institution, with leadership, consultative help, and other services provided by professional media specialists and other media center personnel.

o 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.

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

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

o The quantity 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.

o 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.

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

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

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

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

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

- An educational media center should provide such media as projected materials, recorded materials, graphic materials, self-instruction materials, and television kinescopes or video tapes.

- 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, mountings and display boards, photo copies, overhead transparencies, films, filmstrips, slides, study prints, laminations, specialized photographic materials such as time-lapse 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 quantity 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 16mm motion picture films with optical sound, and/or 8mm black and white or color films with magnetic sound, and a motion picture laboratory should be provided for processing and printing 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 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-instruction devices.

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- Every classroom should be equipped with full light control, electrical outlets, 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 humidity 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 studio, (4) at least one darkroom, 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 institutional 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 use of 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 recording, and programmed materials, film librarians, and television staff members.

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

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- Professional media staff members should 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 institutional 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 institutional 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 possess 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 innovations 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 workshops.

CRITERIA
RELATING 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 in-
clusive. 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. SCHOOL SYSTEM EDUCATIONAL MEDIA SERVICES

A. Commitment to the Media Program

- A school system should have a program of media services administered through
  a school educational media center, and building centers if such are needed,
  which provide teachers 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 school system services.

- A school system's educational media program should provide media and ser-
  vices compatible with modern-day instructional technology.

- A school system'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 a school
  system's organizational plan.

- A school system's educational media functions and services should be coordi-
  nated under a single supervisory unit, generally called an "Educational
  Me   Center."

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

- A school system's administrative line and staff relationships should be
  such that teachers and media personnel have a sense of administrative
  support.

Within system lines of communications and responsibilities should be clearly established to define the relationship of 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.

●School 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 a school system to participate in cooperative projects that enrich or stimulate the local media program

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

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

●A school system should engage in a continuous evaluation of its educational media program as it relates to the instructional program

●A school system 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 a school system.

●Teachers should be encouraged to experiment with educational media as a means of increasing instructional effectiveness.

●The educational media program in a comprehensive school system should provide media and services for a wide variety of curricula in the various specialized departments, technical courses, and special education curriculums of the school.

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

C. Commitment to Adequate Educational Media Facilities

●New buildings constructed by a school system 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 system-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 a school system.

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

b. Commitment to Budgeting and Financing the Educational Media Program

a A school system's educational media program should be adequately financed
thru its own or independent budget

b The budget of an educational media program should reflect the needs of the
entire school system

c The manner in which an educational media budget is administered should be
determined by clear cut school system policies concerning allocations,
records, and expenditures.

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

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

3. Commitment to Educational Media Staff

a There should be a sufficient number of professional media staff members to
administer the educational media program and to provide consultative services
to a school system's entire faculty.

b A school system should have a sufficient number of non-professional media
staff members to relieve teachers and professional media staff of all routine
clerical and technical tasks.

c The director of a school system's educational media program should be directly
responsible to the administrative officer in charge of instruction

d A school system's educational media program should be directed by a person
with a good educational background who has special preparation as an edu-
cational media specialist

II. EDUCATIONAL MEDIA SERVICES - CURRICULUM AND INSTRUCTION

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

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

c Teachers should be kept informed on new developments in materials, equip-
ment, and the technology of instruction.

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

a The professional media staff should cooperate with teachers, supervisors,
and other curriculum workers in planning and developing the parts of the
instructional program that make provisions for the use of educational media.

b 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 instructional programs that make use of media.

9 An educational media program should include a consultation function with
professional media staff members competent to render advise to teachers,
administrators, supervisors, and other curriculum workers in the selection,
acquisition, preparation, production, utilization, and evaluation of educa-
tional media.

b 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 instruc-
tional devices, materials and techniques, and the importance and value of
educational media in instruction.

a If the inservice education activities for teachers, librarians and media
personnel includes educational media workshops, institutes and conferences,
the assistance of local, regional, and state educational media specialists
should be utilized in planning and conducting these activities.

c Professional educational media personnel should be readily available for
consultation on research projects in which educational media are used.

e 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.

III. THE EDUCATIONAL MEDIA CENTER

a An educational media center should be organized around the concept of offer-
ing a wide variety of services and media to all instructional and administra-
tive units of the school system, with leadership, consultative help, and
other services provided by professional media specialists and other media
center personnel.

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

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

⊙ An educational media center should provide such media as projected materials, recorded materials, graphic materials, self-instruction materials, and television kinescopes or video tapes.

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

⊕ Services provided by the school's educational media center for building instructional units 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.

⊕ In order to achieve a high level of utilization all educational media should be made highly accessible to each teacher, either by delivery from the school educational media center to the point of use, or by the establishment of building centers where frequently used media are placed on long-term loan.

⊕ If a school system is large and complex, the school media center should be supplemented by building media centers. The services provided by the school media center should be comprehensive and its services should include all those which the building centers are not equipped to provide. Duplication of effort should be held to a minimum.

⊕ All frequently used educational media should be automatically placed in building media centers on a long-term loan when the need is established.

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

⊕ Educational media available only from the school media center should be delivered to the school buildings where used at regularly scheduled intervals.

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

⊕ 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.

● There should be a central photographic production service available to all building instructional units which produces all kinds of still photographic materials.

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

● Graphic materials production facilities and services should be available in one location with sub-facilities available in buildings where needed for the production of graphs, charts, animations, art work, transparency originals, silk-screen plates, teaching models, and scientific exhibits.

● If a school 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.

● If a school has need for complete motion picture production services, there should be facilities for the production of black and white or color 16mm motion picture films with optical sound, and/or 8mm black and white or color films with magnetic sound, and a motion picture laboratory should be provided for processing and printing black and white and color film.

● There should be centralized services for maintaining all educational media owned by the school system.

● 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.

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

● 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 school.

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

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

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

- A School educational media center should maintain an up-to-date collection of catalogs, indexes, and other references for use in the selection and procurement of materials and equipment. This collection should include the Media Index, if this publication is not otherwise available to school media personnel.

- Each building educational media center should maintain an up-to-date file of community resources available to teachers in the building, and the school media center should maintain a master file of all community resources available to all teachers in the school system.

IV. PHYSICAL FACILITIES FOR EDUCATIONAL MEDIA

- Housing facilities for the school's educational media center should be sufficient in size and arrangement to facilitate the efficiency and effectiveness of media services to all instructional functions. The facilities should provide for such specialized activities as storage, handling, maintenance, and circulation control of media, and for office space needed for media center personnel.

- Housing facilities for building educational media centers should be adequate in size and arrangement to make it possible for services needed from the building centers to be effectively provided. The facilities should provide for the storage of all media on long-term loan to the buildings, and for specialized activities such as handling, circulation, and production of media.

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

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

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

- A school 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.

- A school 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.

- A school 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.

* A school 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 humidity control, and office space as required.

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

* 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 all school buildings should be equipped with essential facilities for effective use of appropriate educational media, including telecasts, projected materials, recordings, and self-instruction devices.

* Every 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, a projection screen, map rails, and storage facilities needed for the particular type of instruction conducted in each room.

V. BUDGET AND FINANCE OF THE EDUCATIONAL MEDIA PROGRAM

* 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 school funds.

* A school system should have clear-cut policies concerning allocation, income, and charges against the educational media budget.

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

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

* 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.

* The budget of an educational media program 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.

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

* Teachers should be able to use educational media from the media center with no more restrictions than those imposed on the use of the book library or similar school services.

* 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.

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

VI. EDUCATIONAL MEDIA STAFF

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

* The school's educational media center and building media centers should be staffed with professional, clerical, and technical personnel appropriately trained for the level of performance they are expected to render.

* 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.

* 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, programed 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 school administration, determining budget and financial needs, and providing consultative services to teachers, administrators, supervisors, and other staff members.

