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AUDIO-VISUAL PROGRAMS IN CALIFORNIA PUBLIC SCHOOL DISTRICTS

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SHIRLEY LOIS HOPKINSON

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AUDIO-VISUAL PROGRAMS IN CALIFORNIA PUBLIC SCHOOL DISTRICTS

APPROVED BY

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DISSERTATION COMMITTEE

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AUDIO-VISUAL PROGRAMS IN CALIFORNIA PUBLIC SCHOOL DISTRICTS

CHAPTER I

INTRODUCTION

The Problem

This study is a survey of the status of audio-visual education programs in California public school districts, as of 1955-1956. It is hoped that the data presented will provide the basis for evaluating audio-visual education in the state and for making changes that should result in improvements.

Delimitation

The survey is limited to the local public school districts in California which have formally organized programs for the distribution and utilization of audio-visual instructional materials. No attempt is made to survey programs conducted by individual teachers within a school for the implementation of their own teaching procedures in their own classes, programs of private and parochial schools, or of institutions of higher education, other than those of public junior college districts, or those programs conducted on the county-wide level by the audio-visual departments of the county superintendents of schools.

It is further limited by the criteria applied in determining what constitutes a formally organized audio-visual program. The Califormia State Department of Education's Bureau of Audio-Visual Education established as a measure of an audio-visual program the criteria of (1) an officially designated audio-visual director or supervisor who devotes at least half-time to audio-visual duties and (2) an organized library of audio-visual materials. These criteria were modified slightly to allow for recognition of those districts which were attempting to build up their programs and because of limitations either in budget or in personnel had not quite reached these standards. A few districts fell in this class but showed definite evidence of progress toward meeting the standards within a reasonable time. It was, therefore, decided to include in this study: (1) all districts with an audio-visual director who devotes fifty per cent of his time to the audio-visual program and (2) those districts which have a library or organized collection of audio-visual materials, a director who spends at least one-third of his time in connection with audio-visual work, and plan to continue and to enlarge their programs.

Sources of Data

The greater part of the data utilized in this study was obtained from the directors of audio-visual departments and centers and/or from other school administrators within the districts either by mailed responses to the questionnaires or by interviews scheduled for the purpose of filling in the questionnaires. There is almost no material available on this subject other than a few mimeographed or similarly duplicated

reports and catalogs of holdings. These reports, together with the records in the offices of the California State Department of Education, provided some information regarding the districts themselves, on the relationship between certain districts and the county schools department, and they provided a means of verifying reports on audio-visual holdings.

Procedures Employed

The use of questionnaires was combined with a scheduled interview-observation approach in gathering data. A postal card questionnaire (shown in Appendix I) was designed to determine whether or not the district qualified for inclusion in the survey by having an organized audio-visual program with a half-time director or a library of materials and a director who devotes at least one-third of his time to audio-visual work. Certain other items of information about the district such as the number of schools served by the audio-visual department, the number of teachers, and the average daily enrollment were also included in this questionnaire. It was sent to all of the approximately two thousand districts in the state according to the addresses given in the Directory of Administrative and Supervisory Personnel of California Public Schools, which is published by the California State Department of Education.

From an examination of the returns from these districts, sixtynine were found to meet the minimum standards previously established and could properly be said to have audio-visual programs rather than merely being a part of the county audio-visual system. To these sixty-nine districts, a ten page questionnaire (shown in Appendix II) was sent or taken, during the period from June 1955 to March 1956, to secure detailed information as to their audio-visual programs. Most of the Question-naires were mailed with a cover letter from Dr. Francis Noel, Chief of the Bureau of Audio-Visual Education of the California State Department of Education. To those which did not respond within three months, a follow-up letter was sent from the Bureau of Audio-Visual Education and signed by Dr. Noel.

Of the sixty-nine districts qualifying for the study, a total of sixty-one, or eighty-eight per cent, responded to the mailed questionnaire or granted a scheduled interview for the purpose of filling in the information sought. Table 1 shows the number and per cent of each type of district included in the study.

TABLE 1

TYPE OF SCHOOL DISTRICTS INCLUDED IN THE STUDY

| Type of district | Number qualifying | Number responding | Per cent responding | | |
|---------------------------------------|----------------------|----------------------|---------------------|--|--|
| Elementary | 11 | 9 | 82 | | |
| High School | 11 | 8 | 77 | | |
| Junior College | 12 | 12 | 100 | | |
| Districts with Unified Administration | 35 | 32 | 91 | | |
| Total | 69 | 61 | 88 | | |

Included among the districts surveyed are seven eight-year and two six-year elementary districts, all maintaining kindergartens; four combination high school and junior college districts; three four-year high school districts; and one six-year high school district whose schools include the grades from seventh through twelfth. In addition, there are sixteen twelve-year and fifteen fourteen-year unified districts, all of which maintain kindergartens, and one twelve year district which maintains no kindergarten.

Definition of Terms

Because of the ambiguity of certain terms used in the audiovisual field and because of the different interpretations placed upon them by different persons, it was thought advisable to establish a definition for several terms used in this study.

Audio-visual program - the sum total of the activities involving the use of audio-visual materials and equipment in the schools.

<u>Audio-visual department</u> - the organization which assumes major responsibility for the audio-visual program.

<u>Center</u> - the physical plant or area which houses the materials and equipment and the audio-visual staff.

<u>Audio-visual director</u> - the staff member who is charged with overseeing the program, frequently called the department head, coordinator, or supervisor.

<u>Audio-visual materials</u> - all of the sensory materials of instruction as distinguished from printed materials (materials such as films, filmstrips, recordings, and the like).

Audio-visual equipment - the mechanical apparatus and machines which project or reproduce the audio-visual materials and make them available to the learners.

<u>Professional staff</u> - those employees who have professional status in accordance with the classification and salary scale of their district. In most cases this classification requires education and preparation equal to or above that required for certificated teachers.

Non-professional staff - those employees who have not had the education and training of the professional staff but who perform clerical or technical duties in connection with the audio-visual program.

Curriculum type - the kind of curriculum pattern such as separate subjects, broad fields, integrative core, child centered, or other.

<u>Curriculum form</u> - the actual form of the written curricular guide as adopted by the district officials, such as a printed course of study or a framework statement.

Need for this Study

A study of this type has not yet been done specifically on the district level in the state of California. In fact, there has been no similar study since the McPherson survey of 1938. As the audio-visual movement in California was only in its early stages at that time, that study now gives no correct picture of audio-visual education in the state.

At the present time, 1955-1956, a survey of audio-visual education on the county level is being conducted by a member of the staff of the Bureau of Audio-Visual Education. In order to have the complete picture of audio-visual education in the state, it was necessary to gather comparative data on audio-visual education in the districts which are not served or are only partially served by the county department. The officials of the Bureau of Audio-Visual Education were seeking someone who

would undertake a similar survey on the district level to complement the county level study. It was upon their suggestion and because of their encouragement that this study was made.

In recent years, California's population and school facilities have seen a great and rapid growth, and it appears that this growth will continue. New schools have been built as the need became urgent, and educational programs have been expanded tremendously. It is now time to assess, to evaluate, and to make plans for future expansion. The audiovisual program, as well as all other phases of the educational program, must constantly be evaluated. Before this can be done, it is necessary to have data on the present situation. Guides are needed for planning audio-visual programs in new school districts and for improving the programs of districts which have doubled or tripled their size in a short time. It is believed that the information gathered by this survey could be used in evaluating audio-visual education in California to-day and in planning for future development.

The National Education Association surveys, the second of which was recently completed, point the way for more specific studies of a local nature. It is hoped that this will be only one of a number of state and regional studies to be made in the near future.

It is also hoped that this study may be of some value to school officials in states which have not yet developed their audio-visual programs to the degree that has been reached in California, a pioneer in

These surveys are reported in two articles. (1) "Audio-Visual Education in City School Systems," National Education Association Research Bulletin, XXIV (December, 1946), pp. 131-170. (2) "Audio-Visual Education in Urban School Districts, 1953-54," National Education Association Research Bulletin, XXXIII (October, 1955), pp. 91-123.

audio-visual education. Through the reports on this study and the companion study on the county level, the rest of the country will have an opportunity to learn what actually has been done in California in the audio-visual area.

A Survey of Related Literature

There have been two surveys of audio-visual education on the national level. The first was a cursory survey of audio-visual programs in city school systems conducted in 1946 by the Research Division of the National Education Association. This study was concerned primarily with the materials and equipment available for use in audio-visual programs, rather than with methods of organization and administration; was confined to city school systems; and, since it was concerned with the audiovisual situation in the United States as a whole, the data were not interpreted with regard to geographical area. For that reason, data concerning the audio-visual programs in California school districts lose their identity completely. The results, while interesting, do not shed any light on the situation in California, with which we are concerned in this present survey. The second survey, 2 made in 1953 and 1954, follows the same plan and again does not differentiate by locality. The surveys are useful in comparing the situation in California with that in the United States as a whole, however. The value of these

National Education Association Research Division, Audio-Visual Education in City School Systems (Washington, D.C.: National Education Association, 1946).

²National Education Association Research Division, <u>Audio-Visual</u> Education in <u>Urban School Districts</u>, 1953-54 (Washington, D.C.: National Education Association, 1955).

studies to the present study lies, therefore, in providing an overall background and a basis for comparison.

In 1939, at the University of California, a survey was made, the results of which were incorporated in the doctoral dissertation of Harry Maxwell McPherson. 1 This survey was concerned with the organization, administration, and financial support of visual instruction in California. The picture presented by his study is no longer an accurate representation of the situation in California, since the major impetus to the audiovisual movement in California came during the years 1944 to 1946, and the state and county audio-visual departments which are of such importance in the state today did not exist until after 1946. The McPherson study did not attempt to cover elementary districts of under three hundred average daily attendance nor junior college districts. It is of interest today only as historical background, as a point of comparison to show the growth of and changes in the status of audio-visual education in the state, and because its recommendations may have had some influence in bringing about the establishment of the state Bureau of Audio-Visual Education. As such, it is of value, but it has long ceased to be an accurate description of audio-visual education in California.

Another doctoral dissertation, that of Lelia Taggart Ormsby, was completed at Leland Stanford Junior University in 1948.² It is concerned

Harry Maxwell McPherson, "The Organization, Administration and Support of Visual Instruction in California" (Unpublished Ph.D. dissertation, Dept. of Education, University of California, 1939).

²Lelia Taggart Ormsby, "Audio Education in the Public Schools of California" (Unpublished Ed. D. dissertation, Dept. of Education, Leland Stanford Junior University, 1948).

with audio education in the public schools of California and is limited entirely to the audio phase of audio-visual education. Stress is placed upon educational radio programs, and the use made of them in the public schools, and the recording of such programs for future use, with some attention given to the equipment used. It is concerned with the amount of use and with equipment holdings, rather than with organizational or administrative procedures. While it had great value as a source of information about the use of radio education in the state, the figures are now out-of-date and cannot be interpreted as a measure of the present situation.

A third doctoral dissertation, that of John Charles Schwartz, large written at the University of California at Los Angeles, is devoted to the problem of developing a set of evaluative criteria for measuring the effectiveness of organized audio-visual programs in public school systems. The programs of six school districts were evaluated in order to revise and refine the criteria. The Schwartz criteria were used to some extent in determining areas to be examined in the present survey.

The administration of the audio-visual programs of the junior colleges of southern California was the subject of a doctoral dissertation written in 1952 at the University of California at Los Angeles by Lal Chand Mehra.² Actually only sixteen of the thirty-five junior

¹John Charles Schwartz, Jr., "Evaluative Criteria for an Audio-Visual Instructional Program" (Unpublished Ph.D. dissertation, Dept. of Education, University of California, Los Angeles, 1949).

²Lal Chand Mehra, "The Administration of the Audio-Visual Programs of the Junior Colleges of Southern California" (Unpublished Ph.D. dissertation, Dept. of Education, University of California, Los Angeles, 1952).

colleges in southern California were surveyed. The study is limited to an examination of administrative practices. In some cases the information is now out-of-date, as in the case of Chaffey College, which now has an entirely different type of audio-visual organization from that reported. The study has not been of much value to the present survey since the latter is concerned with a much broader approach to the audio-visual programs than a survey of administrative practices. A number of colleges included in Dr. Mehra's study belong to unified school districts, but he has surveyed them as separate entities. The presentstudy is concerned with them only as they affect their district's audio-visual program. The two studies have little in common. In the three years which have elapsed since the first study, many changes have been made, not only in the number and type of holdings, but in organizational patterns as well.

In 1953, E. Glen Fulkerson's doctoral dissertation was completed at the University of California at Los Angeles. Although the title of his study leads us to believe that it is an analysis of the use of audiovisual materials in the schools of southern California, actually all of the teachers in the sample which he observed were employed in one county. Three hundred teachers were observed and their work was analyzed from the standpoint of kinds of materials and equipment used, frequency and amount of use, purposes in use, and ability to use the materials as assessed by a rating scale. Because of the necessity of anonymity for the teachers involved, no information is given concerning specific districts, and the

lE. Glen Fulkerson, "An Analysis of the Use of Audio-Visual Materials in the Public Schools of Southern California" (Unpublished Ph.D. dissertation, Dept. of Education, University of California, Los Angeles, 1953).

only area included is that of use of materials. His study can be used with the present study for comparison in the area of use, but this is the only relationship.

Henry R. Hansen's study of the administration of California county audio-visual facilities, completed at Leland Stanford Junior University in 1949, is interesting in its analysis of the county programs. Since the data were collected seven years ago, it is not entirely reliable as an accurate representation of the situation as it exists today. Because of the subject matter, county audio-visual facilities, it is not of value to the present study.

Henry R. Hansen, "The Administration of California County Audio-Visual Facilities" (Unpublished Ed. D. dissertation, Dept. of Education, Leland Stanford Junior University, 1949).

CHAPTER II

AUDIO-VISUAL EDUCATION IN CALIFORNIA

Historical Background

The years 1920 to 1927 saw the initial movement in California toward the establishment and operation of organized audio-visual programs in the larger school systems. This period coincided more or less with the nation-wide awakening of interest in the use of audio-visual materials in instructional programs and in the establishment of city and district audio-visual departments. At this time the term visual education, or visual instruction, was currently in use; the term audio-visual came into popularity at a somewhat later date. Since these early programs were the beginnings, however, of what later became known as audio-visual education, we shall use the term audio-visual throughout this account to signify any sensory materials of instruction.

Los Angeles City Schools established a Department of Visual Education in 1920, and two years later, Berkeley and Sacramento employed Directors of Visual Instruction and organized their audio-visual departments. The following year, Oakland City Schools expanded their picture collection into what could properly be called an audio-visual materials center.

During the year 1923 a number of events of importance in the

audio-visual world occurred in California. The Berkeley Public Schools Visual Education Department became the first audio-visual department in the country to publish a graded list of available films, thus starting a trend of considerable proportions. F. Dean McClusky made the first accurate survey of audio-visual education in the United States. In July, at the Cakland Convention of the National Education Association, the audio-visual movement was given official recognition. It was at this meeting that the Department of Visual Instruction was created. The same summer, audio-visual education was given a place in the program of the World Conference on Education held in San Francisco.

On May 9, 1924, the Oakland Public Schools began broadcasting an experimental series of educational radio programs over a local commercial station. There is some question as to whether this project can be credited with being the first educational radio series in the nation, since the New York City Schools sponsored a program a few months earlier in the year. Carroll Atkinson, however, thinks that Oakland should be credited with having the first educational radio broadcasts because their programs were "more definitely organized and intelligently carried out over a period of time." Subjects treated in the experimental programs included geography, arithmetic, English, literature, penmanship, physical

Curriculum Committee on Visual Education, <u>Visual Instruction</u> (Berkeley, California: Berkeley Public Schools, 1923).

²July 6, 1923. This department later became the Department of Audio-Visual Instruction, and is still in existence.

³Carroll Atkinson, Radio Programs Intended for Classroom Use (Boston: Meador Publishing Company, 1942), p. 85.

training, and group guidance for classes going into high school. A committee of teachers observed classrooms receiving the lessons and made suggestions for the improvement of the radio presentation. 2

A second series of programs was sponsored during the 1924-25 school year, together with an in-service radio training school for teachers. Twenty teachers were selected and given a series of lessons in the technique of broadcasting, the preparation of radio lessons, and the utilization of these lessons in the classroom.³

At the end of the first year of the series, the Superintendent's Council recommended:

That classroom instruction by radio be continued and gradually enlarged as proper reception and interest developed. That all new school buildings under construction should be provided with conduits for wires to lead from a central receiving set to a loud speaker connection in each classroom.4

In accordance with this recommendation, thirty-six radio lessons were presented during the school year 1925-26. It was found that arithmetic, penmanship, physical education, social studies, and manual activities were most suitable for instruction over the air.

Important contributions of this experiment were:5

lvirgil E. Dickson, "An Experiment in Classroom Instruction by Radio in the Public Schools of Oakland, California" (Unpublished manuscript, University of California at Los Angeles Library, no date), p.1.

²Ibid., p. 2.

^{3&}quot;Teaching Radio to Teachers," Sierra Educational News, XXI (1926), p. 596.

⁴Dickson, op. cit., p. 3.

⁵Henrietta A. Johnson, <u>Classroom Instruction</u> by Radio in the <u>Oakland Public Schools</u> (Oakland, <u>California</u>: Oakland <u>Public Schools</u>, 1925), p. 3.

- 1. The demonstrated importance of cooperation and of supplementary work by classroom teachers.
- 2. The presentation of the first convincing proof that pupil activity and learning could be secured from the radio, and
- 3. The highlighting of the absolute necessity of careful preparation and effective presentation of radio lessons.

The first regional educational radio broadcasts for school use in the United States were initiated by the California State Department of Education, starting in November, 1924. The series, which was primarily intended to supplement the instructional programs of the rural schools of the state, was broadcast weekly. Grace C. Stanley, the State Commissioner of Elementary Schools, directed the series which included selections by musical organizations of the public schools and talks on California history and geography. In the geography lessons, "The Old Man of the Rivers" took a boy and a girl on imaginary journeys along great rivers of the world. These travelogues were, perhaps, the most significant contribution of the series.

Another early experiment in educational radio was the series of Standard School Broadcasts which originated largely as the result of a public relations gesture of the Standard Oil Company of California. When the company agreed to finance the concerts of the San Francisco Symphony Orchestra, it was given the privilege of broadcasting the concerts.²

lGrace C. Stanley, "Radio in California Schools," Journal of the National Education Association, XV (1926), p. 156.

²Adrian F. Michaelis, "History of Standard Hour and Standard School Broadcast Programs" (Unpublished manuscript, University of California at Los Angeles Library, no date), p. 2.

Since the programs were so successful, the Standard Oil Company organized its own symphony orchestra and began its series of the Standard Symphony Hour on October 23, 1927.

The following year, the company decided to broadcast a series of music programs for the schools. On October 18, 1928, the Standard School Broadcast course in music appreciation was inaugurated. This program was *designed specifically for the purpose of explaining the music being heard weekly on the Standard Hour. These morning programs included a description, analysis, or dramatization of the music to be played on the Standard Symphony Hour that evening. The programs were presented in terms which the school children could understand and were illustrated by instrumental music. The educational content was supervised by music educators. In the beginning, the program consisted of a single lesson, but it was later divided into an elementary and an advanced course which were presented in semester blocks, correlated with the regular school semesters. Teacher's Manuals were provided to all interested teachers and principals. As the program developed, other materials such as pamphlets, pictures, and maps were supplied to the schools to be used in conjunction with the radio broadcasts.

When the series began, only seventy-two schools on the Pacific Coast were equipped for radio reception.² At the present time, 1956, it is estimated that over four thousand schools make use of the broadcasts, with a listening audience of over one-half million students.

¹Michaelis, op. cit., p. 3.

²Ibid.

As the result of interest in the Standard School Broadcasts, a number of school superintendents in northern California requested Station KPO in San Francisco to initiate an experimental series of broadcasts for intermediate and junior high school pupils in the spring of 1929. These broadcasts led to the establishment of the California School of the Air in 1929 over Stations KPO, San Francisco, and KFI, Los Angeles. During the school year of 1929-30, additional Pacific Coast stations began to carry the programs, and the name of the series was changed to Pacific Coast School of the Air. 1

The Pacific Coast School of the Air was financed by the Standard Oil Company and directed by Paul M. Pitman. The National Broadcasting Company provided the radio facilities.² The State Superintendent of Schools, Vierling Kersey, gave his approval to the programs and appointed a state radio education committee who were charged with:³

- 1. Determining the values of education by radio,
- 2. Grading the values of radio education,
- 3. Cooperating with broadcasting agencies to see that school radio programs were carried out without any noxious advertising approaches, and
 - 4. Finding out what kind of radio equipment is best for schools.

 Although the Pacific Coast School of the Air was discontinued

lArmstrong Perry, Radio in Education (New York: Payne Fund, 1929), p. 130.

²Paul M. Pitman, "Radio in Education," <u>California Quarterly of Secondary Education</u>, V (1929), p. 67.

³ Ibid.

after the end of the 1929-30 school year, it made a significant contribution to the field of radio education during the early years of the audiovisual education movement.

While the radio education experiments were being made, additional school districts were establishing audio-visual departments and building up collections of materials. By 1927, Oakland, Berkeley, Los Angeles City, Los Angeles County, San Diego, Long Beach, San Francisco, and Pasadena all had functioning materials centers and, by 1929, the Los Angeles City Schools audio-visual department had grown until it consisted of six sections (Photographic, Art, Assembly, Editorial and Research, Circulation, and Motion Picture Sections) staffed by a director, three assistant directors, two teacher-assistants, six specialists in photography, art, and research, and a number of clerical workers.

During this same period of time Harry H. Haworth, Director of the Pasadena City Schools Department of Visual Instruction, had been developing a program of in-service education for the teachers of his district. All elementary school teachers and all high school teachers, according to their department of specialization, met once each semester for instruction in the operation of projection equipment, suggestions for the use of various types of materials, and for previews of new films or other materials. Individual conferences were held when requested, and visits to the audio-visual center were encouraged.²

lCharles Roach, "Visual Instruction Service in a City System: Abstract," National Education Association Proceedings, LXVII (1929), pp. 942-943.

²Harry H. Haworth, "Administration of a Department of Visual Instruction," Junior-Senior High School Clearing House, V (1930), p. 218.

The objectives of the Pasadena program were listed as follows:

- 1. To introduce the visual instruction method to teachers and to assist them in the correct and economical use of this method.
 - 2. To secure visual aids.
- 3. To organize visual aids in a scientific manner corresponding to the course of study.
 - 4. To circulate these aids among schools.

At its spring conference in 1931, the Visual Aids Section of the California Teachers Association, Southern Section, adopted a program of teacher training as its main objective and appointed a committee which was charged with:²

- 1. Ascertaining from deans of education, presidents of teachers colleges, and other administrators just what was being done throughout the United States and in California in particular, to train teachers in this field,
- 2. Securing through personal interviews the advice and cooperation of the educational leaders close at hand,
- 3. Submitting to the various publications in the field accounts of successful experience in the use of visual tools and articles of interest regarding the work of the committee.
- 4. Preparing a bibliography of visual aids for the use of instructors in teacher-training institutions who might wish to inform themselves more fully in this field,

Haworth, op. cit., p. 219.

²Margaret S. White, "News Briefs from California," <u>Educational</u> Screen, XI (1932), p. 143.

- 5. Considering the preparation of a handbook on visual aids,
- 6. If the results of the survey so justified, presenting to the State Board of Education a plea for the inclusion of training in the use of visual aids in the curriculum of California teachers! colleges, and
- 7. Being prepared to furnish definite help to teacher-training institutions on request.1

Pasadena Junior College, through its Visual Education Committee, conducted a survey in 1932 to determine the extent of use made of audiovisual aids and the needs of teachers, both those which could be met and those which could not be met.² The survey was launched mainly because the criticism had been made that motion pictures were emphasized to the exclusion of other types of audio-visual materials. The survey showed that this criticism was not valid. The types of materials in descending order of frequency of use were found to be as follows: pictures and wall charts, demonstrations, lantern slides, models, still films (filmstrips), field trips, motion pictures, microscopic projection, and opaque projection.³ The departments using these aids, in descending order of frequency, were: House and Fine Arts, Biological Sciences, Commerce, Physical Science, English, Social Science, Language; and the following to a very small extent: Mathematics, Engineering, Music, Industrial Arts, with Physical Education not using any. 4 Of a total of one hundred and two

lDid.

²Harry H. Haworth, "A Survey of the Use of Visual Aids in Pasadena Junior College," Educational Screen, XI (1932), p. 105.

^{3&}lt;sub>Ibid</sub>.

⁴Tbid.

teachers reporting, forty-nine per cent stated that they made use of audio-visual materials in their teaching.1

An outstanding example of experimentation in the use of audiovisual materials in the period prior to World War II was the project conducted by the American Council on Education in the Santa Barbara City Schools during the years 1938-1940.

Francis Noel, who later became Chief of the Bureau of Audio-Visual Education in the California State Department of Education, was at this time a teacher in the Santa Barbara school system. He had for some time been interested in experimenting with the use of various kinds of audio-visual materials and had developed his hobby of photography as an aid in his teaching. Upon the recommendation of Paul Hanna of Stanford University, who was directing a curriculum revision program for the Santa Barbara City Schools and who believed strongly in the use of adequate curriculum materials, Noel was given a part-time appointment as Audio-Visual Director.

With help from Curtis Warren, the Superintendent of Schools, Franklin Howard, of the Santa Barbara News-Press, and the local Parent Teacher Association, all of whom were convinced of the need for an adequate supply of instructional materials and for improved coordination in the securing of rental or free materials, Noel was able to establish an audio-visual department with a budget of twenty-six cents per pupil in average daily attendance.² (Three years later this amount was increased

lbid.

²L. Paul Saettler, *The Origin and Development of Audio-Visual Communication in Education in the United States* (Unpublished Ph.D. dissertation, University of California, Los Angeles, June 1953), p. 810.

to one dollar and fifty-six cents per average daily attendance.)¹ Additional aid was secured from the Works Progress Administration and the National Youth Administration. In time the audio-visual department grew from a small department with a part-time director and two motion picture projectors to a large establishment with a staff of over seventy-five persons.

On a tour of the eastern section of the country, Noel met Charles Hoban, Jr., who was attempting to select a city for the American Council on Education Committee on Motion Pictures in Education's proposed experimental project.² As a result of this meeting, Hoban visited Santa Barbara and, because he was favorably impressed by the existing program, and thought that the local situation would lend itself well to the study, he chose the school system for the project.³

Reginald Bell of Stanford University served as a consultant in the study, which was administered by the curriculum division and implemented by the department of visual instruction.

It was agreed that the film program was to be developmental, that teacher participation was to be entirely voluntary, that motion pictures were to be kept in educational perspective in proper relation to other instructional materials, and that the curriculum was not to be

lbid.

²The Committee wanted to explore the contributions of motion pictures in a developing curriculum.

³Reginald Bell, <u>Motion Pictures in a Modern Curriculum</u> (Washington, D. C.: American Council on Education, 1941), p. iii.

⁴Ibid., p. 9.

thrown out of joint to accommodate experimental investigations which were likely to develop. Out of the general purposes set up by the Council, specific objectives, techniques, and procedures were to be evolved as the participants gained insight into the problems of using motion pictures in evolving school programs.

For two years, an intensive program of experimentation and evaluation of films in the classroom was followed. The first year was largely exploratory, while the second included a more systematic study in selected curriculum areas.

It may be assumed that this experiment had a tremendous influence upon educators in other school districts in the state and throughout the country.

During the school year 1937-38, a survey was made of the organization, administration, and support of visual instruction in California by Harry Maxwell McPherson. In this survey it was found that audiovisual education was confined for the most part to the larger city school districts and that practically no audio-visual materials were available to teachers in smaller districts or in rural areas. McPherson recommended the formation of county or joint county audio-visual departments to centralize services and a Division of Visual Instruction in the State Department of Education with a qualified supervisor.

The year 1939 was a crucial one for audio-visual education in California. This was the year that the Los Angeles County Council made what came to be known as the O'Connor decision. This decision stated that no money could be used for audio-visual materials in the cities and

¹ Ibid., p. 10.

counties of California because there was no legal provision for such expenditure in the state school code.

Such a ruling could have had an extremely serious effect upon the development of audio-visual programs in the state and might have succeeded in almost completely abolishing it from the state, had not the audio-visual leaders, together with a number of interested educators and administrators, united to fight for a negation of the decision by a change in the school law. In the spring of 1940 such a change in the school code was passed.

Apart from certain large city district and county school programs and scattered experimental projects, audio-visual education in California, as we know it today, did not come into being until after 1945. The less wealthy and the rural areas of the state had practically no audio-visual service until after that date.

The year 1945 is an outstanding year in the history of audicvisual education in California and marked the beginning of what might be called the state-wide program. Movements which culminated that year in concrete steps forward had been growing for several years. The results did not come about over night, yet 1945 can still be designated as the turning point and as the beginning of the current audic-visual program.

The Division of Audio-Visual Education in the State Department of Education was authorized by the State Board of Education on April 17, 1944, and was established one year later. According to Dr. Francis W. Noel, who was given the appointment as Chief of the department and who has served continuously in the position since the department was opened, "It took more than six years of continuous effort to establish it and

procure the first legislative financial support for the division's activities."

In establishing a program for the Division of Audio-Visual Education, the state was divided into three regions and meetings were called in each region to provide interested educators, administrators, representatives from teacher-training institutions, and audio-visual leaders with an opportunity to share in the fundamental planning.²

A major question to be decided upon was: "Should the state establish a number of material depositories under direct state control or should such depositories be developed under the cognizance of the county superintendents of schools and/or local district superintendents, with the state providing, if possible, some financial support and professional direction in the operation of the services?" At each regional meeting it was decided that the latter suggestion was preferable, and so the decentralized system, with the state supplying financial aid and professional assistance and guidance to the local audio-visual departments, was established.

During the first year of the Bureau's existence, initial steps were taken in the areas of: (1) policy establishment, (2) procurement of funds for the state-wide program, (3) gaining support from educational leaders in the state, (4) a credential requirement in audio-visual

¹Francis W. Noel, "Audio-Visual Education Reports," California Journal of Secondary Education, XXI (1946), p. 143.

²Francis W. Noel, "State Programs of Audio-Visual Education," National Society for the Study of Education, 48th Yearbook (Chicago: University of Chicago Press, 1949), p. 170.

^{3&}lt;sub>Ibid</sub>.

education for teachers, (5) formation of audio-visual professional groups, (6) regional conferences on state-wide problems, (7) a conference on teacher-training, (8) aid in the establishment of three new county audio-visual departments, (9) a handbook for the county departments, (10) a handbook for principals, (11) summer courses in audio-visual education in state teacher-training institutions, and (12) the formation of the Educational Film Institute in Hollywood.

The Bureau was then able to turn its attention to specific problems in teacher education, audio-visual centers in cities and counties, appraisal and evaluation of materials and equipment, appraisal and evaluation of audio-visual programs, research, and establishing a bulletin of information.²

In 1946, the State Superintendent of Public Instruction appointed a Committee of twenty-six educators to determine the existing teacher needs in training to utilize audio-visual materials and equipment. This committee decided upon the content of a course in audio-visual education to be given in all of the teacher-training institutions of the state. Serving on the committee were college presidents, deans of education departments, superintendents of schools, curriculum directors, audio-visual directors, and teachers.³ Their report was published by the State Department of Education under the title Developing Standards of Teacher Competency in Audio-Visual Education. Standards had now been set up for a

Noel, "Audio-Visual Education Reports," p. 143.

²Tbid.

³Noel, "State Programs of Audio-Visual Education," p. 171.

program of teacher education in audio-visual methods and materials.

In order to make the standards effective and to assure that the new state-wide program which was to be fostered would not be wasted because of lack of teacher knowledge and preparation, the State Board of Education passed the following resolution which was soon incorporated into the State School Code.

Institutions to be considered for approval to offer the training and to make the recommendation for the kindergarten-primary, general elementary, junior high school, general secondary, junior college credentials must, effective July 1, 1947, maintain a course or the equivalent, of at least two semester units in value, in audio-visual-radio education and require that such course be successfully completed by each applicant for one or another of the credentials listed above. 1

A law was passed which required that all teachers who wished to renew their previously acquired credentials must earn credit in a two-unit course in audio-visual-radio education before the renewal could be granted.

In order to provide financial aid to the less wealthy school districts, the County Service Fund was established. Every year, the state legislature sets aside an amount to equalize the difference between districts in ability to support their educational programs. A part of these funds is allocated to the support of audio-visual programs. The money is apportioned through the counties and distributed by them to the districts within their jurisdiction. Thus a centralized program of support was established throughout the entire state, and the development of the local and county audio-visual programs was assured.

lCalifornia, Administrative Code, Title 6, Section 818.

One of the outstanding features of audio-visual education in California has been the series of two-week audio-visual and curriculum workshops, co-sponsored by the Bureau of Audio-Visual Education of the State Department of Education and various state colleges, for the purpose of improving the utilization of instructional materials. The first of the series was held at San Diego, in August, 1947, and the following at Donner Summit Lodge, Soda Springs, California, in the summers of 1948, 1950, and 1952.

The themes and specific purposes of each conference have varied to conform with current needs, but the over-all objectives formulated by the Bureau of Audio-Visual Education have been common to all. The success of these workshops has been confirmed by the results of various evaluations, developments in audio-visual education within the state, and by increased expressed interest in the workshops and requests for their continuation.

The first workshop emphasized improvement of the administration of audio-visual programs in the cities and counties. A four unit course for pre-service and in-service training of teachers in the use of audio-visual materials was prepared to serve as a guide to institutions which offer courses in audio-visual education to meet credential requirements, and for school districts which attempt to provide in-service training to teachers already on the staff.

Suggestions from the participants resulted in the calling of another workshop for the following year in which audio-visual problems could be approached by curriculum workers and audio-visual directors studying better utilization of audio-visual materials in curriculum

programs. It was believed that an environmental situation, with participants living and working together with opportunity for informal recreational activities, would be most conducive to the understanding of common problems. Sixty participants, representing thirty-seven county and city school districts, attended the conference, together with six members of the State Department of Education staff who acted as consultants. 1

The three main areas studied at this meeting were: (1) inservice education of teachers, (2) group work techniques, and (3) curriculum planning.²

The 1950 workshop was called for the expressed purposes of:3

- 1. Evaluating the effectiveness of audio-visual services to date in terms of the curriculum patterns of each county or city system represented.
- 2. Using these data to establish a base line of needs and services for future planning.
- 3. Analyzing and devising means of meeting specific curriculum needs in terms of the Framework for Public Education in California.

 (The Framework is a curriculum publication of the State Department of Education designed to serve as a guide for the improvement of public school curricula throughout the state.)

¹California. State Department of Education, An Evaluation of the Curriculum-Audio-Visual Workshop, Donner Summit (Sacramento: State Department of Education, 1949), p. 4.

²Ibid., p. 2.

³California. State Department of Education, A Summary of the Audio-Visual and Curriculum Services Workshop, Donner Summit, August 6-19, 1950 (Sacramento: State Department of Education, 1950), p. 1.

The group of fifty-two participants in this workshop was composed of twenty audio-visual coordinators, ten general supervisors, five
curriculum coordinators, and nine consultants from the State Department
of Education or from Sacramento State College.

The 1952 workshop was called for the purpose of working on the various problems pertinent to developing more efficient use of instructional materials in the school curriculum. The theme of the session was stated as "Developing More Efficient Use of Instructional Materials through Curriculum Planning." The group of sixty-eight participants was almost evenly divided between audio-visual and curriculum personnel.

The workshop concentrated its efforts on the following specific problems:³

- 1. The role of the consultant in in-service education of teachers.
- 2. Long range planning.
- 3. How to get better utilization of all materials.
- 4. Expediting curriculum materials, and
- 5. Techniques for improving the quality of utilization.

The belief is held by a great many audio-visual and curriculum leaders within the state that these workshops have been of tremendous value in bringing together interested personnel and in pointing out the place of audio-visual materials in the curriculum.

^{1&}lt;u>Tbid.</u>, p. 4.

²California. State Department of Education, Report of the 1952 Donner Summit Audio-Visual Curriculum Workshop (Sacramento: State Department of Education, 1953), p. 4.

^{3&}lt;sub>Ibid</sub>.

Audio-visual education in California in the last thirty years has developed from a few scattered departments in the larger cities through a period of experimentation in the use of different types of materials and methods, prodded along by recommendations from leaders such as McPherson, McClusky, and Noel, and from groups such as the California Teachers' Association Visual Aids Section, until it has finally reached the enormous state-wide program of today.

In 1944, there were sixteen city and ten county audio-visual departments in the state. By 1948, the number of city departments had increased to twenty-two, and forty-seven of the fifty-eight counties had established departments. At the time of this survey all of the counties either have their own department or are served by that of a neighboring county, and there are sixty-nine city or district audio-visual departments.

Francis Noel believes that there are several factors which contributed to the development of audio-visual education in California.

They are: (1) the readiness on the part of the lay public and educators to initiate such a program, (2) the sound economic position of the state which made possible the support of public education more adequately than in many other states, and (3) the fact that the state leadership in education is dynamic and is established on a professional, rather than a political, basis.

Framework for Audio-Visual Education in California Today

The State Program

Audio-visual education in California is represented on the state

level by the Bureau of Audio-Visual Education in the State Department of Education. This department was authorized on April 17, 1944, and it began to function the following year.

It was decided that, because of the geographical area to be served, it would be wise to adopt a state program of decentralization, with the state department attempting to supply professional advice, leadership guidance, and some financial aid to local audio-visual programs, rather than attempting to serve as a source of supply of audio-visual materials for the entire state.

The personnel of the Bureau is composed of three professional employees (the Chief of the Department and two audio-visual consultants), a photographic technician, and four secretaries.

The following functions were designated for the Bureau of Audio-Visual Education:²

- 1. Achieving teacher competency in the proper selection, utilization, and evaluation of audio-visual devices and materials in terms of good instructional practices,
- 2. Obtaining greater financial support for the procurement of materials and equipment by local audio-visual units,
- 3. Influencing commercial companies to produce materials more nearly meeting educational needs and securing state funds for model and diorama materials which are not available on a commercial basis,
- 4. Achieving a better selection and use of materials in terms of curricular needs at all educational levels,

¹Before 1947, the Division of Audio-Visual Education.
²Noel, "State Programs of Audio-Visual Education," p. 171.

- 5. Improving local programs of audio-visual education and developing more effective services,
- 6. Disseminating pertinent information about audio-visual education to school personnel,
- 7. Developing a better understanding of audio-visual education by promoting interest in a professional organization such as a state audio-visual education association.
- 8. Obtaining better facilities for using these materials in classrooms, both in old school buildings and in new ones, and
 - 9. Developing a state wide radio-education program.

The Bureau of Audio-Visual Education was established also to serve as a materials and equipment center for the staff of the State Department of Education in Sacramento.

The policies set up for the Bureau include:

- 1. Promotion of pre-service and in-service teacher education in audio-visual education departments,
- 2. Promotion of the development of county and city audio-visual education departments,
- 3. Help to improve services of existing audio-visual education departments,
- 4. Encouragement of provision of classroom facilities for the use of all kinds of audio-visual education instructional materials,
- 5. Encouragement of research in the production and utilization of audio-visual education materials, and in the development of skills

Noel, "Audio-Visual Education Reports," pp. 145-146.

in seeing and hearing,

- 6. Dissemination of information of general interest to school people regarding audio-visual education,
- 7. Provision for audio-visual education services to the staff of the State Department of Education,
- 8. Encouragement and assistance in the appraisal and evaluation of equipment and materials, and
- 9. Cooperation with producers in developing materials and equipment more nearly meeting instructional needs.

One of the most important functions of the Bureau of Audio-Visual Education is to assist local school administrators to establish their own audio-visual centers and departments. Conferences are held, talks are given by Bureau personnel at institute meetings, and meetings have been held to set up evaluative criteria for audio-visual programs.

The Bureau prepares and releases reports and articles on audiovisual education. It is a policy of the Bureau to encourage and lend assistance to individuals and groups preparing such material for publication. Reprints are published and distributed usually without charge.

The Audio-Visual-Curriculum Workshops are sponsored by the Bureau in an attempt to bring about an improved understanding on the part of educators of the place of audio-visual materials in the curriculum and an increase in the amount of materials used in the proper manner.

Another service of this department has been the encouragement and assistance given to the county schools audio-visual departments.

Visits are made for the purpose of giving advice in the setting up of new programs and services and for evaluating existing programs. Because

of the provision of state funds to the county school departments, the Bureau is in a position to establish a close relationship with these units.

Much encouragement has been given by Bureau officials to the formation and fostering of audio-visual professional organizations. They have given support to local programs sponsored by these organizations, especially to those of the Audio-Visual Education Association of California.

Recently, the Bureau has aided in two surveys of the present status of the audio-visual education programs in the state. One, conducted by Harry Skelly, of the Bureau of Audio-Visual Education staff, is concerned with the audio-visual programs on the county level, and the other is the present study of such programs on the local and district level.

Programs at the County Level

At the time of the McPherson survey in 1938, twenty of the fifty-eight counties in the state provided some audio-visual services to the schools under their jurisdiction and six others were starting audio-visual programs but had not made sufficient progress to be classified as counties with actual programs. At the time of the present study (1955 and 1956) fifty-three counties have functioning audio-visual programs. Three of those without audio-visual departments contracted with a neighboring county for service to their schools. Only two counties are without any service.

¹ McPherson, op. cit., p. 10.

The County Superintendent of Schools is charged with the supervision of instruction, including instructional materials, in all elementary school districts with less than three hundred average daily attendance and with curriculum coordination in the high schools of the county.

In a report to the Bureau of Audio-Visual Education of the State Department of Education, the Audio-Visual Committee of the California School Supervisor's Association made a number of recommendations concerning the organization of county level audio-visual programs. They listed the fundamental objectives of county audio-visual programs as:

- l. Development among teachers of the ability and willingness to make effective use of audio-visual materials,
- 2. Provision of an adequate supply of readily available audiovisual materials which have been chosen to enable teachers to develop and
 interpret the subject matter of the curriculum in the clearest possible
 manner,
- 3. Provision of a guide to available audio-visual materials, services, and equipment so that each teacher can locate immediately materials which can be used in teaching,
- 4. Provision of equipment and building facilities to enable teachers to make convenient and effective use of available audio-visual materials, and
- 5. Provision of consultant service on curricular selection, utilization in terms of acceptable instructional practices, and evaluation of audio-visual materials.

It was this committee's opinion that audio-visual services adequate to meet the needs of classroom teaching can best be provided

by a large administrative unit, therefore, they recommended that county-wide programs be organized and developed. Even the largest schools could not afford to own all the materials and equipment that their teachers might need. Money would be spent on materials and equipment that might seldom be used, but which would have to be purchased by each school and kept idle except for the times when actually needed. Renting films from commercial sources or from university and college film libraries was not recommended for individual schools because of the expense involved, the rigid advance scheduling which frequently makes it impossible to secure the films when the teachers wish to use them, and the lack of materials suitable for younger students available from these sources. There is no commercial or university materials center in California which attempts to supply filmstrips, slides, transcriptions, or any other audio-visual materials except for films to schools for teaching purposes.

It was suggested by the committee that a county or large city school system having an average daily attendance of twelve thousand pupils is sufficiently large to maintain an adequate audio-visual program. For counties with a lower average daily attendance than twelve thousand, a joint service or cooperative program between two or more counties was recommended. They warned against allowing the administrative unit to become so large that close contact between the audio-visual center and the schools which it serves becomes impossible, whether deliveries are made by truck, mail, or express. It was believed that a center can serve schools within a radius of sixty to seventy miles satisfactorily.

Services to be provided by the county audio-visual departments should include, according to the recommendations of the committee:

- 1. A library of audio-visual materials,
- 2. A system of distribution of these materials and equipment which schools can not economically provide for themselves, which are adapted to circulation among schools, and which teachers and pupils are able to use effectively,
- 3. Advisory service by the audio-visual department staff on problems involved in selection of materials and use of equipment,
- 4. Meeting, display, and preview rooms for the use of teachers in the county,
- 5. A workshop where locally made audio-visual materials may be produced,
 - 6. An equipment maintenance service, and
- 7. A guide to or handbook of audio-visual materials and services provided by the audio-visual department.

It was also suggested that an in-service teacher training program be provided.

The suggested staff should be headed by a director or supervisor who has had experience in:

- 1. Audio-visual equipment and maintenance,
- 2. Organization of a library of audio-visual materials,
- 3. Classroom teaching procedures,
- 4. Planning and production of school-made materials,
- 5. Planning and production of radio programs,
- 6. Curriculum development, and
- 7. Administrative practices.

Other staff members should include a trained librarian, charged

with the cataloging and classification of the materials collection; a technician, charged with the inspection and repair of materials; clerical personnel, charged with all the secretarial and stenographic routines; and a photographer, charged with the production of local materials.

It was suggested that each district be responsible for the purchase of all audio-visual equipment and materials permanently placed in the district and that each district should share in the purchasing of the materials which are circulated among all of the schools in the county, because these materials are part of the learning equipment of each school.

The cost of operating the audio-visual center should be met by contributions from each district based on the size of the district and its ability to pay, and by a contribution from funds at the disposal of the superintendent of schools.

Thus was established a set of criteria for the development of audio-visual programs in the county school departments. The counties were not required to comply with these suggestions, but it was thought that they might be helpful to those establishing or expanding their audio-visual programs, and that they might serve as a means of evaluating such programs.

The State Bureau of Audio-Visual Education has encouraged the establishment and development of county audio-visual programs both by advice and guidance and by financial aid. Bulletins, conferences, and direct contacts are among the devices used to provide the former. The relationship between the State Bureau of Audio-Visual Education and the county audio-visual departments is strictly consultative. The Bureau does not direct the county programs nor approve or disapprove their work,

thus leaving the counties in a relatively autonomous status.

The legal basis for the maintenance of cooperative audio-visual services is found in the California State Education Code. Sections 18941 to 18945 authorize the county superintendent of schools, with the approval of the county Board of Education, to establish and conduct audio-visual services for the benefit of the schools of the county. Section 18946 authorizes school districts to contract with the county superintendent of schools for such services and to use the school district funds in payment for these services. Section 18944 provides for agreements by county superintendents and districts as to payment for the costs of such services.

County expenditures for audio-visual programs have increased tremendously since 1945. This increase can be attributed to a large extent to the state encouragement of such programs and by the provision for financial aid through the County School Service Fund. California is one of the few states with a centralized support program for audio-visual education. Each year the state legislature allots an amount (three dollars per average daily attendance of the state plus smaller sums from miscellaneous sources) to this fund which is used to equalize the differences between school districts in their ability to support their entire educational program, of which the audio-visual program is a part. County School Service Fund allocations are apportioned among the counties on a basis of need stated by the budget of the county, modified by decision of the State Department of Education with respect to the expressed need and available funds. Allotments are made for specific purposes, such as audio-visual education, only, and the funds must be used for that purpose.

The County School Service Fund helps counties which lack adequate tax bases and other sources of revenue. Counties are encouraged to provide an increasing amount of local support, either by taxation or by assessment upon districts. In some instances, local districts are required to pay for audio-visual services supplied to their schools by the county schools department. This may take the form of a variable amount per classroom teacher, or per average daily attendance, a combination of both, an amount per school, per types of service, a minimum fee, or a combination of any of these. Occasionally it is a fixed amount. The money secured from districts within the county is used for purchasing audio-visual materials for the county collection. The county service fund money is used mostly for salaries, operating expenses, transportation of materials, maintenance, and occasionally for the purchase of new materials.

Services which school districts may obtain from the county audio-visual departments vary. The small districts and rural schools, with no audio-visual department of their own, usually depend entirely upon the county services for their audio-visual materials. The county provides not only motion picture films but filmstrips, flat pictures and study prints, recordings, dioramas, specimens, slides, and, in short, all types of materials. A district with a fairly adequate audio-visual program of its own may arrange to borrow only films from the county depository. Occasionally a number of districts within a county may join together to support a film depository to which all contribute and from which all may draw films for use in their schools. The larger city school systems and districts which have well developed audio-visual programs of

their own usually do not or should not draw upon county resources. This enables the available collection to be shared by the less wealthy and smaller districts.

California School Districts

There is a very complicated system of school district organization prevailing in the state today. This factor adds to the complexity of audio-visual education on the district level.

The four most common types of districts found in California are elementary, union high school, junior college, and unified school districts. In addition, there are union elementary, joint elementary, joint union elementary, joint union high school, city elementary, city high school, city junior college, city unified, and joint junior college districts. All of these districts can, of course, be grouped into the general classifications of elementary, high school, junior college, and unified.

At one time, there were over four thousand school districts in California. By 1945, this number had been reduced to two thousand five hundred and fiftynine. Even this number was too large for efficient and practical educational administration. Since 1945, the State Commission on School Districts and, later, the State Board of Education through the Bureau of School District Organization, have conducted an intensive program of education and persuasion to effect a still further reduction in the number of school districts in the state. By 1953, the number was reduced to one thousand and seventeen, and on July 1, 1955,

¹California Schools, XXIV (1953), pp. 477-87.

it was one thousand eight hundred and eighty.1

The regular elementary school district is the basic district in California. The union high school law provided for the bringing of a number of elementary districts together into a single high school district without affecting the existing structure of the elementary districts. A junior college district may include several high school districts, or it may be identical with one high school district. Because of this arrangement, quite frequently there may be two or even three separate administrations governing the educational program in a given area. The law provided that whenever the boundaries of an elementary district and those of a high school district become coterminous, the area shall automatically become a unified school district.

As of July, 1955, there were ninety-two unified districts, one thousand five hundred and thirty-three elementary districts and twenty-two junior college districts within the state. Of the elementary school districts only five hundred and four had over three hundred average daily attendance, with the largest group (six hundred and ninety-six districts) having less than one hundred average daily attendance.

In order to present a clear picture as concisely as possible, for the purposes of this study it was believed that the school districts surveyed should be grouped into the four general classifications of elementary, high-school, junior college, and unified districts. Junior colleges are classed as separate districts only when they are legal districts. Districts which include both a high school and a junior college

¹California Schools, XXVI (1955), pp. 529-536.

are classed as high school districts. In the same manner, the junior colleges maintained by a unified school district are not considered apart from the unified district. Cities which have separate elementary and secondary districts, which have a unified administrative staff, and which are served by one audio-visual department are classed as unified although they may legally be two districts. A district audio-visual program serving an elementary district of grades kindergarten through eight needs to have a somewhat different program from one which serves only grades kindergarten through six. Similarly, a unified district which serves the grades through the twelfth will not have to provide the same services as one which serves an educational program with a fourteen year span. It was found that districts with audio-visual programs which qualified for and responded to the extensive survey consisted of nine elementary school districts, with eight spanning kindergarten through the eighth grade and one with grades from kindergarten through sixth; eight high school districts, with one consisting of grades seven through twelve, three consisting of grades nine through twelve, and four composed of grades nine through fourteen; twelve two year independent junior college districts; and thirty-two unified school districts, with sixteen composed of kindergarten through the twelfth grade, fifteen composed of kindergarteen through the fourteenth grade, and one with grades one through twelve. Unified school districts had three times as many functioning audio-visual programs as any other type of district.

CHAPTER III

RESULTS OF THE SURVEY

This survey attempts to ascertain the present status of audiovisual programs in California public school districts. Sixty-nine districts met the minimum standards for inclusion in the survey, and sixtyone of these responded to the questionnaire, either by mail or during an
interview. The sixty-one districts were carefully studied in terms of
their audio-visual programs, holdings of materials and equipment, personnel, expenditures in the audio-visual area, and services performed. The
findings are reported in the following chapter.

Whenever possible an attempt has been made to show comparisons between elementary, high school, junior college, and unified districts. At the same time, data are interpreted for the districts as a whole.

Background Information

Dependence upon County Services

of the sixty-one districts surveyed, forty report that they are able to secure materials from the county audio-visual department. Thirty-five enter into a contractual agreement with the county school department and five are extended such service without a formal contract. Table 2 gives the number of districts in each classification which are served with and without contract and the type of materials secured. It also

gives the number of districts in each classification which are not served by any county audio-visual department.

TABLE 2
COUNTY SERVICES TO DISTRICTS

| Type of District | Served b | y County No Contract | Materia Films Only | als Secured All Materials | Not Served by County |
|---------------------|----------|----------------------------|--------------------------|---------------------------------|-------------------------|
| Unified | 17 | 1 | 11 | 7 | 1 1 t |
| Elementary | 5 | 1 | 2 | 4 | 3 |
| High School | 6 | 1 | 3 | 4 | 1 |
| Jr. College | 7 | 2 | 5 | 14 | 3 |
| Total | 35 | 5 | 21 | 19 | 21 |

Replies to the questionnaire show that there is no uniformity among counties in the assessments upon districts for the county audio-visual services. In some counties there are several different plans from which the district may choose. For example, in one county some districts reported that they pay a rate of seventy-five cents per average daily attendance, others pay two dollars and twenty-five cents per booking, and still others stated that they are limited to one thousand films per year at a rate of three dollars per film used. In some counties, the assessment is based entirely upon the average daily attendance or the number of teachers in the schools. In some, it is based on the assessed valuation of the local district, a combination of assessed valuation and student enrollment, or the number of teachers and average daily attendance.

Occasionally the fee is set at a flat rate or definite amount per year, or there may be a charge of a fixed amount per film used or per booking. All of the above answers were given by one or more districts in response to the questions relating to payment for county services.

One district reported that it pays a fixed yearly rate of one hundred dollars, another pays seven hundred and thirty-nine dollars, and a third pays nine hundred dollars. Other districts reported their charge per average daily attendance as thirty-five cents, forty-two cents, and seventy-five cents. The rate per film is one dollar in one county and three dollars in another.

The fees paid are determined, of course, by such factors as ability of the district to pay, other sources of revenue for the county, and the amount of the state school fund money available.

The county film library as a source of film supply varies greatly from district to district. The participants in the survey were asked to give the per cent of films used which were borrowed from the county. Responses varied from six per cent to one hundred per cent in the unified districts, with a mean of sixty-eight per cent; from one and one-half per cent to ninety-eight per cent in the elementary districts, with a mean of fifty per cent; from thirty per cent to ninety-seven per cent in the high school districts, with a mean of sixty-four per cent; and from thirty per cent to eight per cent, with a mean of fifty per cent, in the junior college districts.

Curriculum Backgrounds

In an attempt to determine the curriculum pattern which is most

prevalent in the districts qualifying for the survey, questions were asked regarding the type and form of the curriculum of the district.

Each district was asked to classify their curriculum pattern under one of the following general types: (1) separate subjects, (2) broad fields, (3) integrative core, (4) child centered, and (5) all others. Unified districts were asked to differentiate further between their curricula on the elementary and secondary levels.

It is possible that the meaning of "child centered" as a pattern or type of curriculum was not clear to all of the respondents. That may account for the relatively few districts appearing to have this type of curriculum pattern.

Table 3 gives the number of elementary, high school, and junior college districts which claimed to have each curriculum pattern. Table 4 gives the same information for the unified districts, broken down by elementary or secondary grades.

TABLE 3

CURRICULUM PATTERNS IN ELEMENTARY, HIGH SCHOOL,
AND JUNIOR COLLEGE DISTRICTS

| Type of District | Separate Subjects | Broad Fields | Integrative Core | Child Centered | Combi- nation | Total |
|---------------------|----------------------|-----------------|---------------------|-------------------|------------------|-------|
| Elementary | 5 | 1 | 0 | 0 | 3 | 9 |
| High School | 7 | 0 | 0 | 0 | 1 | 8 |
| Jr. College | 11 | 1 | 0 | 0 | 0 | 12 |
| Total | 23 | 2 | 0 | 0 | 4 | 29 |

The results of this survey show that the majority of the elementary, high school, and junior college districts responding still retain the traditional separate subject curriculum. Fifty-five per cent
of the elementary, eighty-five per cent of the high school, and ninetytwo per cent of the junior college districts reported that their curricula fall into this classification. The same trend is evident in the
secondary school curricula of the unified districts. Only in the elementary curricula of the unified districts are curricula other than separate
subjects predominant. The broad fields type led in this group.

TABLE 4
CURRICULUM PATTERNS IN UNIFIED DISTRICTS

| Grades | Separate Subjects | Broad Fields | Integrative Core | Child Centered | Combi- nation | Total |
|------------|----------------------|-----------------|---------------------|-------------------|------------------|-------|
| Elementary | 4 | 8 | 6 | 1 | 7 | 26 |
| Secondary | 18 | 3 | 1 | 0 | 4 | 26 |

Several districts reported that their curriculum pattern is a combination of the types listed in the questionnaire. One elementary district which includes the grades from kindergarten to eight reported that its junior high schools have the integrative core curriculum while the curriculum below the seventh grade could more properly be called child centered. Another district reported its curriculum to be a combination of broad fields and integrative core. A third combination included separate subjects in the upper elementary grades and a child centered and broad fields curriculum in the lower grades. One high school

district includes several junior high schools. For them the curriculum is integrative core, while that of the high schools is separate subjects.

The combinations in the secondary grades of the unified districts are: separate subject and broad fields, separate subject and integrative core, and a combination of all four types. In the elementary grades of the unified districts are such combinations as: separate subjects and broad fields, broad fields and integrative core, broad fields and child centered, and integrative core and child centered. One district reported using all four types within its elementary grades.

Form of Curriculum

In order to discover whether a flexible or rigid form of curriculum was most prevalent in the districts qualifying for the survey, each district was asked whether its curriculum was a printed course of study adopted by the Board of Education, a series of resource units based on subject areas, a series of resource units based on areas of experience, a cooperative general framework statement, or a framework statement supplemented by resource units. Twenty-seven per cent of the districts reporting have a formal curriculum (a printed course of study), ten per cent have a series of resource units based on subject areas, three per cent have resource units based on areas of experience, thirty-five per cent have general framework statements, and twenty-five have framework statements supplemented by resource units.

Table 5 shows the percentage of each of the four classifications of districts which reported having each curriculum form.

TABLE 5

PER CENT OF DISTRICTS HAVING EACH FORM OF CURRICULUM

| Type of District | Printed Course | Subject Units | Experi- ence Units | General Frame- work | Framework and Units | Combi- nation |
|------------------|-------------------|------------------|--------------------------|---------------------------|------------------------|------------------|
| Elementary | 55 | | | 33 | 12 | |
| High School | 17 | 16 | | 50 | 17 | |
| Jr. Col. | 30 | | 10 | 60 | | |
| Unified | 20 | 20 | | 16 | 归 | 3 |

Resources of the Audio-Visual Departments

Information was secured from the directors regarding holdings in sound and silent films, filmstrips, disc recordings, magnetic recordings, maps, charts, dioramas, slide sets, study prints, mounted pictures, models, specimens, projector stands, microphones, record players, recorders, radios, screens, stereoscopes, production equipment, and the following types of projectors: sound and silent motion picture, filmstrip-slide, regular slide, overhead, and opaque. Tables 43 through 46 in Appendix III give in detail the holdings as reported by the district audio-visual directors. The tables also give information as to the type of district, average daily attendance, the number of teachers, and pupil and teacher ratios for each type of material and equipment. For example, one elementary district has 161 teachers, an average daily attendance of 4,000, and 136 sound films. It has one sound film for every 36 pupils and for

every 1.2 teachers. A district can be identified by its average daily attendance for the 1954-55 school year. School officials in the district can compare their holdings and their ratios with other districts of a similar type and with a comparable average daily attendance.

In general, the larger districts tend to have the larger number of holdings, but this is not always the case. Policy, such as a decision to rent motion picture films rather than to purchase them may cause some districts to deviate from the normal pattern.

In some districts, equipment is decentralized or, occasionally, even owned by the individual schools. Unless one is careful to note these instances, the equipment holdings may be misleading.

Table 6 gives the total holdings of each type of audio-visual material or equipment for unified, elementary, high school and junior college districts, and the average of each type of holding per district. For example, the elementary districts in this survey have a total of 1,395 sound films, an average of 155 per district. By consulting the tables in Appendix III we can ascertain the amount of deviation of each district from these average figures. We must be careful, however, not to assume that the averages represent actual holdings, which may deviate considerably from the average figure. It is interesting to note the difference among the several types of district in regard to any one particular type of holding. The eight high school districts have an average of twenty-one and one-half sound films per district, while the nine elementary districts have an average of 155 sound films each. At the same time the twelve junior college districts average sixty films per district, and the thirty-two unified districts have an average of almost 1,210 films

each. A closer comparison is possible between the high school, elementary, and junior college districts, than between any of the former and the unified districts, which are for the most part larger districts composed of a number of schools and, for that reason, requiring a much larger number of holdings than the smaller districts. Type of material or equipment also makes a difference in the holdings. The junior college districts have an average of almost 158 magnetic recordings, while the elementary districts, which do not make much use of this particular aid, have only an average of one and one-half per district. When care is taken in the interpretation, however, the table does provide for some interesting comparisons.

Table 7 shows the growth in certain audio-visual holdings for six representative unified school districts over an eighteen year period. From these figures it is evident that there has been a tremendous but not uniform increase. Los Angeles now has almost nineteen times as many lomm sound films as in 1937. During the same period of time, Long Beach's holdings in lomm sound films increased twelve times, while Oakland's increased only seven times. Growth in school age population and in the number of schools within the district probably accounts for most of this variation.

In three of the districts, the number of silent film holdings decreased. This can undoubtedly be attributed to the transition from silent to sound films and to the fact that districts are now purchasing sound films whenever possible and discarding worn out and obsolete silent films.

In three instances, the total number of models, specimens, and

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TABLE 6
SUMMARY OF HOLDINGS BY DISTRICT TYPE

| Type of Holding | Unif. Dist. | Avg. per Dist. | Elem. Dist. | Avg. per Dist. | H.S. Dist. | Avg. per Dist. | J.C. Dist. | Avg. per Dist. |
|---------------------|------------------|----------------------|----------------|----------------------|---------------|----------------------|---------------|----------------------|
| Sd. films Titles | 38,707 17,119 | 1209½ 535 | 1395 1284 | 155 143 | 172 172 | 21½ 21½ | 715 713 | 60 60 |
| Si. films Titles | 923 745 | 29 23 | 5 5 | 12 | կ2 18 | 5 2 | 15 15 | 1 |
| Filmstrips | 93,062 | 2908 | 7171 | 797 | 2619 | 327 | 2250 | 187½ |
| Slide sets | 91,984 | 2874 2 | 721 | 80 | 78 | 10 | 637 | 53 |
| St. prints | 153,497 | 4797 | 1660 | 184 | 1570 | 196 | 642 | 53 ½ |
| Mtd. pict. | 199,456 | 6233 | 4200 | 467 | 321 | 40 | 1110 | 92 1 |
| Models | 2,800 | 87 호 | 118 | 13 | 2 | 4 | 106 | 9 |
| Specimens | 6,518 | 204 | 45 | 5 | 0 | 0 | 18 | 11/2 |
| Records | 48,732 | 1523 | 7216 | 802 | 1667 | 208 | 3275 | 273 |
| Magn. rec. | 2,711 | 85 | 15 | 12 | 101 | 12½ | 1890 | 157 ½ |
| Maps | 3,403 | 106 | 928 | 103 | 132 | 16 1 | 232 | 19 |
| Charts | 15,016 | 469 | 73 | 8 | 17 | 2 | 267 | 22 |

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TABLE 6 - Continued

| Type of Holding | Unif. Dist. | Avg. per Dist. | Elem. Dist. | Avg. per Dist. | H.S. Dist. | Avg. per Dist. | J.C. Dist. | Avg. per Dist. |
|--------------------|----------------|----------------------|----------------|----------------------|---------------|----------------------|---------------|----------------------|
| Diorama | 127 | 4 | 34 | 4 | 0 | 0 | 45 | 3 |
| 16mm proj. | 4275 | 133 2 | 129 | 14 | 140 | 17½ | 106 | 9 |
| Si. proj. | 94 | 3 | 0 | 0 | 8 | 1 | 7 | <u> </u> |
| Fsslide | 4179 | 130½ | 163 | 18 | 78 | 10 | 87 | 7 |
| Slide pr. | 1353 | 42 | 50 | 5 } | 69 | 8 <u>구</u> | 58 | 4 |
| Overhead | 248 | 8 | 8 | 1 | 22 | 3 | 30 | 21/2 |
| Opaque | 332 | 10 | 36 | 4 | 33 | 4 | 48 | 4 |
| Stereoscopes | 3591 | 112 | 92 | 10 | 4 | <u> 2</u> | 4 | -1/3 |
| Screens | 5083 | 159 | 276 | 31 | 272 | 34 | 175 | 142 |
| Pr. Stands | 2166 | 68 | 234 | 26 | 113 | 14 | 77 | 6 |
| Microph. | 1910 | 60 | 139 | 15 | 106 | 13 | 67 | 5 2 |
| Rec. players | 7473 | 233 2 | 591 | 66 | 126 | 16 | 95 | 8 |
| Recorders | 977 | 30 2 | 61 | 7 | 89 | 11 | 79 | 6 } |
| Radios | 6236 | 195 | 196 | 22 | 24 | 3 | 24 | 2 |

TABLE 7

AUDIO-VISUAL HOLDINGS IN 1937 AND 1955 IN SIX DISTRICTS*

| W-7-44 | Los | Angeles | 0ak | land | Long | Beach | Pas | adena | Fr | esno | Gle | ndale |
|--------------------------------|-------|---------|-------------|-------|------|-------|------|-------|------|-------|------|-------|
| Holding | 1937 | 1955 | 1937 | 1955 | 1937 | 1955 | 1937 | 1955 | 1937 | 1955 | 1937 | 1955 |
| 16mm Sound Films | 1,159 | 20,521 | 258 | 1,942 | 122 | 1,472 | 280 | 2,577 | 69 | 373 | 35 | 900 |
| 16mm Silent Films | 139 | 215 | 41 | 131 | 6 | 0 | 10 | 0 | 20 | 14 | 7 | 14 |
| Filmstrips | 3,464 | 36,486 | 61 0 | 7,280 | 724 | 1,775 | 685 | 2,278 | 483 | 2,580 | 500 | 1,500 |
| Maps and charts | 899 | 10,551 | 310 | 2,500 | 335 | 1,100 | 0 | 264 | 0 | 60 | | |
| Records | | | 815 | 2,000 | | | 0 | 1,686 | 626 | 3,000 | 0 | 2,943 |
| Models, specimens and exhibits | 4,206 | 1,647 | 710 | 625 | 227 | 1,800 | 0 | 3,274 | 0 | 50 | 200 | 110 |

^{*}Figures for 1937 were obtained from the report on the study made in 1937-38 by Harry Maxwell McPherson, "The Organization, Administration, and Support of Visual Instruction in California" (Unpublished Ph.D. dissertation, Dept. of Education, University of California, 1939).

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exhibits decreased, at least in one case (and probably in all) because of the difficulty in housing and transporting this type of material.

The above are the only instances where a decline is evident. In most of the districts the increase is quite large and reflects the expansion of audio-visual education in the last two decades.

The number of holdings per district for each of five types of audio-visual equipment were compared with certain of the Seaton standards. In two areas, the 2 by 2 slide projectors and the record players, over half of the districts had a sufficient number or holdings, according to these standards. In the remaining three areas, less than half of the districts met the standards. Table 8 gives a breakdown of the data in regard to these holdings and shows how many out of the total of sixty-one districts met each standard listed.

The directors were asked whether, in their opinion, the quantity of audio-visual instructional materials in their department is sufficiently adequate to meet the normal needs of the schools promptly and efficiently and to allow adequate loan time for proper use. Thirty-six of the directors believe that they are, and two additional directors reported that in some areas they are. The thirty-six districts with apparently adequate resources include nineteen unified, five elementary, four high school, and eight junior college districts. The fact that the directors in the remaining districts are aware of the limitations of their collections leads us to believe that there is hope for improvement and that in time the collections of additional departments may be built up to adequate

Helen Hardt Seaton, A Measure for Audio-Visual Programs in Schools (Washington, D. C.: American Council on Education, 1944).

TABLE 8

SELECTED AUDIO-VISUAL HOLDINGS OF DISTRICTS COMPARED
WITH THE SEATON STANDARDS

| Selected Seaton | | Districts | Meeting St | andards | |
|--|-------|-----------|------------|---------|-------|
| Standards | Elem. | High Sch. | Jr. Col. | Unified | Total |
| One 16mm Sound Projector for every 200 Students | 0 | 2 | 7 | 6 | 15 |
| One Filmstrip Projector for every 200 Students | 3 | 0 | 5 | 5 | 13 |
| One 2 by 2 Slide Projector for every 400 Students | 6 | 4 | 8 | 21 | 39 |
| One $3\frac{1}{4}$ by 4 Slide Projector for every 400 Students | 0 | 1 | 4 | 4 | 9 |
| One Record Player for every 200 Students | 5 | 4 | 4 | 20 | 33 |

size.

The districts were also queried as to their servicing and production equipment. Out of the sixty-one districts, fifty-five have splicing machines, twenty-four have film editor machines, forty-one have still cameras, thirty-one have motion picture cameras, twenty-six have Dry Mount presses, twenty-four stock slide production materials, thirty-seven keep on hand spare parts for equipment, and twenty-four have or have access to photographic equipment.

TABLE 9
SERVICING AND PRODUCTION EQUIPMENT

| Type of Equipment | Unified | Elem. | High Sch. | Jr. Col. | Total |
|--|---------|-------|-----------|----------|-------|
| Splicing Machines | 28 | 9 | 8 | 10 | 55 |
| Film Editors | 13 | 1 | 5 | 5 | 24 |
| Still Cameras | 24 | 5 | 6 | 6 | 41 |
| Motion Picture Cameras | 17 | 3 | 5 | 6 | 31 |
| Dry Mount Presses | 19 | 3 | 1 | 3 | 26 |
| Slide Production Materials | 15 | 4 | ı | 4 | 24 |
| Spare Parts for Equipment | 17 | 7 | 7 | 6 | 37 |
| Photographic Pro- cessing Equipment | 13 | 3 | 4 | 4 | 24 |

Twenty-six districts reported that the audio-visual plant is located in the same building with the other district offices. Eight departments have their own building adjacent to the other district offices. The remainder are located either in a building of their own in an entirely separate location from the other districts or in one of the school buildings.

Of the fifty districts which responded to the question involving the relationship of the audio-visual plant to that of the library,
nineteen reported that the audio-visual department and the book library

are located in the same area and ten reported that the audio-visual department is completely separated geographically from the book library.

Fourteen districts reported that they have only one room which is used for all audio-visual purposes. Table 10 shows the number of districts which reported having specific rooms or areas used in connection with the audio-visual program.

TABLE 10

NUMBER OF DISTRICTS HAVING CERTAIN TYPES OF ROOMS

| Room | | | | | | | | 1 | hur | nbe | er | 0. | f Dis | tric | ts |
|------------|----|----|----|----|-----|-----|----|---|-----|-----|----|----|-------|------|----|
| Office . | • | • | • | • | • | • | • | • | • | | • | • | 38 | | |
| Storage . | • | • | • | • | • | • | • | • | • | • | • | • | 36 | | |
| Repair . | • | • | • | • | • | • | • | • | • | • | • | • | 28 | | |
| Preview | • | • | • | • | • | • | • | • | • | • | • | • | 26 | | |
| Conference | 3 | • | • | • | ٠ | • | • | • | • | • | • | • | 24 | | |
| Shipping . | | | | | | | | | | | | | | | |
| Display . | • | • | • | • | • | • | • | • | • | • | • | • | 13 | | |
| Curriculu | n | La | bc | re | ito | ry | • | • | • | • | • | • | 7 | | |
| Garages . | • | • | • | • | ٠ | ٠ | • | • | ٠ | ٠ | ٠ | • | 4 | | |
| Listening | | • | • | • | • | • | • | • | • | • | • | • | 3 | | |
| Photograph | ıi | C | La | bc | ra | ito | ry | • | • | • | • | • | 2 | | |
| Recording | | • | • | • | • | • | • | ٠ | • | ٠ | • | | 1 | | |

Services Provided by the Audio-Visual Departments

Services which may be provided by an audio-visual department were grouped under the following major headings: (1) Selection and procurement of materials and equipment, (2) Distribution or circulation of materials, (3) Maintenance of an audio-visual library, (4) Maintenance and repair service to school owned equipment, (5) Radio education services of the audio-visual department, (6) Provision of supervisory and consultant services, (7) Provision of information services, and (8) Integration of audio-visual materials with the curriculum. Districts were

queried as to their practices in a number of aspects under each of the above headings in an attempt to evaluate what is being done and to determine which procedures and policies are most prevalent.

Selection and Procurement of Materials and Equipment

Evaluation and selection of new materials and equipment is made by preview groups of interested teachers and supervisors or audio-visual staff members in seventy-two per cent of the districts surveyed. In thirteen per cent the audio-visual director or audio-visual staff alone is responsible for the selection of new items, but they attempt to base their selections upon the requests of teachers and supervisors. The building coordinators perform this function in seven per cent of the districts, and in five per cent committees of supervisors are responsible. In the remaining three per cent of the districts, the audio-visual director has the sole responsibility, or privilege, of selecting new materials and equipment for the schools under his jurisdiction. Table 11 gives a breakdown by type of district of the number falling under each category.

One method of evaluating audio-visual or any other type of instructional materials is by direct use with pupils. Classroom evaluations are made by teachers and pupils together in sixty-seven per cent or forty-one districts. It is possibly due to the difficulty of obtaining materials for preview purposes before purchase that more use is not made of pupil evaluation of teaching materials.

Districts may purchase audio-visual materials and supplies at any time during the year as need arises in thirty-eight, or sixty-two per cent of the districts. Purchases may be made only once a year in

TABLE 11
PERSONNEL INVOLVED IN THE SELECTION
OF NEW MATERIALS AND EQUIPMENT

| Persons Responsible for Selection | Unified Districts | Elem. Districts | | Jr. Col. Districts | |
|-----------------------------------|----------------------|--------------------|---|-----------------------|---|
| Audio-Visual Director Alone | 1 | 0 | 0 | 1 | , |
| Preview Groups | 27 | 6 | 4 | 7 | |
| Supervisors | 1 | 1 | ı | 0 | |
| Building Coordinators | 1 | 2 | 1 | 0 | |
| Director Upon Requests | 2 | 0 | 2 | 4 | |

twenty-one per cent, that is, in thirteen districts. Purchasing once a year may be highly convenient for the business department, but several audio-visual directors stated that they believe that it handicaps the teaching program. In the remaining districts, materials and equipment may be purchased at stated times during the year. Table 12 gives the number of each type of district which follow each of the three plans for ordering.

In thirty-one, fifty-one per cent of the districts, materials and equipment may be purchased from any dealer. All or most items must be purchased through the bid system in the remaining districts. Many times the lowest bidder may not supply the best or most lasting item, and the apparent saving is not always the greatest. Because of archaic

TABLE 12
FREQUENCY WITH WHICH PURCHASES OF MATERIALS
AND EQUIPMENT ARE MADE

| Purchases Made | Unified | Elem. | High Sch. | Jr. Col. | Total |
|-----------------------------|---------|-------|-----------|----------|-------|
| As Needed | 18 | 6 | 6 | 8 | 38 |
| Once a Year | 6 | ı | 2 | 4 | 13 |
| Stated Times during Year | 8 | 2 | 0 | 0 | 10 |

provisions in the district's school laws, the audio-visual director's hands are tied, and he is forced to use the bid system of purchase. In some districts, small items such as filmstrips or projector lamps may be purchased directly from dealers, but larger items such as equipment must be presented for bids. In a few districts, the directors reported that price is the determinant, and all purchases over a certain fixed sum must be presented for bids. In the best audio-visual program, materials and equipment should be purchased on the basis of their merit alone, not because one dealer can underbid his competitors.

The audio-visual directors reported that requested films are rented or borrowed from outside sources when not owned by the audio-visual department in fifty-one, or eighty-three per cent, of the districts. Table 13 gives a more complete breakdown of the data regarding rentals. Table 14 gives the number of films rented during the last fiscal year and the cost of the rental program for a selected number of elementary, high school, and junior college districts. Since local

TABLE 13
SOURCES OF FILMS USED BY DISTRICTS

| | Unified | Elem. | High Sch. | Jr. Col. | Total |
|--------------------------------|---------|-------|-----------|----------|-------|
| Films secured from outside | 25 | 7 | 7 | 12 | 51 |
| Films not secured from outside | 7 | 2 | 1 | 0 | 10 |

holdings and local policies account to a large extent for the number of films rented by any given district, there can be no real comparison between districts in regard to this item. It is interesting to compare the amounts which districts of a similar size and nature are spending for their film rentals and of the number of films obtained for a given amount of money. Charges of the film rental library, the number of requests for the films in any one school, the amount of money available for rentals, and policies of the audio-visual directors all enter into the final decision of how much should be rented and where from. Availability of alternate materials in the local collection, and access to county or other free sources also affect the final decision.

Table 15 gives the same data for a selected number of unified districts.

Only ten of the unified districts reported that they obtained films from their county audio-visual services without charge. These ten districts borrowed a total of 4,490 films during the last fiscal year.

TABLE 14

RENTAL OF FILMS IN SELECTED ELEMENTARY, HIGH SCHOOL, AND JUNIOR COLLEGE DISTRICTS*

| Eler | n. Dist. | н. S | . Dist. | J. C. Dist. | | | |
|--------|-----------|-----------------|---------|-----------------|-------|--|--|
| No. of | f Cost | No. of Films | Cost | No. of Films | Cost | | |
| 10 | \$ 20 | 25 | \$ 125 | 4 | \$ 16 | | |
| 10 | 25 | 125 | 415 | 36 | 100 | | |
| 42 | 50 | 200 | 350 | 85 | 400 | | |
| 126 | 300 | 200 | 500 | 143 | 738 | | |
| 500 | 400 | 700 | 1500 | 200 | 500 | | |
| 506 | 3000 | 1500 | 4500 | 239 | 978 | | |
| | | | | 280 | 400 | | |
| | | | | 500 | 900 | | |
| | | | | 500 | 1500 | | |
| | | | | 700 | 2000 | | |
| | | | | 1400 | 4000 | | |

^{*}Read Table 14 thus: One elementary district rented ten films at a total cost of twenty dollars. A second elementary district rented ten films at a total cost of twenty-five dollars. One high school district rented twenty-five films at a total cost of one hundred and twenty-five dollars.

The number varied greatly from district to district with one borrowing 1,959 and one borrowing only two. Four elementary districts reported borrowing a total of 1,236 films from the counties, or an average of 309

TABLE 15
FILM RENTALS IN SELECTED UNIFIED DISTRICTS*

| | No. of Films | Cost | No. of Films | Cost | No. of Films | Cost |
|--------|-----------------|-------|-----------------|--------|-----------------|--------|
| : | 10 | \$ 45 | 300 | \$1000 | 1000 | \$2000 |
| 1 | 20 | 150 | 350 | 600 | 1200 | 1500 |
| : | 26 | 53 | 385 | 2125 | 1425 | 4275 |
| · ! | 100 | 2000 | 400 | 850 | 1500 | 3800 |
| | 150 | 400 | 400 | 1000 | 1500 | 4000 |
| | 156 | 200 | 400 | 1000 | 1500 | 4500 |
| | 250 | 4000 | 800 | 1200 | 2000 | 5000 |

^{*}Read in same manner as Table 14.

per district. Nine thousand films were secured from the counties by five high school districts, with one large district accounting for seven thousand films. Five junior college districts borrowed 1,122 county free films, with a variance of from four to 385 films per district.

Distribution of Materials

According to one school of current audio-visual thought, every teacher should be able to request materials upon need and not be forced to make long range fixed schedules. Limitations in the amount of materials available and in the number of staff members in the centers make such a situation practically impossible under existing conditions. A few of the larger audio-visual centers, however, believe that they have a

sufficient supply of materials on hand to assure the teachers of finding some type available upon short notice.

Schools must make orders for materials from the audio-visual center for specific dates in all but four districts, which accept orders for a general period of time. Single item orders for specific dates are permitted in thirty-three districts, but in the remaining orders from schools must be combined by the coordinator into bulk orders to decrease the amount of handling time required.

The frequency with which booking requests may be submitted varies from once a year in four districts to daily in thirty-two districts. One high school district does not permit requests to be submitted more frequently than every two weeks, and three districts accept only monthly orders.

In an attempt to arrive at an estimate of the availability of audio-visual materials in general, directors were asked how long in advance material should be booked in order that the teacher be fairly certain of its use on the date desired. In twenty districts, teachers may book one week in advance and be fairly certain of receipt, while, in fifteen districts, one month is required for delivery with any degree of certainty. The remaining districts find it necessary to book material from six months to a year in advance in order that it may be available when desired. On the other hand, one large district with a very adequate audio-visual material collection does not permit booking requests to be submitted more than one month in advance. The type of material may make a difference in the time required for booking, of course. If a district has a large collection of filmstrips or records, they will not need to

schedule those materials nearly as long in advance as films of which the district may have only a few.

Delivery of audio-visual materials is made by vehicle in most districts. In only five districts is it made by mail. The twelve junior college districts are all one-campus districts, and their delivery is made by messenger, when materials are not picked up by teachers at the center. All of the districts reporting seem to feel that their delivery service is adequate to the need. Table 16 shows the frequency with which delivery and pick-up of materials is made in the different types of district, according to the responses made by the audio-visual directors.

In all districts, teachers may visit the audio-visual center and take the materials which they have booked. