A STUDY OF THE PROVISIONS AND FACILITIES FOR UTILIZING AUDIO-VISUAL MATERIALS AND EQUIPMENT IN SELECTED ELEMENTARY SCHOOLS OF KANSAS FOR THE 1963-1964 SCHOOL YEAR

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CHAPTER I

THE PROBLEM, DEFINITIONS OF TERMS USED, AND STUDY PROCEDURES

Audio-visual materials, of one type or another, have been used since ancient times, for the communicating of ideas. Technological advances during the twentieth century have created an abundance of audio-visual materials and equipment. These tools of learning are being extensively used in the fields of education, business, religion, and government.[1] Audio-visual materials favor certain conditions for their most effective use. Engstrand illustrated six steps to follow for good usage of audio-visual materials: "Careful selection; teacher preparation; class preparation; presentation of material; follow-up and application; and evaluation of the lesson and methods of use."[2] Audio-visual media improve and enrich instruction only to the extent that schools are prepared to use them. Guidelines for the effective usage of audio-visual materials and equipment have been formulated by many individuals and organizations.

I. THE PROBLEM

Statement of the Problem

The purpose of this study was (1) to investigate and determine

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[1] K. C. Rugg, Improving Instruction, Budgeting Your A-V Program, p. 5.

[2] Agnes Engstrand, Audio-Visual Materials for Improving Instruction, p. 2.

the status of the provisions and facilities for utilizing audio-visual materials and equipment in selected elementary schools in Kansas for the 1963-64 school year and (2) to locate information related to audio-visual education in elementary schools.

Importance of the Study

The author's classroom teaching experiences provided opportunities for utilizing audio-visual materials and equipment in education. While enrolled in an audio-visual methods class, the investigator was made aware of the need for knowing more specifically the type of equipment, materials, and facilities located in Kansas elementary schools. It was felt this study would (1) help to provide current detailed information related to audio-visual provisions and facilities in Kansas elementary schools; and (2) be useful in helping teacher training institutions plan course offerings and course content for pre-service teachers and experienced teachers and administrators.

Limitations of the Study

In this study an attempt was made to determine the status of the provisions and facilities for utilizing audio-visual materials and equipment in selected elementary schools in Kansas for the 1963-64 school year. Only schools that were on the Kansas State Teacher's Association mailing list were sent questionnaires. The quantitative and qualitative accuracy of the data yielded from the questionnaires was dependent upon the information available and the opinions of the individuals providing the information. If less than five, or 1.4 per

cent of the elementary schools reported an item present or lacking, that item was not shown in the tables included in the report. The investigator did not attempt to discover the methods employed by teachers in utilizing specific audio-visual media; nor did she attempt to determine the extent to which audio-visual materials and equipment were utilized.

II. DEFINITIONS OF TERMS USED

Elementary School

A public or private institution of learning including the group level kindergarten through grade eight or any combination of these group levels.

Audio-visual Materials

Audio-visual materials were interpreted to mean teaching materials which appeal to the eye or ear, such as slides, filmstrips, motion picture film, phonograph records, recording tapes, chalkboards, bulletin boards, models, objects, and specimens.

Audio-visual Equipment

Audio-visual equipment was interpreted to mean devices designed to facilitate the use of audio-visual materials, such as motion picture projectors, filmstrip and/or slide projectors, opaque projectors, overhead projectors, projection screens, tape recorders, record players, radios, television sets, public address systems, and teaching machines.

Audio-visual Media

References by the writer to audio-visual media were interpreted to mean both audio-visual materials and equipment.

Provisions

Audio-visual provisions were identified as the personnel, budgets, policies, services, and procedures designated to facilitate the use of audio-visual materials and equipment in classrooms.

Audio-visual Program

An audio-visual program was interpreted to mean an organized plan for the coordination and administration which would regulate and promote desirable selection and utilization of audio-visual materials, equipment, and facilities within a school.

III. STUDY PROCEDURES

In preparation for this study, reference material sources pertaining to the problem under investigation were located. The investigator was not responsible for the construction of the questionnaires that were sent to the administrators of selected Kansas elementary schools. It was the responsibility of the investigator to organize and classify the data from the returned questionnaires. Tables were set up indicating the extent to which certain audio-visual provisions and facilities were available in the selected schools. The questionnaire data and the related literature were analyzed in the light of the purposes of the investigation.

CHAPTER II

REVIEW OF THE LITERATURE

Much has been written in regard to using audio-visual materials and equipment to promote learning. The effectiveness of audio-visual media is dependent on many factors. The investigator will summarize literature she studied concerning audio-visual education in elementary schools.

I. LITERATURE ON THE HISTORICAL BACKGROUND OF CERTAIN AUDIO-VISUAL MEDIA

The beginning of the use of audio-visual media for the purpose of communicating ideas began when "primitive man used signs and gestures to convey his thoughts."[1] As civilization progressed and man's quest for knowledge continued ancient philosophers such as Plato and Aristotle used the field trip as a method of teaching.[2] Visual experiences and materials for instructional purposes were used by the Greeks, Pestalozzi, Froebel, and John Dewey.[3]

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[1]Harry C. McKown and Alvin B. Roberts, Audio-Visual Aids to Instruction, p. 4.

[2]Burl Hunt, "Making a Guide for Community Resources and Resource Persons," Florence H. Lee (ed.) Principles and Practices of Teaching in Secondary Schools: A Book of Readings, pp. 263-265.

[3]Burl Hunt, "Basic Principles, Philosophy and History of Audio-Visual Education," pp. 1-2. (Mimeographed sheet obtained in audio-visual methods class, Feb. 19, 1964.)

The advent of the printing press in the mid-fifteenth century[1] opened up tremendous communication possibilities. The "invention of photography by Niepce and Daguerre in the 19th century and modern engraving processes opened up numerous illustration possibilities."[2]

The invention of various kinds of equipment enlarged the possibilities for increased learning by visual and audio means. Erickson summarized the following historical influences on American audio-visual education:

> 1645--Kircher invented magic lantern, Rome, used drawings for first screen
> 1870--Posed motion pictures in France
> 1889--Eastman patent application for flexible photofilm
> 1887--Magic lantern entertainment by Rev. Goodwin for congregation
> 1891--Edison invented kinetograph camera and viewer
> 1894--Edison peepshow in New York
> 1895--Screen projection in England, France, and United States
> 1896--April 23, New York City, commercial screen projection[3]

During the 20th century technological advancements have produced an abundance of audio-visual media. "Most of the important changes in sound recording and transmission have occurred during the relatively short span of time since 1920."[4]

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[1]Walter A. Wittich and Charles F. Schuller, Audio-Visual Materials: Their Nature and Use, p. xix.

[2]McKown and Roberts, op. cit., p. 5.

[3]Carlton W. H. Erickson, Administering Audio-Visual Services, p. 6.

[4]James W. Brown, Richard B. Lewis, and Fred F. Harcleroad, A-V Instruction Materials and Methods, 2nd edition, p. 189.

Television has gained support as an educative tool since its emergence from the laboratory stage in 1945.[1] Educational television received a boost when the Federal Communications Commission reserved 242 television channels for non-commercial use in 1952.[2]

The vast amount of audio-visual media have created problems. Boula referred to the administrator's feeling of puzzlement when surveying the whole audio-visual field and trying to decide "what, which, when, and how far."[3] It was Boula also who suggested that audio-visual media have been extensively used by the armed forces and in industry because they have the staff, facilities, and money.[4]

Various plans for studying and organizing audio-visual media have been developed at local, state, and national levels. Erickson noted that:

> In 1905 the first administrative unit for visual education was established by the St. Louis Educational Museum for a public school system. By 1923, sixteen city school systems had departments of visual education.[5]

Institutions of higher learning also made their contributions. "The first five educational visual libraries were opened in the year 1914,

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[1] Ibid., p. 211.

[2] Ibid., p. 215.

[3] James A. Boula, "Providing a Complete A-V Service," American School and University, 36:114, May, 1964.

[4] Ibid., p. 115.

[5] Erickson, op. cit., p. 8.

. . . one of which was the University of Kansas."[1]

II. LITERATURE ON THE RESEARCH FINDINGS IN THE AUDIO-VISUAL FIELD

Research findings have been published by the U. S. Office of Education, the National Education Association and other organizations.

F. Dean McClusky devoted "an extensive section to 'Research on Value and Utilization of Audio-Visual Materials' in his A-V Bibliography."[2] Others who have conducted research in the audio-visual field are Charles F. Hoban, James D. Finn, and Edgar Dale. The compounding of a vast amount of research evidence resulted in a presentable statement of what audio-visual materials, when properly used in the teaching situation can accomplish.[3]

Studies of school audio-visual programs have been conducted in various parts of the United States. Investigations utilizing survey procedures were conducted by:

Luminati, in Public Schools of Great Neck, New York[4]

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[1]Burl Hunt, "Basic Principles, Philosophy and History of Audio-Visual Education," p. 3.

[2]Edgar Dale, Audio-Visual Methods in Teaching, p. 65.

[3]Ibid.

[4]Charles Edward Luminati, "An Evaluation of the Audio-Visual Instructional Materials Program in the Public Schools of Great Neck, New York: With Recommendations for the Improvement of Existing Services and Facilities," Dissertation Abstracts, 17:2757, Sept., 1957.

Schofield, in the Public Schools of Newark, New Jersey[1]
Skelly, in fourty-seven counties in Northern California[2]
Hopkinson, in sixty-one public school districts in California[3]
Pearson, in the Minnesota Public Schools[4]

The U. S. Office of Education has been involved in numerous research projects. Funds for studies have been procured under the National Defense Education Act of 1958. Brown, and others stated:

> A recent NDEA-sponsored survey conducted by Dr. Francis W. Noel and his associates provided detailed data concerning the multitude of new media and audio-visual services of the fifty state departments of education in the United States.[5]

A study by Faris, Moldstad, and Frye was supported by NDEA funds and resulted in the preparation of a guide for expanding local production of instructional materials.[6]

Eleanor P. Godfrey directed a project entitled, "Audio-visual Equipment and Materials in Public Schools and Factors Influencing Their

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[1]Edward Twining Schofield, "An Evaluation of the Audio-Visual Program in the Public Schools of Newark, New Jersey," Dissertation Abstracts, 15:210, 1955.

[2]Harry James Skelly, "Audio-Visual Services in Counties of Northern California," Dissertation Abstracts, 16:1826, 1956.

[3]Shirley Lois Hopkinson, "Audio-Visual Programs in California Public School Districts," Dissertation Abstracts, 17:1936, Sept., 1957.

[4]Neville P. Pearson, "Organization and Use of Audio-Visual Education in Minnesota Public Schools," Dissertation Abstracts, 21:2951, Jan., 1964.

[5]James W. Brown, Richard B. Lewis, and Fred F. Harcleroad, A-V Instruction Materials and Methods, 2nd edition, pp. 60-61.

[6]Gene Faris, John Moldstad, and Harvey Frye, Improving the Learning Environment, a Study on the Local Preparation of Visual Instructional Materials, p. iii.

Use," through the Bureau of Social Science Research, Inc.[1] National Defense Education Act grants through the U. S. Office of Education financed the Godfrey study and a follow-up study entitled, "A Feasibility Project to Validate Results of a Previous Study of Media Used and to Identify Critical Factors Which Influence Teachers to Use Media."[2]

A School Management survey revealed data about the cost of audio-visual instruction in United States schools during 1962-63 and 1963-64.[3]

III. LITERATURE ON SOURCES SERVING THE AUDIO-VISUAL FIELD

Edgar Dale noted that basic sources of audio-visual materials were located within the school, school system, local community, in books and pamphlets, and educational journals and magazines.[4] Sources of free and inexpensive materials come from "federal, local, and state governments; professional associations; trade associations and private industry; and foreign governments and travel offices."[5]

Two informative sources concerned with theory, operation, and

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[1] Educational Media News and Reports, Title VII, p. 7, August, 1961.

[2] Educational Media News and Reports, Title VII, p. 6, July, 1964.

[3] "The Cost of Audio-Visual Instruction: 1962-63 - 1963-64," School Management, 8:pp. 82 ff., June, 1964.

[4] Dale, op. cit., p. 32.

[5] Brown, Lewis, and Harcleroad, op. cit., p. 72.

evaluation of audio-visual materials and equipment have been prepared by Finn[1] and Erickson.[2] Material suitable for an in-service teacher education program was published by the Teaching Aids Laboratory at Ohio State University.[3] The McGraw-Hill fourteen volume guide, The Educational Media Index, with its annual supplements, reveals the source, content, and cost of more than 50,000 items.[4]

The National Education Association has provided funds for studies and published information about audio-visual topics. One source commented that the National Education Association's Department of Audio-Visual Instruction "is the largest publisher in the field of audio-visual education and instructional technology."[5]

Governmental agencies and appropriations have provided aid to audio-visual education. Kinder noted: "Ohio was one of the first states to recognize the value of visual education when it set up a Slide and film Exchange in the State Department of Education about 1926."[6]

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[1]James D. Finn, The Audio-Visual Equipment Manual, p. 1 ff.

[2]Carlton W. H. Erickson, Administering Audio-Visual Services, p. 1 ff.

[3]Catharine M. Williams, Sources of Teaching Materials, p. 1 ff.

[4]Richard B. Lewis and Jerrold E. Kemp, "Resources for Teaching and Learning in a Multimedia Setting," The Instructor, 73; 53 and 65, June, 1964.

[5]"DAVI and Federal Aid to AV Education," Educational Screen and Audio-Visual Guide, 44:31, April, 1965.

[6]James Screngo Kinder, Audio-Visual Materials and Techniques, 2nd edition, p. 520.

Another source discussed the legislative enactments that provide federal aid to schools. These laws related to audio-visual media, facilities, and training were revealed:

> The Elementary and Secondary Education Act of 1965; National Defense Education Act; Library Services and Construction Act of 1964; Federal Communications Act, Public Law 87-447.[1]

Within the state of Kansas information and services are obtainable from the Kansas State Department of Public Instruction, The Division of Instructional Services, Curriculum Section, Audio-Visual Consultant.

Brown and others listed ways state universities and colleges serve as audio-visual sources:

> Issue publications; hold conferences and clinics; give speeches and demonstrations; answer personal letters; and provide extension service specialists and consultants.[2]

The bibliography included within the present study lists the titles of publications referred to in the literature review.

IV. LITERATURE ON AUDIO-VISUAL MEDIA, FACILITIES, PROVISIONS, AND PROGRAMS

Engstrand noted audio-visual materials as contributors to greater skill and more knowledge, understanding, and information.[3]

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[1]Buckman Osborne, "A Schoolman's Guide to Federal Aid," School Management, 9:p. 96 ff., June, 1965.

[2]Brown, Lewis, and Harcleroad, op. cit., p. 61.

[3]Agnes Engstrand, Audio-Visual Materials for Improving Instruction, p. 7.

Brandon considered equipment to be only a tool, the use made of the material was the vital element.[1] Criteria for selecting audio-visual equipment were listed by Erickson.[2]

Two sources cited somewhat opposing views about the teacher construction of materials. Faris and others suggested local production programs.[3] Tanzman questioned the manpower and financial expense of locally prepared material, unless justified by great usage of those materials made.[4]

Preliminary findings of a national survey indicated that 95 per cent of all school buildings included in the 1961-62 school survey of public elementary schools had slide and filmstrip projectors; 16mm projectors; and record players.[5] It was predicted that microprojectors will be more portable in the future.[6] It was suggested by one author that the limited amount of equipment in a school be given to one teacher.[7]

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[1]Leonie Brandon, "Seeing Is Believing...and Learning," Grade Teacher, 82:75, January, 1965.

[2]Erickson, op. cit., pp. 166-167.

[3]Faris, Moldstad, and Frye, op. cit., p. 114.

[4]Jack Tanzman, "Roll Your Own?", School Management, 9:49, May, 1965.

[5]John Moldstad, "Summary of AV Research," Audiovisual Instruction, 9:493, Sept., 1964.

[6]William H. King, "Touring the Exhibits with Bill King," Audiovisual Instruction, 9:454, Sept., 1964.

[7]Jack Tanzman, "Give Limited Equipment to One Teacher," School Management, 9:52, March, 1965.

The storage of equipment and materials was a problem discussed by several authors. Tanzman suggested conversion of used space storage in the library, teacher's lounge, or reception center.[1] Suggested plans and contents to be included in audio-visual rooms, instructional materials centers, or audio-visual centers outside the school building were noted by the investigator of literature.

Opinions expressed concerning audio-visual budgets were varied. One common basis of reporting audio-visual costs is on the per pupil average daily attendance.[2] One of the specific cost per pupil figures was quoted by Tanzman to be "$2.03 per elementary school pupil."[3] If a school had funds limited to the specific amounts of one hundred, five hundred, or fifteen hundred dollars, Leonie Brandon provided the list of equipment and materials she felt ought to be purchased.[4]

Two sources cited plans for the training of elementary school students to operate equipment. Erickson's plan included teacher coordinators; student leaders; student teams; and office clerical crew.[5] The "On-demand" and "In-class" approaches were discussed in

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[1]Jack Tanzman, "Using What's Available?", School Management, 9:45, April, 1965.

[2]Kinder, op. cit., p. 539.

[3]Jack Tanzman, "How to Get Started," School Management, 9:42, February, 1965.

[4]Leonie Brandon, "Dollar by Dollar, Here's How to Buy AV Equipment," Grade Teacher, 82:76; 78, January, 1965.

[5]Carlton W. H. Erickson, Administering Audio-Visual Services, p. 212.

detail by Cobun.[1]

According to Freedman and Berg, teachers lack actual usage of equipment and materials because that aspect of teaching was not part of their professional preparation.[2] Two suggested methods for in-service education were self instruction through usage of audio-visual equipment[3] and the usage of television for instruction of teachers.[4]

Evaluation of audio-visual programs is a periodic duty of the individuals in charge of audio-visual media. A plea for public sharing of educational media evaluation was expressed by Guss and Nicholas.[5]

V. LITERATURE ON THE FACTORS RELATED TO AUDIO-VISUAL EDUCATION IN KANSAS

The information noted by the investigator and presented in the preceeding literature review chapters of the report were related to Kansas schools. The suggested sources serving the audio-visual field

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[1]Ted C. Cobun, "How to Train Students to Operate A-V Equipment," The Nation's Schools, 75:84, March, 1965.

[2]Florence B. Freedman and Esther L. Berg, Classroom Teacher's Guide to Audio-Visual Materials, p. vii.

[3]"Self-Instruction on the Use of Audio-Visual Machines Saves Time," Kansas Audio-Visual Communication Organization Newsletter, 2:5; 6, September-October, 1963.

[4]Richard B. Lewis and Jerrold E. Kemp, "Resources for Teaching and Learning in a Multimedia Setting," The Instructor, 73:57, June, 1964.

[5]Carolyn Guss and Donald L. Nicholas, "A Plea for Publicly Sharing Educational Media Evaluations," Educational Screen and Audio-Visual Guide, 44:25, February, 1965.

also benefit the audio-visual education programs in Kansas. Two publications, The Kansas Audio-Visual Communication Organization Newsletter and Kansas Schools provide current and past literature about audio-visual developments in Kansas. The Curriculum Section of the Division of Instructional Services, Kansas State Department of Public Instruction, was the state agency dealing with audio-visual services at the time the study was conducted. Three publications of the Kansas State Department of Publication Instruction were located by the investigator; Audio-Visual and Other Instructional Materials; Techniques of Tape Preparation and Duplication; and Quantity Standards for Audio-visual Equipment. The compiled list of guidelines in the latter publication were used for comparative purposes in the survey conducted by the investigator.

No specific audio-visual aid appropriation was budgeted by the Kansas Legislature in its 1963 session. Indirectly funds were obtained through the budgetary allowance to the Kansas State Department of Public Instruction and the National Defense Education Act matching grants.[1]

Film libraries serving in the state of Kansas as of November 16, 1964 were:

> Higher education: Bureau of Visual Instruction, KU; KSTC, Emporia; Fort Hays KSC, Hays (serving public schools of the state). Counties: Barber, Barton (Great Bend, Hoisington, Ellinwood), Gray, Harper, Meade, Pratt, Sedgwick. City:

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[1] Paul R. Shanahan, State of Kansas, Session Laws, 1963, p. 78.

Atchison, Derby, Haysville, Hutchinson, Kansas City, Leavenworth, Liberal, Manhattan, Newton, Olathe, Pauline, Salina, Tecumseh, Topeka, Wichita.[1]

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[1]Harold Caldwell (Information received by investigator from Caldwell via letter dated November 16, 1964).

CHAPTER III

PROVISIONS AND FACILITIES FOR UTILIZING AUDIO-VISUAL MATERIALS AND EQUIPMENT AS REVEALED BY QUESTIONNAIRE RETURNS

This chapter presents the information revealed in questionnaire returns which sought to determine the status of the provisions and facilities for utilizing audio-visual materials and equipment in selected elementary schools of Kansas for the 1963-1964 school year. The data included in this chapter will deal with the organization and service provisions of audio-visual materials and equipment; school-owned audio-visual materials and equipment; audio-visual classroom facilities; audio-visual budgets; and problems preventing the adequate use of audio-visual media in the responding schools.

In January, 1964, a six page check-list type questionnaire was mailed directly to the principals of eight hundred and ten elementary schools in Kansas. A questionnaire and a copy of the covering letter appear in the Appendix section of this report. Mailing labels were obtained from the Kansas State Teacher's Association. In February, 1964, follow-up letters were sent to the schools that had not yet responded to the questionnaire. The total number of returns received was four hundred and ninety or a 64.9 per cent response. Ten of the returns were not useable so 480 questionnaires were considered in the classification of the data. Questionnaires were returned from ninety of the 105 counties in Kansas. A total of 6,503 teachers was employed

in all the schools responding. A total of 6,329 classrooms was reported.

I. AUDIO-VISUAL PROVISIONS

Table I shows that returns came from elementary schools with various combinations of grade levels. A nearly equal amount of returns came from schools having a grades one through six arrangement and from schools with the grades one through eight organization. The largest enrollment was 58,633 in schools having the grades one through six arrangement. A total of 158,428 students was reported in schools included in the study.

Table II shows that 296 of the responding schools have a person who is responsible for obtaining the audio-visual materials within their school. Study findings revealed that one hundred and sixty-three, or 34 per cent of the schools indicated the person having this responsibility was the school principal or administrator. Fifty-four schools reported having more than one person responsible for handling the audio-visual media within the school.

Table II shows that 301 schools indicated that a local film library, teaching materials center or audio-visual center was available locally. Eighty-eight per cent of the schools indicated that the materials and equipment were obtained from the local library or center on a free basis. Tabulations showed that two hundred and eighty-six or 91.7 per cent of the schools indicated they utilized the audio-visual materials and equipment available from the local library or

TABLE I

GRADE LEVEL ORGANIZATION AND NUMBER OF STUDENTS PARTICIPATING IN STUDY

Type of Organization	Number of Schools	Number of Students
Grade 1-6	150	58,633
Grade 1-8	146	30,574
Kg.-Grade 6	114	46,881
Kg.-Grade 8	39	12,825
Kg.-Grade 5	19	6,176
Grade 3-8	10	2,469
Kg.-Grade 12	2	870
Total	480	158,428

TABLE II

NUMBER OF SCHOOLS WITH AUDIO-VISUAL PROVISIONS

Type of provision	Number of schools with provision
A local city or county film library, teaching materials center or audio-visual center	301
A catalog or list of locally available audio-visual materials and equipment	296
Pick-up and delivery service for audio-visual materials	155
A recent catalog of motion pictures available to teachers in school	415
A person responsible for obtaining and distributing audio-visual materials and equipment	296

center.

Table II shows that the most frequently occurring audio-visual provision was the indicated presence of a recent catalog of film listings available in the responding school. Only one hundred and fifty-five, or 51.5 per cent of the schools indicated that the local film library or center provided pick up and delivery service for audio-visual materials. This service makes materials available for use in the classroom at the time when the teacher needs them.

In response to the question pertaining to the amount of time devoted to audio-visual work by persons responsible for obtaining and distributing audio-visual materials and equipment within a school, 274 of the responding schools indicated that this staff member devoted part-time to audio-visual work. Thirty-two responding schools indicated that the person responsible for the audio-visual program devoted full time to audio-visual duties.

Table III shows that 169 of the responding schools indicated that the responsibility for audio-visual materials and equipment was acquired by individuals because it was a part of the job requirement. One-fourth of the schools reported that individuals were selected because they had formal training in the use of audio-visual materials and equipment.

Table IV illustrates the variety of film sources utilized by the reporting schools. A film source reported by five, or 1.4 per cent of the schools was not listed in Table IV. The University of Colorado and the University of Kansas served in nearly equal capacity as sources

TABLE III

REASONS FOR THE SELECTION OF PERSONS RESPONSIBLE FOR THE AUDIO-VISUAL PROGRAMS IN SCHOOLS INCLUDED IN THIS STUDY

Reasons for selection*	Number of schools
Had formal training in audio-visual aids	121
Had some practical experience	138
Had special interest in audio-visual aids	131
Was part of job requirement	169
Demonstrated administrative ability	60

*It was possible for the respondent to the questionnaire to check more than one reason.

TABLE IV

NUMBER OF SCHOOLS REPORTING SOURCES OF FILMS

Source of films	Number of schools
University of Kansas	147
University of Colorado	155
University of Nebraska	31
Emporia State Teachers College	5
Fort Hays State College	8
Local school system	79
Local public library	7
Government agency	13
Modern Talking Pictures Services, Inc., Kansas City	27
Industrial or business concern	21
Modern Picture Sound Co., Omaha	5
Association Films, Inc., Dallas	8
Miscellaneous library or catalog	94

of films for the reporting schools. Seventy-nine of the responding schools obtained films from their local school system. Tabulations revealed that 85 per cent of the schools included in the survey reported some type of film source. Ten different universities or colleges were listed as film sources. Three hundred and fifty-six schools reported to be utilizing universities or colleges as film sources.

Among the numerous audio-visual services provided in schools, Table V shows that in 449 of the responding schools free and rental materials were obtained for teachers upon request; 438 of the responding schools kept their equipment and materials in repair; and 410 of the responding schools kept their teachers informed of available new materials and acquisitions.

Approximately one-fourth of the responding schools trained students to operate audio-visual equipment. Nearly one-half of the responding schools conducted audio-visual workshops for training in-service teachers to operate and use audio-visual media. Previews on audio-visual materials were arranged in one-half of the total responding schools. Assistance to teachers in planning field trips was provided in over one-half of the responding schools.

The data in Table V shows that only eighty-one of the responding schools were producing audio-visual materials for classrooms. Assistance in producing radio or television programs was the least frequently occurring service provided in the responding schools. One hundred and sixty-nine, or slightly over one-third of the responding schools indicated that they had written policies which regulated the services

TABLE V

NUMBER OF AUDIO-VISUAL SERVICES AND ACTIVITIES PROVIDED IN SCHOOLS INCLUDED IN THIS STUDY

Type of service	Number of schools
Obtaining free and rental materials for teachers upon request	449
Consulting with individual teachers on use of audio-visual materials	359
Keeping teachers informed of available new materials and acquisitions	410
Providing student operators for equipment used in school	106
Keeping equipment and materials in repair	438
Classifying and storing audio-visual materials	306
Training students to operate equipment	128
Selecting and purchasing audio-visual materials and equipment	345
Arranging pre-views on audio-visual materials	241
Providing operators and equipment for community use	136
Conducting audio-visual workshops for in-service teachers	233
Assisting teachers in planning field trips	281
Producing audio-visual materials for classrooms	81
Assisting in producing radio or television programs on commercial stations	56
Making tape recordings for classroom use	174

and activities shown in Table V.

II. SCHOOL-OWNED AUDIO-VISUAL EQUIPMENT AND MATERIALS

Table VI reveals that no item of basic audio-visual equipment was available in all schools. The record player and 16mm sound projector were available in nearly all of the reporting schools.

Abbreviations of trade names used in the report: Co. means Company; Corp. means Corporation; and Inc. means Incorporated. The most prevalent trade name of 16mm projectors reported was the Bell and Howell Co. Projector. Of the six hundred and six 16mm sound projectors reported, 265 were Bell and Howell Co. Projectors. Other trade names of 16mm sound projectors reported were the Eastman Kodak Co., Radio Corporation of America, Ampro Corp., and Victor Animatograph Corp. Projectors. The Bell and Howell Co. trade name was also the most prevalent 16mm silent projector.

Thirty-eight different trade names were listed for record players. The most prevalent trade name of record players was the V-M Corporation Record Player. Over one-half of the responding schools indicated the presence of that brand of record player. Other trade names of record players reported were the Radio Corporation of America, Webcor, Inc., Califone Corp., Zenith, and Newcomb Electronics Corp. Record Players.

Table VI shows that 271 of the responding schools owned filmstrip projectors. The two frequently occurring trade names of filmstrip projectors reported were the Viewlex, Inc., and the Society for

TABLE VI

NUMBER OF SCHOOLS REPORTING OWNERSHIP
OF AUDIO-VISUAL EQUIPMENT

Audio-visual equipment	Total number equipment reported	Number of schools owning equipment
16mm sound projector	606	462
16mm silent projector	60	43
Filmstrip projector	429	271
Combination filmstrip and slide projector	515	334
Opaque projector	268	247
Combination opaque and slide projector	7	6
3¼ x 4 in. lantern slide projector	19	18
2 x 2 in. slide projector	34	31
Tape recorder	471	369
Record player	2,365	468
Radio set (AM-FM)	398	272
Television set	173	127
Public address system	281	257
Portable projection screen	833	430
Overhead projector	81	57
Fixed projection screen	450	189
Teaching machine	39	25
Empty film reel	931	346

TABLE VI (continued)

Audio-visual equipment	Total number equipment reported	Number of schools owning equipment
Microphone	540	288
Electrical extension cord	1,566	395
Projection stand	760	361
Microprojector	20	17
Rear view screen	6	6
Previewer	45	12
Reading equipment	51	39
Copying equipment	12	11
Microscope or bioscope	83	24
Central sound system	6	6

Visual Education, Inc. Filmstrip Projectors. The same trade names were the most frequently reported for the combination filmstrip and slide projector. The filmstrip only projector was not as prevalent in the responding schools as the combination filmstrip and slide projector.

Two hundred and forty-seven, or slightly over 50 per cent of the responding schools indicated ownership of an opaque projector. Approximately 12 per cent of the responding schools indicated ownership of an overhead projector. The most prevalent trade name of opaque projector was the Charles Beseler Co. Opaque Projector. Trade names of overhead projectors reported were Minnesota, Mining, and Manufacturing Co. and Charles Beseler Co. Overhead Projectors.

Three hundred and sixty-nine, or slightly over three-fourths of the responding schools owned tape recorders. The trade names of tape recorders most prevalent and nearly equal in total number reported were the Wollensak and the Webcor, Inc. Tape Recorders.

Figures listed in Table VI indicate 430 responding schools owned portable projection screens. Only 189 schools reported owning fixed projection screens. The two frequently reported trade names for projection screens were Radiant Manufacturing Corp. and Da-Lite Screen Co. Projection Screens.

Table VI reveals the less prevalent types of school-owned equipment reported: the combination opaque and slide projector, the rear view screen, and a central sound system.

Listed in Table VII are the number of responding schools achieving some of the audio-visual equipment standards given in the

TABLE VII

NUMBER OF SURVEYED SCHOOLS ACHIEVING THE KANSAS STATE DEPARTMENT OF PUBLIC INSTRUCTION QUANTITY STANDARDS FOR EQUIPMENT

Type of equipment	Quantity standard	Number of schools achieving standard
16mm sound projector	1 per 10 classrooms	247
Filmstrip and/or 2x2 in. slide projector	1 per 5 classrooms	166
Opaque projector	1 per building	198
Overhead projector	1 per building	50
Microprojector	1 per building	17
Television set	1 per building	104
Fixed screen	1 per classroom	8
Portable screen	1 per building	383
Rear view screen	1 per building	3
Projection roll stand	1 per "heavy projector"*	243
Record player	1 per 2 classrooms	139
Tape recorder	1 per building	305
Radio	1 per 5 classrooms	48

*The words "heavy projector" were interpreted to mean a 16mm sound projector or an opaque projector.

publication, Quantity Standards for Audio-Visual Education.[1] The questionnaire did not provide useable information about all the suggested standards.

Table VII indicates three quantity standards concerned with the field of motion picture projection were achieved by over one-half of the reporting schools for a particular item. Two hundred and forty-seven responding schools achieved the 16mm sound projector standard. The quantity standard of one portable screen per building was achieved by 383 responding schools. Two hundred and forty-three responding schools achieved the quantity standard for projection roll stands.

Slightly over 60 per cent of the responding schools achieved the quantity standard for tape recorders. Table VII shows that the least number of responding schools achieved the quantity standard suggested for each of the following pieces of audio-visual equipment: rear view screen; fixed screen; and microprojector.

Table VIII illustrates the number of schools having equipment, but not in sufficient amounts to meet the State Department of Public Instruction quantity standards. Three hundred and twenty-nine of the responding schools did not achieve the quantity standard for record players. Two hundred and twenty-four did not achieve the standard set for radios. Two hundred and fifteen of the responding schools did not achieve the quantity standard for 16mm sound projectors. One hundred

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[1]Harold Caldwell, and others, Quantity Standards for Audiovisual Equipment, pp. 2-4.

TABLE VIII

NUMBER OF RESPONDING SCHOOLS ACHIEVING THE KANSAS STATE DEPARTMENT OF PUBLIC INSTRUCTION QUANTITY STANDARDS FOR EQUIPMENT COMPARED WITH THE NUMBER OF SCHOOLS REPORTING OWNERSHIP OF AUDIO-VISUAL EQUIPMENT

Type of equipment	Number of schools achieving quantity standard	Number of schools reporting equipment	Difference in number of schools
16mm sound projector	247	462	215
Opaque projector	198	247	49
Overhead projector	50	57	7
Microprojector	17	17	0
Television set	104	127	23
Fixed screen	8	189	181
Portable screen	383	430	47
Rear view screen	3	6	3
Record player	139	468	329
Tape recorder	305	369	64
Radio	48	272	224

NOTE: This table should be read as follows: The 16mm sound projector quantity standard was achieved in 247 of the responding schools. Four hundred and sixty-two schools reported ownership of 16mm sound projectors. Two hundred and fifteen of the 462 schools owning 16mm sound projectors did not achieve the quantity standards suggested by the Kansas State Department of Public Instruction.

and eighty-one did not meet the quantity standard for fixed screens. The quantity standards for record players, radios, sound projectors, and fixed screens were proposed on a per classroom basis.

Of the 360 schools reporting ownership of tape recorders, only sixty-four of those schools did not achieve the quantity standard for tape recorders. The quantity standard for tape recorders was proposed on a per building basis.

Quantity standards for opaque projectors were also set up on a per building basis. Of the 247 schools reporting ownership of opaque projectors, only forty-nine did not achieve the quantity standard.

Table VIII shows only seven schools did not achieve the quantity standards for overhead projectors; three of the schools owning rear view screens did not achieve the quantity standard, and all schools reporting ownership of microprojectors did meet the suggested quantity standards for microprojectors. The total number reportedly owned for each type of equipment was not very large: fifty-seven overhead projectors; seventeen microprojectors; and six rear view screens. It is not possible for the difference figure to be extremely great in size.

Twenty-four different types of audio-visual storage locations were mentioned by the schools included in the survey. One hundred and thirty-eight schools indicated they stored audio-visual equipment in a supply or storage room. One hundred and eleven of the responding schools indicated their audio-visual equipment was stored in the office.

Four hundred and eighteen or 63.5 per cent of all schools reported they kept an ample supply of spare parts for their audio-visual

equipment. In reply to the question, "Do you consider the amount of equipment owned by your school as being adequate?" two hundred and thirty-eight or 49.6 per cent of the responses indicated "yes." A similar question concerned with the adequacy of materials received two hundred and thirty-three or 48.5 per cent affirmative replies.

One hundred and twenty-two or one-fourth, of the responding schools indicated that 100 per cent of the teachers could successfully operate all equipment owned by the school. Eighty-two schools reported that 50 per cent of the teachers could operate the school-owned audio-visual equipment. Of the 122 schools reporting 100 per cent teacher operation of equipment, thirty-nine schools also reported that students were trained to operate audio-visual equipment. It was noted that the total number of teachers within a particular school varied from a two-teacher school to 107 teachers in one school. This variation would influence the percentage figure.

Of the types of audio-visual equipment needed, Table IX shows that 150 of the responding schools indicated they needed overhead projectors. Another expressed need was for opaque projectors, 101 schools indicated that lack. Film projectors and filmstrip projectors were reported to be needed by an equal number of schools. Although no question was asked concerning the needs of schools for materials, approximately two per cent of the schools indicated a need for films or filmstrips.

Among the audio-visual materials owned by schools included in the study, Table X shows that 436 of the responding schools indicated

TABLE IX

AUDIO-VISUAL EQUIPMENT NEEDS OF SCHOOLS INCLUDED IN THIS STUDY AS REVEALED IN QUESTIONNAIRE

Type of equipment	Number of schools needing equipment
Overhead projector	150
Opaque projector	101
Tape recorder	78
Television set	76
Film projector	34
Filmstrip projector	34
Record player	30
Public address system	21
Slide projector	18
Radio	18
Projection screen	15
Copying equipment	11
Teaching machine	7
Microprojector	7
Projection stand	6
Room darkening equipment	5
Reading equipment	5

TABLE X

NUMBER OF SCHOOLS REPORTING OWNERSHIP
OF AUDIO-VISUAL MATERIALS

Type of materials	Number of schools owning materials
Globes	436
Phonograph records	391
Wall maps	390
Feltboards	302
Models, objects, and specimens	190
Recorded tapes	160
Slides	127
Filmstrips	94
Sound motion picture films	91
Exhibits	75
Sets of wall maps	33
Silent motion picture films	22
Phonograph albums	9
Sets of slides	5
Bulletin boards	5

they owned globes for classroom use. Two other items owned by many of the responding schools were wall maps and phonograph records.

Indicated ownership of filmstrips and bulletin boards was written in by the questionnaire respondents in the section titled "Other." It is possible that ownership of such materials was not indicated by some of the responding schools. Ranking low on the list of school-owned materials were phonograph albums, sets of slides, and bulletin boards.

Two hundred and fifty or over one-half of the responding schools indicated they provided a collection of audio-visual books and magazines for the teachers in their schools.

III. AUDIO-VISUAL CLASSROOM FACILITIES

Table XI shows that nearly all of the responding schools indicated chalkboards and bulletin boards were available in all classrooms in their schools. Only two rooms were reported to be without chalkboards. Thirty-two rooms were reported to be without bulletin boards.

In reply to the question, "Are all classrooms in your school adapted for the use of projected materials?" 235 or nearly one-half of the responding schools indicated "yes." Tabulations revealed that 2,301 Kansas elementary classrooms included in the study were not adapted for the use of projected materials.

Three hundred and sixty-six or approximately three-fourths of the responding schools indicated that they used their auditorium or

TABLE XI

NUMBER OF SELECTED KANSAS ELEMENTARY SCHOOLS WITH AUDIO-VISUAL CLASSROOM FACILITIES

Type of facility	Number of schools with facility
Chalkboards in all classrooms	476
Bulletin boards in all classrooms	474
All classrooms adapted for the use of projected materials	235
A central audio-visual room	279
Auditorium or assembly room used for film showings	366
Photography or dark room	17
Sound or speech recording room	22

assembly room for film showings. Two hundred and seventy-nine of the responding schools indicated that they had a central audio-visual room which was used by the entire school.

Ninety of the responding schools indicated more than one classroom building was on their school grounds. Fifty-six of the ninety responding schools which had more than one classroom building, used at least one classroom in each building for audio-visual purposes.

Very few schools reported having sound recording, speech recording, photography, or dark rooms. One hundred and four schools reported having a portable television receiver available for classroom use.

IV. AUDIO-VISUAL BUDGETS

Two hundred and three or slightly over 40 per cent of the responding schools indicated they had an audio-visual budget which was separate or in addition to the library materials budget.

Three hundred and fifty-five or almost three-fourths of the responding schools indicated the purchase of some type of audio-visual media during the year preceding the 1963-1964 school year.

Table XII gives an indication of the items purchased by the schools included in this study. Film projectors and record players were the two most prevalent items of equipment purchased by the responding schools. Filmstrips were the most prevalent type of audio-visual material purchased by the reporting schools.

Table XII indicates that audio-visual media such as, reading equipment, television sets, storage facilities, charts, slides, copying

TABLE XII

NUMBER OF SCHOOLS REPORTING PURCHASE OF AUDIO-VISUAL EQUIPMENT AND MATERIALS FOR THE 1963-64 SCHOOL YEAR

Type of equipment	Number of schools purchasing equipment	Type of materials	Number of schools purchasing materials
Film projector	81	Filmstrips	150
Record player	79	Maps	56
Tape recorder	46	Phonograph records	45
Projection screen	42	Globes	39
Filmstrip and/or slide projector	31	Tapes and reels	16
Overhead projector	30	Film purchase	16
Mobile stand or cart	23	Film rental	12
Opaque projector	13	Models	8
Reading equipment	7	Storage facility	7
Television set	7	Charts	7
Copying equipment	6	Slides	6
Public address system	6	Bulletin boards	5
Microscope or bioscope	5		
Teaching machine	5		
Headsets	5		
Rear view screen	5		

equipment, public address systems, microscopes or bioscopes, teaching machines, headsets, rear view screens, and bulletin boards were purchases reported in only a small number of schools.

It was reported the schools purchased audio-visual equipment and materials through funds obtained from sources such as the general budget, school board, parent-teacher association, government, and school activities.

One hundred and ninety-nine of the responding schools indicated that money had been budgeted for audio-visual purposes for the 1963-1964 school year. No computation of a monetary nature was made concerning the 1963-1964 school audio-visual budgets, because of lack of information and irregularity of budget bases.

In response to the question, "Is this budget sufficient to meet the needs of your school program?" 183 individuals answered "yes"; 100 replied "no"; and 197 gave no response.

Some factors on which the audio-visual budgets were based in the responding schools were needs, teacher and administration requests, student enrollment, and available finances.

V. AUDIO-VISUAL PROBLEMS

Table XIII shows the two greatest problems preventing the adequate use of audio-visual media in the responding schools were: the lack of teacher and administration understanding of audio-visual media and the time-consuming preparation for use of materials. Three other major problems reported were inadequate facilities,

TABLE XIII

NUMBER OF SCHOOLS REPORTING PROBLEMS PREVENTING ADEQUATE USE OF AUDIO-VISUAL MEDIA

Type of problem	Number of schools reporting problem
Insufficient quantity and quality of audio-visual media	150
Lack of teacher and administration understanding of audio-visual media	197
Inadequate facilities	158
Inability of teachers to operate equipment	87
Materials cannot be obtained when needed	155
Equipment in poor working condition	12
Preparation for use of materials is time consuming	194
Lack or have inadequate audio-visual coordinator	3
Finances	20

unobtainability of materials when needed, and insufficient quantity and quality of audio-visual media. The inability of teachers to operate equipment was reported to be a more prevalent problem in schools than having the equipment in poor working condition. The least problem reported was that of the lack or inadequacy of an audio-visual coordinator.

CHAPTER IV

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

I. GENERAL SUMMARY

The problem in this investigation was to determine the status of the provisions and facilities for utilizing audio-visual materials and equipment in selected elementary schools in Kansas for the 1963-1964 school year and to locate information related to audio-visual education in elementary schools.

Literature concerning the audio-visual field was reviewed. The data yielded from questionnaires sent to the principals of selected Kansas elementary schools was analyzed. The investigator's findings, conclusions drawn, and recommendations which follow, are listed by corresponding numbers to aid in the understanding of the material and to avoid repetition of details.

II. FINDINGS AND CONCLUSIONS

1. Three hundred and one schools had some local audio-visual film library or center available. The 91.7 per cent utilization by the schools of such a library or center is to be noted.

2. Pick-up and delivery service was provided by 51.5 per cent of the local libraries or centers.

3. The reported provisions made for audio-visual media indicate the most frequent provision was the presence of a film catalog for

teachers. Eighty-five per cent of the schools included in the survey reported some type of film sources.

4. One-fourth of the responding schools trained students to operate equipment. The assistance given to teachers through in-service training workshops and the previewing and/or use of audio-visual materials was provided by approximately one-half of the responding schools.

5. The more prevalent trade names of equipment were noted in this survey.

6. Record players and 16mm sound projectors were available in nearly all the reporting schools. Overhead projectors were reported to be present in only fifty-seven of the schools included in the survey. The opaque and/or overhead projectors were reported to be needed items in approximately one-fourth of the schools. Films and filmstrips were the type of audio-visual materials needed by most of the schools. Twenty-four different types of audio visual storage locations were mentioned by schools.

7. Some information obtained from the questionnaires was compared with the suggested quantity standards published by the Kansas State Department of Public Instruction. The quantity standards for three items in the area of motion picture projection were achieved by over one-half of the schools for each particular item: sound projector, portable screen, and projection roll stand. A comparison was made between the number of schools achieving the quantity standard for a certain type of equipment and only the schools reported to be owning

such equipment. Those schools not owning equipment were not considered in the analysis. Suggested standards for such items as record players, sound projectors, radios, and fixed screens were organized on a certain amount per number of classrooms basis. Tape recorders, opaque projectors, overhead projectors, rear view screens, and microprojectors were organized on a one per building basis. The comparison showed a greater portion of the schools owning equipment met the suggested standard set on the per building basis than when the standard was on an amount per classroom basis. Overhead projectors, rear-view screens, and microprojectors were not owned by very many of the reporting schools. This factor influenced the low figure achieved when comparing the number of schools owning equipment and the number of schools meeting quantity standards. Schools may have one piece of equipment but it is not adequate for the number of classrooms it has to serve.

8. Nearly all of the responding schools indicated chalkboards and bulletin boards were available in nearly all their classrooms. The small number of bulletin boards purchased by the responding schools, may be due to the present existence of bulletin boards in classrooms.

9. Nearly one-half of the schools indicated that all the rooms in their school were adapted for the use of projected materials. Approximately three-fourths of the responding schools used their auditorium or assembly room for film showings. Over one-third of the responding schools had a central audio-visual room used by the entire school.

10. Very few schools reported having sound recording or speech

recording rooms.

11. Information concerning the amount or basis of the school audio-visual budget was not available to several of the questionnaire respondents. Nearly three-fourths of the responding schools purchased some type of audio-visual media in the year preceding the 1963-1964 school year. A variety of items were purchased. Film projectors and projection screens were among the more prevalent types of equipment purchased. It is to be noted that the rental or purchase of films was not reported by many schools. Perhaps the mere rental of a film was not considered as a purchase. Schools have reported needing both films and filmstrips. One hundred and fifty schools reported purchasing filmstrips but only sixteen schools reported purchasing films. The availability of free materials or the purchase of items for a local audio-visual center, rather than for the individual school, influence the figures quoted for materials purchased.

12. Two audio-visual problems reported by the greatest number of schools were lack of teacher and administration understanding of audio-visual media and the time-consuming preparation of materials. The inability of teachers to operate equipment was reported by some schools to be a problem.

III. RECOMMENDATIONS

1. An increased development of local film libraries and audio-visual centers is recommended on the basis of the high utilization made of the centers and libraries already established.

2. Increased pick-up and delivery service for audio-visual materials would benefit the classroom teacher.

3. The investigator urges teachers to be aware of film sources and utilize their services.

4. The training of teachers and students should be increased. Teacher-training should be adapted for beginning and experienced teachers.

5. The actual type of equipment that teachers must operate in the classroom ought to be considered in the course content of audio-visual classes.

6. A comparison of the four types of school owned equipment, film projectors, filmstrip projectors, opaque projectors, and overhead projectors with the expressed needs of schools for audio-visual media indicates: (1) Schools need the materials necessary to effectively utilize the projectors already present in the schools; (2) Schools lack overhead projectors and opaque projectors but the expressed need for such equipment indicates such items may be appearing in more schools, hence a necessity for educating in the operation of such equipment. The continuous purchase and usage of phonograph records is urged. Ample supplies of materials for all types of school-owned equipment is recommended. Schools need to study carefully the actual use made of equipment and materials in the classroom. Storage facilities must be adjusted to the type of audio-visual media available and be conveniently located.

7. Schools should consider the amount of equipment they have

on a per building basis and per classroom basis. A study based directly upon the State Department of Public Instruction quantity standards could be conducted.

8. A study of the quality and quantity of chalkboards and bulletin boards within individual classrooms is urged.

9. More adaptations need to be made for the use of projected materials, either in the form of adapting individual classrooms, or other rooms within the school for such purposes. The many schools reportedly owning film projectors and portable screens and the expressed desires for owning overhead and opaque projectors require suitable facilities be made available for the effective use of such equipment.

10. Consideration of a speech or recording room facility needs to be considered by the schools owning tape recorders.

11. The investigator recommends schools purchase equipment and materials balancing the known needs with funds available. The exploration of new sources of funds for audio-visual purposes should be made. Sources of free or inexpensive materials are abundant.

12. Improved pre-service training and in-service workshops aimed at creating an understanding of the value of audio-visual media and the actual construction of materials should lessen two of the problems revealed to be present in the schools included in the study. Learning to operate the equipment within a school is a professional responsibility of the teacher. The mere presence of equipment and materials within a school means very little unless such media is effectively used to promote learning. The investigator recommends

that individual schools evaluate the audio-visual media, facilities, and provisions in their locale. Consultant service is available from colleges, universities, and the State Department of Public Instruction. Administration and teacher cooperation would be necessary and desirable. There is abundant literature available concerning evaluation tools that could be used. Sources providing assistance to the audio-visual field were discussed in the literature review portion of this report: Government funds and agencies; audio-visual organizations; studies previously conducted; college and university contributions; local projects; and publications.

After an evaluation study is completed and the needs of a particular school are made more evident, procedures should be employed to make the audio-visual program as effective as possible.

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APPENDIX

Kansas State University

Manhattan, Kansas 66504

School of Education
Holton Hall

January 10, 1964

TO: Elementary Principals of Kansas

FROM: Dr. Burl Hunt, Kansas State University, Manhattan, Kansas

I am conducting a survey concerning provisions and facilities for utilizing audio-visual materials in the elementary schools of Kansas. I am asking you to help me in this study by completing and returning the enclosed questionnaire.

By computing the results of this questionnaire I hope to draw some conclusions which will be helpful to me as an instructor of audio-visual courses. If you would like a report on the results of the study, please indicate this on the last page of the questionnaire.

Thank you for your interest and consideration.

Very truly yours,

Burl Hunt

Burl Hunt
Assistant Professor of Education

BH/cal
Enc.

A SURVEY OF THE PROVISIONS AND FACILITIES FOR UTILIZING AUDIO-VISUAL MATERIALS IN SELECTED ELEMENTARY SCHOOLS OF KANSAS

Name of School:_____

Address:_____
(City) (County)

Enrollment:_____ Number of Teachers:_____ Number of Classrooms_____

Type of School:_____
Grades 1-6 Grades 1-8 Other

Check list checked by:_____, _____
(Name) (Position)

Directions: Please read each of the following statements and place a check in the appropriate space to the left of each statement or write in the answer in the blank space provided. Return this check list to: Burl Hunt, Assistant Professor of Education, Kansas State University, Manhattan, Kansas.

I. ORGANIZATION

___Yes ___No 1. Is a city or county film library, teaching materials center, or audio-visual center provided for schools in your school system:

___Yes ___No 2. Does this establishment provide a catalog or list of materials that are available to your school?

___Yes ___No 3. Does your school utilize the audio-visual materials and services of this establishment?

___Yes ___No 4. Are these materials and services obtained on a free basis?

___Yes ___No 5. Is delivery and pick-up service for these materials provided?

___Yes ___No 6. Is a recent catalog of motion pictures for public schools available for teachers in your school?

___Yes ___No 7. Do you have a person who is responsible for obtaining and distributing audio-visual materials and equipment in your school?

8. If so, what is the exact title of this person? (Write answer in blank)

_____

9. How much time does this person devote to audio-visual work? (Check one)

_____Full-time, _____Part-time.

10. How was the person responsible for audio-visual work selected?

____a. Had formal training in audio-visual aids

____b. Had some practical experience

____c. Had special interest in audio-visual aids

____d. Part of his job requirement

____e. Demonstrated administrative ability

11. From which film library do you obtain films? _____University of Kansas, _____ University of Colorado, _____University of Nebraska, Other _____.

12. What audio-visual services or activities are provided in your school? (Check the appropriate answers):

____a. Obtain free and rental materials for teachers upon request

____b. Consult with individual classroom teachers on use of audio-visual materials

____c. Keep classroom teachers informed of available materials and new acquisitions

____d. Provide student operators for equipment used in school

____e. Keep equipment and materials in repair

____f. Classify and store materials

____g. Train students to operate audio-visual equipment

____h. Select and purchase audio-visual materials and equipment

____i. Arrange pre-views on audio-visual materials

____j. Provide operators and equipment for community use

____k. Conduct workshops for classroom teachers on how to operate and use audio-visual materials and equipment

____l. Assist teachers in planning field trips

____m. Production of audio-visual materials for classrooms

____n. Assist in production of radio or television programs on commercial stations

___ Make tape recordings of programs for classroom use

___p. Other_____

___q. _____

13 Do you have any written policies or procedures which regulate the above services and activities in your school? (Check one answer)

Yes_____ No_____

II. MATERIALS AND EQUIPMENT

Directions: Please indicate the number (and trade name as far as possible) of each of the following items of equipment that your school owns.

Number	Equipment	Trade Name
___	16mm sound motion picture projector	_____
___	16mm silent motion picture projector	_____
___	filmstrip projector	_____
___	combination filmstrip and slide projector	_____
___	opaque projector	_____
___	combination opaque & slide projector	_____
___	3 1/4 x 4 inch lantern slide projector	_____
___	2 x 2 inch slide projector	_____
___	tape recorder	_____
___	record player	_____
___	radio set (AM-FM)	_____
___	television set	_____
___	public address system	_____
___	portable projection screen	_____
___	overhead projector	_____
___	fixed projection screens	_____

Number	Equipment	Trade Name
_____	teaching machines	_____
_____	empty film reels	_____
_____	microphones	_____
_____	electrical extension cords	_____
_____	projection stands	_____
_____	(other)_____	_____

1. Place a check (✓) by the items of equipment owned but not in working order.

2. Do you keep an ample supply of spare parts (i.e., projection lamps, fuses, etc.) on hand? (Check one answer) _____Yes, _____No.

3. Where is the audio-visual equipment stored in your school? (Write answer in blank)_____

4. What per cent of teachers can successfully operate all equipment owned by your school? ☐ 10% ☐ 20% ☐ 30% ☐ 40% ☐ 50% ☐ 60% ☐ ___%

5. Do you consider the amount of equipment owned by your school as being adequate? (Check one answer) _____Yes, _____No.

6. What items of equipment not presently owned by your school do you need? (Write answer in blanks):_____ _____

_____

_____

7. Please indicate the approximate number of the following audio-visual materials that your school owns:

____Sound motion picture films, ____silent motion picture films, ____slides, ____recorded tapes, ____phonograph records, ____wall maps, ____globes, ____models, objects, specimens, ____exhibits, ____feltboards, ____other _____, ____ _____

8. Do you consider the amount of material owned by your school as being adequate? (Check one answer) _____Yes, _____No.

9. Do you provide audio-visual books and magazines for the teachers professional library in your school? _____Yes, _____No.

III. CLASSROOM FACILITIES

1. Are blackboards available in all classrooms in your school? _____Yes, _____No. If No, how many classrooms do not have them? _____.

2. Are bulletin boards available in all classrooms in your school? _____Yes, _____No. If No, how many classrooms do not have them? _____.

3. Are all classrooms in your school adapted for the use of projected materials? _____Yes, _____No. (Consider room darkening, electrical outlets, ventilation, etc.)

4. If answer is No, how many classrooms are not adapted for the use of projected audio-visual materials? (Write the number) _____.

5. Do you have a central audio-visual room which is used by the entire school? _____Yes, _____No.

6. Do you use your auditorium or assembly room for film showings? _____Yes, _____No.

7. Do you have several classroom buildings on your campus? _____Yes, _____No.

8. If so, do you have at least one room in each building which is used for audio-visual purposes? _____Yes, _____No.

9. Do you have a photography or darkroom? _____Yes, _____No.

10. Do you have a sound recording room or speech recording studio? _____Yes, _____No.

11. Does your school have access to local radio and television studies? _____Yes, _____No.

12. Is a portable television receiver available for classroom use? _____Yes, _____No.

IV. BUDGET

1. Do you have an audio-visual teaching materials budget (a budget separate or in addition to library materials budget)? _____Yes, _____No.

2. What equipment and materials have you purchased in the past year?

_____ _____

_____ _____

_____ _____

3. What was the source of money for this purchase? _____

_____

4. What is your audio-visual budget for 1963-1964? _____

5. Is this budget sufficient to meet the needs of your school program? _____Yes, _____No.

6. On what basis is your audio-visual budget determined?_____

_____

_____

V. PROBLEMS

Check any of the following statements considered by you as being obstacles which prevent adequate use of audio-visual materials in your school:

____1. Insufficient quantity of audio-visual materials

____2. Lack of teacher understanding of the value of audio-visual materials

____3. Inadequate classroom facilities

____4. Inability of teachers to operate equipment

____5. Materials cannot be obtained when needed

____6. Equipment in poor working condition

____7. Preparation for use of materials is time consuming

____8. (other reasons) _____

A STUDY OF THE PROVISIONS AND FACILITIES FOR UTILIZING AUDIO-VISUAL MATERIALS AND EQUIPMENT IN SELECTED ELEMENTARY SCHOOLS OF KANSAS FOR THE 1963-1964 SCHOOL YEAR

by

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B. S., Kansas State University, 1959

AN ABSTRACT OF A MASTER'S REPORT

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The purpose of this investigation was to determine the provisions and facilities for utilizing audio-visual materials and equipment in selected elementary schools in Kansas for the 1963-1964 school year and to locate information related to audio-visual education in elementary schools.

The investigator reviewed literature concerning audio-visual history, research, and resources.

A questionnaire was mailed to the principals of eight hundred and ten elementary schools in Kansas. The mailing labels were obtained from the Kansas State Teacher's Association. Information from four hundred and eighty of the returned questionnaires was analyzed. Tables were set up to record the extent to which certain provisions, equipment, materials, facilities, problems, and budgets were present in the selected schools.

Three hundred and one schools reported a local film library or audio-visual center was available. Another frequently occurring audio-visual provision was the indicated presence of a list or catalog of locally available audio-visual media. Eighty-five per cent of the schools indicated some type of film source was being utilized.

One-fourth of the responding schools trained students to operate equipment. Approximately one-half of the schools reported assistance was given to teachers through in-service training workshops; previewing; and/or use of audio-visual materials.

The quantity and brand names of different types of audio-visual equipment were noted in the survey. Record players and 16mm sound

projectors were available in nearly all the reporting schools. Slightly over three-fourths of the responding schools owned tape recorders. Slightly over fifty per cent of the schools indicated ownership of an opaque projector. Approximately 12 per cent of the responding schools owned an overhead projector.

The needs for certain types of audio-visual equipment and materials were expressed. Overhead and opaque projectors were reported as needed items in approximately one-fourth of the schools. Films and filmstrips were reportedly needed in nearly all of the schools.

Some of the information obtained from the questionnaire was compared with the Kansas State Department of Public Instruction list of suggested quantity standards for audio-visual equipment. Analyses of total number of schools reporting any equipment, only schools reporting equipment, and schools achieving quantity standards were made. The greater portion of schools owning equipment met the quantity standard organized on the per building basis than the standard established on the per classroom basis.

Over 60 per cent of the schools reported they kept an ample supply of parts for their equipment. Data indicated a variety of equipment storage locations were revealed in the survey. Almost one-half of the respondents to the questionnaire considered the supply of equipment or materials in their school as adequate.

Chalkboards and bulletin boards were available in nearly all the classrooms included in this survey. Almost one-half of the schools indicated that all the rooms in their school were adapted for the use of

projected materials. Very few schools reported having sound recording or speech recording rooms.

Information concerning the amount or basis of the school audio-visual budget was not available to several of the questionnaire respondents. Nearly three-fourths of the responding schools purchased some type of audio-visual media in the year preceding the 1963-1964 school year. Funds were obtained from such sources as the general budget, school board, parent-teacher association, government, and school activities. Needs, enrollment, and available finances were some of the factors schools reported as budget bases.

Two audio-visual problems reported by the greatest number of schools were lack of teacher and administration understanding of audio-visual media and the time-consuming preparation of materials. The inability of teachers to operate equipment was reported by some schools to be a problem.