* The functions of the director of the educational media program should include the administration of the educational media center. In large school systems the coordination of the various functions of the educational media center should be delegated to an assistant director who approaches the broad educational requirements listed above for educational media directors.

* Specialists in the various media areas should be delegated supervisory responsibilities for the specialized functions of the educational media center. Such supervisors should report to the director or the assistant director, and should include specialists in television production, radio production, programed learning, media evaluation, selection and procurement, film librarians, and consultants skilled in assisting teachers in the instructional application of educational media.

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

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

* The educational media program in each building should be implemented and coordinated by an educational media specialist specifically prepared for this activity.

* Large buildings should be provided with the full-time services of a professional educational media coordinator.

* Small buildings should share the services of a professional educational media coordinator. Each coordinator should be assigned to few enough buildings to allow him to effectively implement and coordinate the media program in each building.

* The educational media coordinator should be well grounded in general education, and should have had successful experience as a classroom teacher. He should possess a masters degree, or its equivalent, and should have had training in such areas as theory of educational communications, curriculum and instructional methods, production of such media as graphics, photographic materials, and recorded materials, programed learning, administration, and supervision.

* Coordinators assigned to buildings where educational television is used should have an understanding of educational television production, and should be well grounded in techniques of television utilization in classroom instruction.

* The functions of the educational media coordinator should include: reporting the media needs of the building to the school media director, assisting teachers in the selection and procurement of materials, supervising all functions of the building media center, and providing consultative services to teachers, principals, supervisors, and other staff members assigned to the building.

* The non-professional educational media staff should consist of adequate numbers of clerical personnel, maintenance technicians, television technicians, distribution clerks, and production technicians.

* An educational media specialist should be able to delineate subject matter into teachable concepts, lead the faculty in cooperatively planning the curriculum, and organize a media center so that equipment and materials can be coordinated into the teaching program with dispatch. He should possess administrative ability to 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 innova-
tions for possible introduction into instructional programs and should be
able to interpret and promote those innovations that can make significant
contributions to teaching and learning.

● 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 produc-
tion.

● An educational media specialist should demonstrate a desire to improve his
professional competence by attending local, state, and national educational
media conferences, conventions, and workshops.

IV. CONCLUSIONS AND RECOMMENDATIONS

Conclusions

Based on experience gained in the process of developing the Self-Evaluative Checklist, the following conclusions have been derived:

1. The Self-Evaluative Checklist appears to be a valid instrument and is usable as a self-evaluating instrument for appraising the status of educational media programs in school systems and higher education institutions of varying sizes and types.

2. The use of this instrument will permit administrators in school systems and in higher education institutions to infer the adequacy of their educational media programs by interpreting their responses to items in the Self-Evaluative Checklist.

3. The application of this instrument and the interpretation of the results of its use will provide a basis for the isolation of areas of educational media programs that need further development and innovation.

Recommendations

As a result of this study the following recommendations are submitted:

1. That the instrument be used on a nationwide basis in an attempt to accumulate findings in various parts of the country for purposes of isolating areas of major weakness in educational media programs.

2. That the instrument and criteria be published and widely distributed to enhance its use on a voluntary basis.

3. That schools, colleges, and agencies be encouraged to use the

instrument in evaluating their educational media programs, and that they also be encouraged to use consultants to assist in planning for the improvement of a program after it has been self-evaluated.

4. That the instrument itself be evaluated periodically with the expectation of revision as new media, new technological advances, changes in the educational system, and changes in teaching procedures affect the nature of the educational media field.

5. That coordinative efforts be used to establish and implement the relationship of this instrument to other related developments such as the development of quantitative standards, and the development of teacher competencies.

BIBLIOGRAPHY

Barnes, Virginia C. "The Organization and Administration of the In-
structional Materials Center in Medium-Sized School Districts,"
Unpublished Doctor's dissertation, Stanford University, 1960.

Brown, James W., and Molstad, John A. "Administration of Instructional
Materials," Review of Educational Research, XXXII (April, 1962),
194-209.

Brown, James W., and Norberg, Kenneth. Administering Educational Media.
New York: McGraw-Hill Book Company, 1965.

Buehler, Ronald G. "How to Help Your Teachers Use the New Media,"
Nation's Schools, LXX (July, 1962), 41-45.

Cochran, Lee W. "School Production of Audio-Visual Materials," The
School Administrator and His Audio-Visual Program, Yearbook of the
Department of Audio-Visual Instruction, National Education Associ-
ation. Washington, D. C.: The Department, (1954), 83-120.

Connecticut State Department of Education. A Survey of Audio-Visual
Education in Connecticut Public Schools. Hartford, Connecticut:
The Department, 1951.

Corbacho, Henry Francis. "An Analysis of the Administrative Organi-
zation of Selected System Instructional Materials Center Programs,"
Unpublished Doctor's dissertation, Wayne State University, 1963.

Cross, A. J. Foy, and Cypher, Irene F. "Provisions of Audio-Visual
Materials, Equipment, and Building Facilities," The School
Administrator and His Audio-Visual Program, Yearbook of the
Department of Audio-Visual Instruction, National Education Associ-
ation. Washington, D. C.: The Department, (1954), 60-82.

Darden, William Judson. "A Study of Audio-Visual Education in Selected
County Audio-Visual Centers," Unpublished Doctor's dissertation,
Columbia University, New York, 1953.

Davidson, Raymond Leon. "Administrative Provisions for Audio-Visual
Instruction in Selected Public Schools in West Texas," Unpub-
lished Doctor's dissertation, University of Texas, 1950.

DeBernardis, Amo. "A Study of Audio-Visual Education in Oregon's
Public Schools," Unpublished Doctor's dissertation, University
of Oregon, 1951.

Department of Audio-Visual Instruction, National Education Association. _Audio-Visual Checklist for Self-Evaluating Teacher Education Institutions_. Washington, D. C.: The Department, (Undated).

Divizia, Margaret W. "Administration of an Audio-Visual Center," _The School Administrator and His Audio-Visual Program_, Yearbook of the Department of Audio-Visual Instruction, National Education Association. Washington, D. C.: The Department, (1954), 32-59.

Erickson, Carlton W. H. _Administering Audio-Visual Services_. New York: The Macmillan Company, 1959.

Fulton, W. R. "Teacher Education - Our Best Investment," _Audio-Visual Instruction_, I (December, 1956), 210-211, 218.

Fulton, W. R., and Cross, Earl W. "The Distribution and Circulation of Audio-Visual Materials," _The School Administrator and His Audio-Visual Program_, Yearbook of the Department of Audio-Visual Instruction, National Education Association. Washington, D. C.: The Department, (1954), 185-229.

Golterman, Elizabeth. "The Program of Audio-Visual Education in City School Systems," _Audio-Visual Materials of Instruction_, Forty-Eighth Yearbook of the National Society for the Study of Education. Chicago: University of Chicago Press, (1949), 127-144.

Gunn, Ben. "How to Evaluate Your AV Program," _Educational Screen and Audio-Visual Guide_, XL (May, 1961), 227-229.

Haas, Kenneth B., and Packer, Harry Q. _Preparation and Use of Audio-Visual Aids_. (3rd ed.) Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1955. Chapter 16, "Organizing to Use Audio-Visual Aids," 291-301.

Harcleroad, Fred F., and Finn, James D. "The Selection and Education of Audio-Visual Personnel," _The School Administrator and His Audio-Visual Program_, Yearbook of the Department of Audio-Visual Instruction, National Education Association. Washington, D. C.: The Department, (1954), 121-141.

Hazlett, J. R. "Analysis and Evaluation of the Organization, Administration and Supervision of Departments of Visual Sensory Aids," Unpublished Doctor's dissertation, University of Pittsburgh, 1938.

Hite, Herbert. "Supervision and In-Service Education," _The School Administrator and His Audio-Visual Program_, Yearbook of the Department of Audio-Visual Instruction, National Education Association. Washington, D. C.: The Department, (1945), 162-184.

Hyer, Anna L. "Administration," _Nation's Schools_, LXVII (February, 1960), 90-91, 104.

Johnson, Harold. "What Makes a Good A-V Program?" _Minnesota Journal of Education_, XLII (November, 1962), 12-13.

Johnson, Joseph B. "Initiating an Audio-Visual Program," The School
Administrator and His Audio-Visual Program, Yearbook of the
Department of Audio-Visual Instruction, National Education Associa-
tion. Washington, D. C.: The Department, (1954), 21-31.

Johnson, Joseph J. "The Problems Involved in the Administration of an
Audio-Visual Program," Unpublished Doctor's dissertation, George
Washington University, Washington, D. C., 1946.

Jones, Wilbur C. "The Practices, Duties and Responsibilities of the
Audio-Visual Director in Selected School Systems of the North
Central Association," Unpublished Doctor's dissertation, University
of Oklahoma, 1963.

Larson, L. C. "Suggested Answers to Some Pertinent Questions in the
Audio-Visual Field," Audio-Visual Materials of Instruction, Forty-
Eighth Yearbook of the National Society for the Study of Education.
Chicago: University of Chicago Press, (1949), 201-222.

McCarty, Henry R., and Hartsell Horace C. The Cooperative Approach to
Audio-Visual Programs. Washington, D. C.: Department of Audio-
Visual Instruction and Department of Rural Education, National
Education Association, 1959.

McIntire, Charles J. "The Impact of New Media on College Instruction,"
Journal of Higher Education, XXXIV (February, 1963), 85-91.

McPherson, Joseph James. "The Organization of a Program of Audio-
Visual Education for the Schools of Kern County California,"
Unpublished Doctor's dissertation, Columbia University, New
York, 1946.

Meierhenry, Wesley C. Enriching the Curriculum Through Motion Pictures.
Lincoln, Nebraska: University of Nebraska Press, 1952.

Molstad, John. "Developing Your Audio-Visual Program," American School
Board Journal, MXXXV (September, 1957), 78, 80, 82.

Morris, Barry (editor). "The Functions of Media in the Public Schools,"
Audiovisual Instruction, VIII (January, 1963), 9-14.

National Education Association, Research Division. "Audio-Visual Edu-
cation in Urban School Districts, 1953-54," National Education
Association Research Bulletin, XXXIII (October, 1955), 93-123.

Harden, Joseph T. "Evaluation of the Audio-Visual Program," The
School Administrator and His Audio-Visual Program, Yearbook of
the Department of Audio-Visual Instruction, National Education
Association. Washington, D. C.: The Department, (1954), 248-265.

Noel, Francis W. "Principles of Administering Audio-Visual Programs,"
Audio-Visual Materials of Instruction, Forty-Eighth Yearbook of the
National Society for the Study of Education. Chicago: University
of Chicago Press, (1949), 180-200.

Nora, Sister Mary. "Programmed Instruction: Its Implications for the Administrator," National Catholic Education Association Bulletin, LVIII (May, 1962), 8-20.

Renfro, Al. "Needed Now: Assistant Superintendent for Technology," Overview, IV (May, 1963), 40-41.

Richardson, Emory, and Green, Robert E. "Design for School Television," Audiovisual Instruction, I (June, 1956), 100-103.

Rugg, Kenneth C. "An Analytical Study of the Position of the City School System Audio-Visual Director," Unpublished Doctor's dissertation, Indiana University, 1964.

Sands, Lester B. "The A-V Building Coordinator: A Curriculum Leader," Educational Screen and Audio-Visual Guide, XXXVII (May, 1958), 228-229.

Schuller, Charles F. "Improve your Instructional Program," Nation's Schools, LXIII (February, 1959), 70-72.

Schuller, Charles F. "Minimum Standards for A-V Budget," Nation's Schools, LIX (April, 1957), 100, 102, 104.

Schuller, Charles F. "Vitalizing the Curriculum," The School Administrator and His Audio-Visual Program, Yearbook of the Department of Audio-Visual Instruction, National Education Association. Washington, D. C.: The Department, (1954), 1-20.

Schwartz, John Charles. Evaluative Criteria for an Audio-Visual Instructional Program. Dubuque, Iowa: William C. Brown Company, 1950.

Sechriest, Earl E. "Organization, Administration, Supervision and Mechanical Facilities of Departments of Audio-Visual Aids," Unpublished Doctor's dissertation, University of Pittsburgh, 1944.

Tanzman, Jack. "An Audio-Visual Program: What you Need Beyond Equipment," School Management, VII (April, 1963), 74-78, 130-136.

Wigren, Harold E. "Media for Tomorrow's Schools," Educational Leadership, XVII (May, 1960), 495-502.

Witt, Paul W. F., and Brunstetter, Max R. "Curriculum Improvement and the Audio-Visual Program," The School Administrator and His Audio-Visual Program, Yearbook of the Department of Audio-Visual Instruction, National Education Association. Washington, D. C.: The Department, (1954), 143-161.

Wittich, Walter A. "Financial Support for the Audio-Visual Program," The School Administrator and His Audio-Visual Program, Yearbook of the Department of Audio-Visual Instruction, National Education Association. Washington, D. C.: The Department, (1954), 230-247.

Wittich, Walter A., and Burr, W. Henry. "The Audio-Visual Tools of Learning: How to Make Them Work," _Nation's Schools_, LXX (July, 1962), 35-40.

Zimmerman, Harry Paul. "An Evaluation of Pre-Service Audio-Visual Experiences in Selected Oklahoma Teacher Education Institutions Based on Reactions of Teachers and Supervisors," Unpublished Doctor's dissertation, University of Oklahoma, 1958.

APPENDIX A

INVENTORY CHECK SHEET

EDUCATIONAL MEDIA INVENTORY CHECK SHEET

This educational media inventory sheet includes five sections relating to: INSTITUTION IDENTIFICATION: INVENTORY OF PHYSICAL FACILITIES: INVENTORY OF EQUIPMENT AND MATERIALS: INVENTORY OF THE EDUCATIONAL MEDIA CENTER: and an INVENTORY OF EDUCATIONAL MEDIA SERVICES AND FINANCES.

This sheet is designed to be used as a basis for determining the inventory status of the educational media in a college, a University, or a school system. Obviously, many types of equipment and materials will not be applicable to a given situation, and there is no implication that any one institution or school should possess all items listed. When questions are not applicable to the institution or school, so indicate by placing a dash (--) in the appropriate place.

The check sheet is intentionally comprehensive, so that it may be used by institutions and schools of various types and sizes. In most cases, the completion of the check sheet requires the use of numbers indicating quantities, amounts, or percentages.

INSTITUTION IDENTIFICATION

A. Name of Institution_____

B. Location_____

C. Person in Charge of the Educational Media Organization:

    1. Name_____

    2. Title_____

D. Check the type of organization that most nearly describes the situation at your institution or school:

( ) 1. Centralized, with all media services provided from one educational media center.

( ) 2. A main media center, with sub-centers located in Colleges or Departments (school building) having a need for such facilities.

( ) 3. Decentralized, no main educational media center, i.e., each College or Department (school building) has its own center for media and services.

E. Date Inventory Taken:_____, _____
                         (Month)   (Year)

INVENTORY OF PHYSICAL FACILITIES

A. Classrooms - Total Number:_____

Indicate the percentage of classrooms equipped with:

__% 1. Light control for all projected media and television.

__% 2. Ventilation and temperature control, for a maximum student load viewing projected materials for prolonged periods of time.

__% 3. Electrical outlets, sufficient in number and location.
__% 4. Permanently installed projection screens.
__% 5. Display facilities and chalkboards.
__% 6. Mounting rails for maps and charts.
__% 7. Storage cabinets, files and "built-ins" for materials.
__% 8. Permanent mounts for all television receivers, with coaxial cable from receivers to building junction boxes.
__% 9. Acoustical treatment for optimum student listening, and for the prevention of interference with adjacent classrooms.

B. Learning Carrels - Total Number:_____

__% Percentage equipped for the use of educational media.

C. Language and Learning Laboratories - Total Number:_____

__% Percentage fully equipped for the use intended.

D. Auditoriums - Total Number:_____

Indicate the percentage of auditoriums equipped with:

__% 1. Permanent mounted adjustable angle screen and/or screens for multi-screen presentations.
__% 2. Light control for all projected media and television.
__% 3. Acoustical treatment, where sound is to be used, to prevent interference with adjacent classrooms, and to facilitate optimum student listening.
__% 4. Electrical outlets, sufficient in number and location.
__% 5. Permanent mounts for all television receivers to building junction boxes.

E. Media Production Facilities
Check in the appropriate columns below indicating whether facilities are available for media production.

Yes No   Yes No

( ) ( ) 1. Photographs   ( ) ( ) 13. Animation
( ) ( ) 2. Slides   ( ) ( ) 14. Models
( ) ( ) 3. Filmstrips   ( ) ( ) 15. 16 mm Sound Films
( ) ( ) 4. Overhead transparencies   ( ) ( ) 16. Recordings on tape or
( ) ( ) 5. Drawings   disc
( ) ( ) 6. Illustrations   ( ) ( ) 17. Radio programs
( ) ( ) 7. Cartoons   ( ) ( ) 18. Television programs
( ) ( ) 8. Charts   ( ) ( ) 19. Other (Please list)
( ) ( ) 9. Graphs
( ) ( ) 10. Display and Exhibits   _____
( ) ( ) 11. Set and Costume designs   _____
( ) ( ) 12. Lettering   _____
                                         _____

INVENTORY OF EQUIPMENT AND MATERIALS

Indicate in the left column the total number of operable items owned by the institution (school, regardless of who has administrative control of such media. Indicate in the right column the number of operable items controlled by the main educational media center. If the main educational media center has inventory control of all educational media, the right column should be completed and the left column ignored.

	Number of Operable Pieces	
	Owned by Institution (School)	Controlled by Media Center
A. Equipment		
1. Projectors, motion picture		
a) 16mm projectors, optical sound..........		
b) 16mm projectors, magnetic sound.........		
c) 16mm projectors, repetitive.............		
d) 8mm projectors, silent..................		
e) 8mm projectors, magnetic sound..........		
2. Projectors, still		
a) Slide projectors, 2" x 2" only, manual control......................		
b) Slide projectors, 2" x 2" only, automatic and/or remote control.........		
c) Combination projector, 2" x 2" slides and 35mm filmstrips....................		
d) Filmstrip projectors....................		
e) Slide Projector 3½" x 4", overhead...............................		
f) Lantern slide projector, 3½" x 4"........		
g) Overhead Projector, 10" x 10"...........		
h) Opaque projectors.......................		
i) Specialized projection equipment		
1) Micro-projectors....................		
2) Controlled readers.................		
3) Tachistoscopes.....................		
4) Projection pointers................		
5) 16mm analysis projector............		
6) Multi-projection consoles..........		
j) Automatic continuous still projectors...............................		
k) Sound slidefilm projector...............		
l) Other specialized projection equipment. List		
a) _____..........		
n) _____..........		
3. Cameras, motion picture		
a) 16mm		
1) Without sound recorder..............		
2) With sound recorder................		
b) 8mm		
1) Without sound recorder..............		
2) With sound recorder................		

	Number of Operable Pieces	
	Owned by Institution (School)	Controlled by Media Center
4. Cameras, Still		
a) Polaroid, 3¼" x 4", and other.........		
b) 35mm Cameras		
1) General purpose...................		
2) Reflex..........................		
3) Special adjustable copy...........		
c) Press, cut film and film-pack or roll............................		
d) Others. Please list.		
e) _____.........		
f) _____.........		
5. Cameras, television		
a) Closed-circuit or portable............		
b) Network quality.....................		
c) Others. Please list.		
d) _____.........		
e) _____.........		
6. Video tape recorders & playbacks		
a) Closed-circuit TV quality.............		
b) Network TV quality..................		
7. Screens, projection, on tripod		
a) 70" x 70" or larger..................		
b) Smaller than 70" x 70"..............		
8. Projection tables or stands		
a) Tables or stands on locking casters...............................		
b) Collapsible tables or stands..........		
9. Carts or dollies for moving media		
a) Suitable for single-floor use.........		
b) With strap-downs suitable for stairs.................................		
10. Printers, transparency, 10" x 10"		
a) Diazo process.......................		
b) Thermocopy (media production).........		
c) Photocopy (media production)..........		
11. Record and transcription players		
a) Records, standard, microgroove, stereo, up to 12"...................		
b) Records, standard, microgroove, up to 17¼"......................		
c) Records, stereo, monaural, up to 17¼"........................		
12. Tape recorders and playbacks		
a) Tape recorder-player, portable........		
b) Tape recorder-player, console, multipurpose.....................		
13. Repetitive tape equipment.................		
14. Tape duplicator, multiple...............		

	Number of Operable Pieces	
	Owned by Institution (School)	Controlled by Media Center
15. Language Laboratory Systems		
a) Fixed....................................		
b) Mobile-portable........................		
16. Instructional television		
a) Classroom television receivers........		
17. Classroom radio receivers..................		
18. Teaching machines (types)		
a) Constructed response...................		
b) Audio-passive..........................		
c) Multiple choice response..............		
d) Multiple choice.......................		
e) Constructed or multiple choice response........................		
f) Multiple choice program, branching techniques..................		
19. Portable public address systems...........		
20. Intercommunication systems.................		
21. Test scoring machines......................		
22. Miscellaneous equipment:		
a) Easels.................................		
b) Film inspection machinery..............		
c) Head phones............................		
d) Lecterns, plain wood or metal..........		
e) Microphones............................		
f) Mechanical lettering equipment........		
g) Power megaphones.......................		
h) Laminating equipment, (hot press).....		
i) Others. Please list.		
_____...........		
_____...........		
B. Materials		
1. 16mm sound films (all prints).............		
2. Titles of 16mm sound films................		
3. Filmstrips................................		
4. Titles of filmstrips......................		
5. 2" x 2" slide sets or number of slides....		
6. 3½" x 4" slide sets or number of slides...		
7. Number of 10" x 10" transparency masters on file...........................		
8. Study prints (photographs, drawings, paintings, etc.).........................		
9. Microfilms...............................		
10. Graphs, charts, posters, etc.............		
11. Programed text books.....................		
12. Roll-type programmed materials...........		
13. Teaching kits of related materials (pre-selected, arranged and distributed in packages)..............................		
14. Kinescopes...............................		

	Number of Operable Pieces	
	Owned by Institution (School)	Controlled by Media Center

15. Video tapes--recorded and filed...........
16. Community resource files..................
17. Magazine and newspaper clipping files.....
18. Transcriptions............................
19. Disc recordings...........................
20. Tape recordings...........................
21. Stereographs..............................
22. Mounted picture units.....................
23. Slide-making materials
    (Instructional Kits)......................
24. Maps (all kinds)..........................
25. Globes....................................
26. Models (all types)........................
27. Other. Please list.

_____..........
_____..........
_____..........
_____..........

INVENTORY OF THE EDUCATIONAL MEDIA CENTER

                                                         Yes   No

A. Educational Media Staff
    1. Professional Staff
        a) Educational Media Director:...........................( ) ( )
            1) Possesses a Doctorate or its equivalent.............( ) ( )
            2) Active in educational media organizations...........( ) ( )
            3) Special training in theory of educational
                communication media...............................( ) ( )
            4) Experience in general education, curriculum
                and methodology...................................( ) ( )
            5) Special training in curriculum and
                instructional methods.............................( ) ( )
            6) Training in production of such materials as
                graphics, photography, and programed materials......( ) ( )
            7) Special training in research and administration.....( ) ( )
                                                                    Number
        b) Professional staff members with faculty status:
            1) Full-time in educational media center..............._____
            2) Half-time or more in educational media center
                and/or sub-centers..................................._____
            3) Teaches media courses, full-time...................._____
            4) Teaches media courses, part-time...................._____
        c) Other professional staff members:
            1) Specialists in photography.........................._____
            2) Specialists in graphics............................._____
            3) Film librarians....................................._____
            4) Specialists in programed learning.................._____

5) Television directors.....................................____
6) Others. Please specify.
7) _____.....................____
8) _____.....................____

2. Non-professional Staff
   a) Clerical assistants, assigned to following:
     1) Filing materials, filling orders and
       circulating materials..............................____
     2) Stenographic, typing, and clerical..................____
     3) Business procedures...............................____
     4) Delivery of media.................................____
   b) Part-time student clerical assistants..................____
   c) Technical assistants, assigned to the following:
     1) Maintenance of materials and equipment..............____
     2) Production of materials............................____
     3) Production of educational telecasts.................____
   d) Part-time student technical assistants.................____
   e) Specialists assigned to the following:
     1) Television engineering staff.......................____
     2) Radio engineering staff............................____
     3. Sound recording staff.............................____
   f) Photography specialists:
     1) Still photography production and processing.........____
     2) Motion picture production and processing............____
   g) Graphics production....................................____
   h) Specialists in educational media procurement...........____
   i) Specialists in educational media cataloging............____
   j) Other non-professional staff members. Please specify.
     1)_____.....................____
     2)_____.....................____
     3)_____.....................____

                                           Yes No

B. Media Center Special Equipment and Facilities
  1. Photographic processing facilities:
    a) Motion picture processing facilities:
      1) Editing room and equipment...........................( ) ( )
      2) Processing laboratory................................( ) ( )
      3) Printing room..( ) ( )
      4) Negative storage room with humidity control..........( ) ( )
      5) Capabilities for processing color and black and
        white...( ) ( )
    b) Still photographic processing facilities:
      1) Still photography studio(s)..........................( ) ( )
      2) Dark rooms and work areas............................( ) ( )
      3) Rooms for printing, dyeing, trimming and mounting
        prints..( ) ( )
      4) Copy room..( ) ( )
      5) Chemical storage area................................( ) ( )
      6) Filmstrip and slide production areas.................( ) ( )
      7) Camera and equipment storage area....................( ) ( )
      8) Microfilm copy area..................................( ) ( )
      9) Negative storage area with humidity control..........( ) ( )
     10) Capabilities for processing color and black and
        white...( ) ( )

c) Are photographic processing facilities air conditioned?.( ) ( )
d) Is office space provided as needed by production staff?.( ) ( )

2. Finishing room(s) with equipment for preparing photographic
prints for classroom use...................................( ) ( )

3. Copy and titling room.....................................( ) ( )

4. Multi-purpose studio furnished with equipment, accessories,
and lightcontrol for use in producing motion pictures,
filmstrips, slides, and other photographic materials.........( ) ( )

5. Television production facilities:
a) Video taping equipment and recording room...............( ) ( )
b) Make up rooms near studios..............................( ) ( )
c) Control rooms with staff communications network.........( ) ( )
d) Workroom for use in producing materials and backgrounds.( ) ( )
e) Offices and work spaces for staff.......................( ) ( )
f) Desk, work, and storage spaces for studio teachers......( ) ( )
g) Observation room (for viewing programs in process)......( ) ( )
h) Studios:
   1) Capabilities for both closed-circuit and broadcast..( ) ( )
   2) Capabilities for closed-circuit only...............( ) ( )
   3) Capabilities for broadcast transmission only........( ) ( )
i) Electronic equipment room...............................( ) ( )
j) Engineering and equipment maintenance shop..............( ) ( )
k) Storage area for video tapes, films, and other media....( ) ( )

6. Radio production facilities:
a) Broadcasting studios....................................( ) ( )
b) Control rooms, adjacent to studios......................( ) ( )
c) Areas for transmitters and related equipment............( ) ( )
d) Work areas for script writers...........................( ) ( )
e) News room...( ) ( )
f) Storage areas for tapes, records and other materials....( ) ( )
g) Conference rooms..( ) ( )
h) Work area for production staff..........................( ) ( )
i) Equipment storage areas.................................( ) ( )
j) Engineering and equipment repair areas..................( ) ( )
k) Staff office space......................................( ) ( )

7. Film library with facilities for booking, processing,
shipping and storing films..................................( ) ( )

8. Cubicles equipped for viewing motion picture films, slides,
and filmstrips; and for listening to recordings.............( ) ( )

9. Sound studio:
a) Equipment for producing and editing tape recordings.....( ) ( )
b) Equipment for producing disc recordings.................( ) ( )
c) Control rooms adjacent to studio........................( ) ( )
d) Storage area for recorded materials.....................( ) ( )

10. Office space with required fixtures (for Center Director
and Administrative Staff)...................................( ) ( )

11. Reception area, including waiting room and reception desk
space..( ) ( )

12. Graphic laboratory:
a) Graphic studio equipped with drawing tables,
graphic equipment, and art equipment.......................( ) ( )
b) Silk screen production space............................( ) ( )
c) Space for mechanical printing processes.................( ) ( )

	Yes	No
d) Storage space for graphic supplies........................	( )	( )
e) Model and exhibit production space (with tools and supplies)...	( )	( )
f) Office space as required by staff........................	( )	( )
g) A library of overhead transparency masters...............	( )	( )

13. Classroom(s) equipped for teaching media courses and for demonstrations...( ) ( )

14. Laboratory for use in teaching media courses and for demonstrations...( ) ( )

15. Maintenance shop for repair of equipment, storage of spare parts and housing of equipment maintenance records...........( ) ( )

16. Conference rooms for research planning, evaluating and selecting new materials and equipment........................( ) ( )

17. Curriculum library, to serve as a centralized professional library for teachers, supervisors and other staff members (including media reference books and research studies)......( ) ( )

18. Study carrels or individual stations, including:
   a) Systems designed for individual learning................( ) ( )
   b) Electronic learning laboratories.......................( ) ( )
   c) Table top viewers with sound...........................( ) ( )
   d) Programed learning materials and devices................( ) ( )
   e) Curriculum materials, study guides and teachers manuals...( ) ( )
   f) Single concept films...................................( ) ( )
   g) Microfilm and facilities...............................( ) ( )
   h) Controlled readers and pacers..........................( ) ( )
   i) Maps and models..( ) ( )

INVENTORY OF EDUCATIONAL MEDIA SERVICES AND FINANCES

	Yes	No

A. Services
   1. Services to the Institution:
      a) Are the Center resources used for student orientation and other student services?................................( ) ( )
      b) Do students and faculty members request more services from the Center than are available?.......................( ) ( )
      c) Do the center personnel contribute to student personnel programs directly, and do they contribute also as consultants to faculty members and students from all colleges/departments of the institution (school)?.......( ) ( )
         1) During the regular school day?.....................( ) ( )
         2) At other hours?....................................( ) ( )
         3) On non-school days?................................( ) ( )
   2. Services to individual students:
      a) Are suitable facilities available to teacher education students for evaluation, production, and practice in most media?...( ) ( )
         1) Within the Educational Media Center?...............( ) ( )
         2) Within the College or Department of Education? (School Building)...................................( ) ( )
         3) Elsewhere?...( ) ( )

3. Services to Institution Departments and/or Colleges:
    (School Building)
    a) Are materials and equipment furnished without charge when
        used for instructional purposes?..........................( ). ( )
    b) The Media Center:
        1) Is frequently used equipment deposited on a long-term
            loan in the departments or buildings where used?....( )   ( )
        2) Are equipment and materials delivered on request?...( )   ( )
        3) Are materials ordered from outside sources for
            faculty members?...................................( )   ( )
        4) Are needed materials prepared or produced locally?..( )   ( )
    c) Does the media center furnish maintenance and repair
        services for all educational media equipment and
        materials?..( )   ( )
    d) Does media center furnish consultative services on
        utilization and other media problems?...................( )   ( )
    e) Are preview facilities and services suitable and adequate
        for:
        1) The teacher education faculty?......................( )   ( )
        2) The faculty of the entire institution (school)?.....( )   ( )
        3) Teacher education students?.........................( )   ( )
        4) All other students..................................( )   ( )
    f) Are preview facilities available at places on the
        campus other than the media center?.....................( )   ( )
    g) Are recording studios available for general use by all
        campus colleges or departments?.........................( )   ( )
    h) Is radio studio located:
        1) In the Media Center?................................( )   ( )
        2) On the campus?......................................( )   ( )
        3) Near the campus and available to institution (school)
            personnel?...( )   ( )
    i) Is broadcast television studio located:
        1) In the Media Center?................................( )   ( )
        2) On the campus?......................................( )   ( )
        3) Near the campus and available to institution (school)
            personnel?...( )   ( )
    j) Is an annual report of educational media activities
        prepared and submitted to the institution (school)
        administration with a copy retained in the director's
        office?...( )   ( )
        1) Have in-service education activities included any
            or all of the following: extension courses, tele-
            casts, workshops and conferences, on campus and off
            campus, during the past twelve months?.............( )   ( )
        2) Is educational media information disseminated
            through newsletters and other publications?........( )   ( )

B. Fir.nces

1. Income for the a.ucational Media Center
   a) The financial support sources are:
      1) Regular budge: allocation..........................____ %
      2) Rentals: on campus departments.....................____ %
      3) Rentals: off campus to schools and to public.......____ %
      4) Gifts...____ %
      5) Student fees..____ %
   b) Average annual amount of support is:
      1) Per student.......................................$____
      2) Per faculty member................................$____

2. Expenditures for Educational Media Center
   a) The per capita expenditures for the Educational Media
      Program during the last two completed fiscal years were:

	Last Fiscal Year	Preceding Year
1) Per student	$____	$____
2) Per faculty member	$____	$____

   b) Purchase expenditures for your institution's
      (school's) Educational Media Program for the last
      two completed fiscal years were:

	Last Fiscal Year	Preceding Year
1) Purchase of materials	$____	$____
2) Purchase of equipment	$____	$____
3) Rental of materials	$____	$____
4) Total purchase expenditures	$____	$____

APPENDIX B

COLLATION OF STANDARDS FOR EDUCATIONAL MEDIA PROGRAMS IN

COLLEGES AND UNIVERSITIES

COLLATION OF STANDARDS

The following is a list of standards derived from a collation of a large number of standards for colleges.

It should be pointed out that the quantities are listed in ranges which represent the lower and higher limits contained in standards in use across the country. This means, in fact, that the quantities listed herein should NOT be considered as recommended quantities. Instead they simply show the wide range of quantities required on standards currently in use.

Furthermore, in view of the lack of uniformity in the manner in which standards are reported, the categories under which they are reported here were somewhat arbitrarily selected and could be open to question.

Consequently this list is presented for the purpose of showing the lower and higher limits of quantitative standards now in use and will serve no other purpose.

COLLATION OF STANDARDS

FOR

COLLEGES AND UNIVERSITIES

* * * * *

INSTRUCTIONAL EQUIPMENT

Item	Institutions at beginning stages of media services program development	Institutions with some years of experience in developing on-going media programs	Goals or objectives sought by institutions attempting to attain high standards of media service development
16mm Motion Picture Projector	One per 11-15 teaching stations	One per 5-10 teaching stations	A sufficient number to insure that no request for loan or use need be refused or delayed
35mm Filmstrip and 2" x 2" Slide Proj.	One per 16-20 teaching stations	One per 10-15 teaching stations	
35mm Filmstrip Viewer	One per media center and sub-center	One per each filmstrip previewing station	
Opaque Projector	Two to ten per institution	At least one per classroom building where used	
Overhead Projector 10" x 10"	One per 6-15 teaching stations	One per 1-5 teaching stations	
Slide Projector 3¼" x 4"	Two to ten per institution	At least one per classroom building where used	
Microprojector	One per 2-5 teaching stations where used	One per teaching station where used	
Tachistoscope	As needed in special purpose stations		
Controlled Reader	As needed in special purpose stations		
Screens	One portable per each item of projection equipment plus permanent installations in large group assembly areas	One per teaching station with permanent installations in most teaching stations	Permanent installations in all teaching stations plus spares in center and sub-centers

		A sufficient number to insure that no request for loan or use need be refused or delayed
Tape Recorder: Two speed for regular classroom use	One per 11-15 teaching stations	One per 5-10 teaching stations
Tape Recorder: High Fidelity or Stereo for special uses	At least one per center and sub-center serving instructors who make use of equipment	At least one per teaching station where equipment is frequently used
Record Player: 3-4 Speed for regular classroom use	One per 20-30 teaching stations	One per 10-19 teaching stations
Record Player: High Fidelity or Stereo for special purposes	At least one per center and sub-center serving instructors who make use of equipment	At least one per teaching station where equipment is frequently used
Transcription Player	At least one per center and sub-center serving instructors who make use of equipment	At least one per teaching station where equipment is frequently used
Portable Public Address System	Available as needed for center and sub-centers	
Megaphone: Power Operated	At least one per center and sub-center serving instructors who make use of equipment	One per instructional area where used
Equipment Carts and Stands	One per each item of projection and audio equipment plus spares in center and sub-centers. Carts on wheels for items moved from one room or area to another on the same floor	
Portable Clingboards	Feltboards, flannelboards, tackboards, etc. supplies in sufficient numbers to provide instructors with needed display areas. The number of portable units will depend on the amount of these surfaces provided in permanent installations and the use made of such media by individual instructors	

Item	Institutions at beginning stages of media services program development	Institutions with some years of experience in developing on-going media programs	Goals or objectives sought by institutions attempting to attain high standards of media service development
Professional Personnel	Full-time director Directors for sub-centers	Full-time director - - - - - - - plus supporting staff as needed, may include the following - - - - - - Full-time directors for sub-centers Broadcasting Director Director of Materials Production	Full-time director - - - - - - Assistant director for center Full-time directors for sub-centers Film librarians Librarians for recorded materials Director of television production Director of radio production Director of motion picture production Director of photographic production Director of graphic production
Clerical Personnel (including student assistants)	A sufficient number to relieve professional personnel of all clerical tasks involved in the operation of the educational media program - - - - - - - - - may include the following as needed - - - - - - - - Secretaries Stenographers Typists Bookkeepers Shipping clerks Distribution and delivery clerks Filing clerks		

Technical Personnel (including student assistants)	A sufficient number to effectively perform all technical tasks involved in the operation of the educational media program.	
	- - - - - - - - - - - - - may include the following as needed - - - - - - -	
	Materials and equipment inspectors and repairmen Materials production personnel	Materials inspectors and repairmen Equipment repairmen Recording supervisor Recording technicians Motion picture production supervisor Motion picture production technicians Cinematographers Motion picture sound supervisor Motion picture sound technicians Motion picture processing technicians Photographic production supervisor Photographers Photographic processing technicians Graphic production supervisor Graphic production technicians Graphic artists Graphic illustrators Chartists Sign painters Radio production engineer Radio transmitter engineer Television production engineer Television transmitter engineer Television audio equipment operators Television video equipment operators Television camera operators Television studio assistants Language laboratory technicians
	Materials inspectors and repairmen Equipment repairmen Recording technicians Photographers Photographic laboratory technicians Graphic illustrators Graphic laboratory technicians Broadcasting engineer Broadcasting technicians Language laboratory technicians	

MEDIA CENTER SPACE

Item	Institutions at beginning stages of media services program development	Institutions with some years of experience in developing on-going media programs	Goals or objectives sought by institutions attempting to attain high standards of media service development
Administrative Office Space	100-160 sq. ft. per professional employee with 140-160 sq. ft. per administrative personnel.		As needed. Minimum of 160 sq. ft. per administrative employee
Space for clerical activities	75-85 sq. ft. per clerical employee involved in booking, typing, secretarial work, filing, receptionist, etc., plus 120-200 sq. ft. for reception area.		As needed. Minimum of 85 sq. ft. per clerical employee plus reception area.
Preview-Auditioning	Preview and auditioning cubicles or rooms of 50-110 sq. ft. each.		A sufficient number of spaces to insure that no request for use need be denied.
Conference rooms	Conference rooms of 300 to 600 sq. ft. each		
General Distribution area	75-95 sq. ft per employee assigned to distribution of media.		As needed. Minimum of 90 sq. ft. per employee assigned to distribution of media.
Maintenance area	80-95 sq. ft. per employee assigned to maintenance of media.		As needed. Minimum of 95 sq. ft. per employee assigned to maintenance of media.
Storage area	Sufficient space for storage facilities needed to store materials and equipment currently on hand plus room for expansion to house all media planned for purchase during the next few years. Access areas (aisles, doorways, etc.) sufficient in width to allow the use of handcarts for transporting items to and from storage facilities.		
Recording area	80-95 sq. ft. per employee assigned to sound recording plus studio space.		As needed. A minimum of 95 sq. ft. per employee assigned to sound recording plus studio space.
Motion Picture production area			As needed. A minimum of 100 sq. ft. per employee assigned to motion picture production plus studio space.

Area	Specification	As needed
Motion Picture processing area		As needed. A minimum of 100 sq. ft. per employee assigned to motion picture processing.
Photographic Production and Processing area	80-100 sq. ft. per employee assigned to photographic production and processing plus studio space.	As needed. A minimum of 100 sq. ft. per employee assigned to photographic production and processing plus studio space.
Graphic production area	80-100 sq. ft. per employee assigned to graphic production.	As needed. A minimum of 100 sq. ft. per employee assigned to graphic production.
Radio Production area	Sufficient space to house equipment and provide enough work area to allow radio production personnel to meet institutional broadcasting objectives.	
Closed-Circuit television production area	Single room operation (cameras and monitors in same classroom) no added space requirement. —————————— Multi-room and/or multi-building operation — A total of 1500 to 3000 sq. ft. with ceiling heights of at least 16 ft. in studios.	As needed. A total of at least 3000 sq. ft. with ceiling heights of at least 16 ft. in studios.
Broadcast television area	Sufficient space to house equipment and allow television production personnel to meet institutional broadcasting objectives. Ceiling heights of at least 16 ft. in all studios.	

EDUCATIONAL MEDIA FINANCES

Item	Institutions at beginning stages of media services program development	Institutions with some years of experience in developing on-going media programs	Goals or objectives sought by institutions attempting to attain high standards of media service development
Purchase of Materials and Equipment	$1.00 - $3.00 per pupil or not less than 1% of total instructional budget	$3.00 - $5.00 per pupil or not less than 1% of total instructional budget	$5.00 - $6.00 per pupil or not less than 1% of total instructional budget

APPENDIX C

COLLATION OF STANDARDS FOR EDUCATIONAL MEDIA PROGRAMS IN

SCHOOL SYSTEMS

COLLATION OF STANDARDS

The following is a list of standards derived from a collation of a large number of standards for public schools.

It should be pointed out that the quantities are listed in ranges which represent the lower and higher limits contained in standards in use across the country. This means, in fact, that the quantities listed herein should NOT be considered as recommended quantities. Instead they simply show the wide range of quantities required on standards currently in use.

Furthermore, in view of the lack of uniformity in the manner in which standards are reported, the categories under which they are reported here were somewhat arbitrarily selected and could be open to question.

Consequently this list is presented for the purpose of showing the lower and higher limits of quantitative standards now in use and will serve no other purpose.

Item			
Microprojector	One per building	One per building with at least 1 per 2-4 science teachers in secondary buildings	One per elementary building. One per science teacher in secondary buildings
Tachistoscope	One per building	One per elementary teacher where need exists. One per secondary department where need exists.	One per teacher where need exists.
Controlled Reader	One per building	One per teacher in elementary buildings where need exists. One per department in Secondary buildings where need exists.	One per teacher where need exists.
Screen	One portable per each item of Projection equipment plus permanent installations in each large group assembly area.	One per classroom with permanent installations in most classrooms and in all large group assembly areas.	Permanent installations corrected for keystoning in each classroom and large group assembly area. At least one portable per building plus spares in center.
Tape Recorder: Two speed for regular classroom use	One per 5-10 teachers in K-3 with at least 1 per building for these grades. One per 9-12 teachers in 4-6 with at least 1 per building for these grades. One per 11-15 teachers in 7-12 with at least one per secondary building.	One per 2-4 teachers in K-3 with at least 1 per building for these grades. One per 4-8 teachers in 4-6 with at least 1 per building for these grades. One per 6-9 teachers in 7-12 with at least 1 per secondary building.	One per teacher in K-3. One per 1-3 teachers in 4-6 with at least 1 per building for these grades. One per 1-5 teachers in 7-12 with one per each teacher justifying need.
Tape Recorder: High Fidelity or Stereo for special uses	Available for use by music teachers in grades 7-12 as needs arise.	One per music department in grades 7-12. Available for use in K-6 as needs arise.	One per music teacher in 7-12. Available for use by other teachers in secondary and elementary buildings as needs arise.
Record Player: 3-4 speed for regular classroom use	One per 3-8 teachers in K-3 with at least 1 per building for these grades. One per 7-10 teachers in 4-6 with at least 1 per building for these grades. One per 15-24 teachers in 7-12 with at least 1 per secondary building.	One per 1-2 teachers in K-3 with at least 1 per building for these grades. One per 3-6 teachers in 4-6 with at least 1 per building for these grades. One per 10-15 teachers in 7-12 with at least 1 per secondary building.	One per teacher in K-3. One per 1-2 teachers in 4-6. One per 5-9 teachers in 7-12, with at least 2 per secondary building.

Equipment			
Microprojector	One per building	One per building with at least 1 per 2-4 science teachers in secondary buildings	One per elementary building. One per science teacher in secondary buildings
Tachistoscope	One per building	One per elementary teacher where need exists. One per secondary department where need exists.	One per teacher where need exists.
Controlled Reader	One per building	One per teacher in elementary buildings where need exists. One per department in Secondary buildings where need exists.	One per teacher where need exists.
Screen	One portable per each item of Projection equipment plus permanent installations in each large group assembly area.	One per classroom with permanent installation in most classrooms and in all large group assembly areas.	Permanent installations corrected for keystoning in each classroom and large group assembly area. At least one portable per building plus spares in center.
Tape Recorder: Two speed for regular classroom use	One per 5-10 teachers in K-3 with at least 1 per building for these grades. One per 9-12 teachers in 4-6 with at least 1 per building for these grades. One per 11-15 teachers in 7-12 with at least one per secondary building.	One per 2-4 teachers in K-3 with at least 1 per building for these grades. One per 4-8 teachers in 4-6 with at least 1 per building for these grades. One per 6-9 teachers in 7-12 with at least 1 per secondary building.	One per teacher in K-3. One per 1-3 teachers in 4-6 with at least 1 per building for these grades. One per 1-5 teachers in 7-12 with one per each teacher justifying need.
Tape Recorder: High Fidelity or Stereo for special uses	Available for use by music teachers in grades 7-12 as needs arise.	One per music department in grades 7-12. Available for use in K-6 as needs arise.	One per music teacher in 7-12. Available for use by other teachers in secondary and elementary buildings as needs arise.
Record Player: 3-4 speed for regular classroom use	One per 3-8 teachers in K-3 with at least 1 per building for these grades. One per 7-10 teachers in 4-6 with at least 1 per building for these grades. One per 15-24 teachers in 7-12 with at least 1 per secondary building.	One per 1-2 teachers in K-3 with at least 1 per building for these grades. One per 3-6 teachers in 4-6 with at least 1 per building for these grades. One per 10-15 teachers in 7-12 with at least 1 per secondary building.	One per teacher in K-3. One per 1-2 teachers in 4-6. One per 5-9 teachers in 7-12, with at least 2 per secondary building.

Item	Schools at beginning stages of media services program development	Schools with some years of experience in developing on-going media programs	Goals or objectives sought by schools attempting to attain high standards of media service development
Record Player: High Fidelity or Stereo for special uses	Available for use by music teachers in grades 7-12 as needs arise	One per music department in grades 7-12. Available for use in K-6 as needs arise	One per music teacher in secondary building. Available for use in grades K-6 as needs arise
Transcription Player	Available as needs arise	One per building	One per classroom where materials are available
Megaphone: Power Operated	Available to buildings as needs arise	One per elementary building. One per secondary physical education department	One per instructional area where used
Equipment Carts and Stands	One per each item of projection and audio equipment plus spaces in each building and center. Carts on wheels for items moved from one room or area to another on the same floor.		
Portable Clingboards	Feltboards, flannelboards, tackboards, pegboards, etc. supplied in sufficient numbers to provide teachers with needed display areas. The number of portable units will depend on the amount of these surfaces provided in permanent installations and the use made of such media by individual teachers.		

*In the opinion of the project staff the goals or objectives sought by schools attempting to attain high standards of media service development should be "a sufficient number to insure that no request for loan or use need be refused or delayed."

EDUCATIONAL MEDIA STAFF

Item	Schools at beginning stages of media services program development	Schools with some years of experience in developing on-going media programs	Goals or objectives sought by schools attempting to attain high standards of media service development
Professional Personnel	One per 35-50 teachers, including: Full-time director. Part-time coordinator per each elementary building or full-time coordinator per 5-8 buildings. Full-time coordinator per secondary building.	One per 25-34 teachers, including: Full-time director. Half to full-time coordinator per elementary building or full-time coordinator per 3-4 buildings. Full-time coordinator per secondary building.	One per 15-25 teachers, including: Full-time director. Full-time coordinator per each building.

- - - - - - - Plus supporting staff, may include the following - - - - - - -

Librarians for instructional materials	Librarians for instructional materials Broadcasting Director Director of Materials Production	Film librarians Librarians for recorded materials Director of Television Production Director of Radio Production Director of Motion Picture Production Director of Still Photographic Production Director of Graphic Production
Clerical Personnel	A sufficient number to relieve professional personnel of all clerical tasks involved in the operation of the educational media program. May include the following: Secretaries Stenographers Typists Bookkeepers Shipping clerks Distribution and delivery clerks Filing clerks	
Technical Personnel	A sufficient number to effectively perform all technical tasks involved in the operation of the educational media program. May include the following: Materials and equipment inspectors and repairmen	Materials inspectors and repairmen Equipment repairmen Recording technicians Photographers Photographic laboratory technicians Graphic illustrators Graphic laboratory technicians Broadcasting engineers Broadcasting technicians Language laboratory technicians	Materials inspectors and repairmen Equipment repairmen Recording supervisor Recording technicians Motion picture production supervisor Motion picture production technicians Cinematographers Motion picture sound supervisor Motion picture sound technicians Motion picture processing supervisor Motion picture processing laboratory technicians

Still photographic production
supervisor
Photographers
Still photographic processing
laboratory technicians
Graphic production supervisor
Graphic production laboratory
technicians
Graphic artists
Graphic illustrators
Charters
Sign painters
Radio production engineer
Radio transmitter engineer
Radio equipment operators
Television production engineers
Television transmitter engineer
Television technicians and
operations (video and audio)
Television camera operators
Television studio assistants
Language laboratory technicians

Goals or objectives sought by
schools attempting to attain
high standards of media service
development

MEDIA CENTER SPACE

Item	Schools at beginning stages of media services program development	Schools with some years of experience in developing on-going media program
Administrative office space	100-160 sq. ft. per professional employee with 140-160 sq. ft. per administrative personnel	As needed. Minimum of 160 sq. ft. per administrative employee
Space for clerical activities	75-85 sq. ft. per clerical employee involved in booking, typing, secretarial work, filing, receptionist, etc. 120-200 sq. ft. for reception area	As needed. Minimum of 85 sq. ft. per clerical employee plus reception area
Preview-auditioning	Preview and auditioning cubicles or rooms of 50-110 sq. ft.	A sufficient number of spaces to insure that no request for use need be denied
Conference rooms	Conference rooms of 300 to 600 sq. ft. each	

Area		
General distribution area	75-95 sq. ft. per employee assigned to distribution of media	As needed. Minimum of 80 sq. ft. per employee assigned to distribution of media
Maintenance area	80-95 sq. ft. per employee assigned to maintenance of media	As needed. Minimum of 95 sq. ft. per employee assigned to maintenance of media
Storage area	Sufficient space for storage facilities needed to store materials and equipment currently on hand plus room for expansion to house all media planned for purchase during the next five years. Access areas (aisles, doorways, etc.) sufficient in width to allow the use of handcarts for transporting items to and from storage facilities.	
Recording area	80-95 sq. ft. per employee assigned to sound recording plus studio space	As needed. A minimum of 95 sq. ft. per employee assigned to sound recording plus studio space
Motion Picture production area	As needed. A minimum of 100 sq. ft. per employee assigned to motion picture production plus studio space	
Motion Picture processing area		As needed. A minimum of 100 sq. ft. per employee assigned to motion picture processing
Photographic Production and processing area	80-100 sq. ft. per employee assigned to photographic production and processing plus studio space	As needed. A minimum of 100 sq. ft. per employee assigned to photographic production and processing plus studio space
Graphic Production area	80-100 sq. ft. per employee assigned to graphic production	As needed. A minimum of 100 sq. ft. per employee assigned to graphic production
Radio Production area	Sufficient space to house equipment and provide enough work area to allow radio production personnel to meet the school's broadcasting objectives	

Closed-Circuit television production area	Single room operation (cameras and monitors in same classroom) no added space requirement	
	Multi-room and/or multi-building operation	
	A total of 1500 to 3000 sq. ft. with ceiling heights of at least 16 ft. in studios	As needed. A total of at least 3000 sq. ft. with ceiling heights of at least 16 ft. in studios
Broadcast television area	Sufficient space to house equipment and allow television production personnel to meet the school's broadcasting objectives. Ceiling heights of at least 16 ft. in all studios	

EDUCATIONAL MEDIA FINANCES

Item	Schools at beginning stages of media services program development	Schools with some years of experience in developing on-going media programs	Goals or objectives sought by schools attempting to attain high standards of media service development
Purchase of Materials and Equipment	$1.00 - $3.00 per pupil or not less than 1% of total instructional budget	$3.00 - $5.00 per pupil or not less than 1% of total instructional budget	$5.00 - $6.00 per pupil or not less than 1% of total instructional budget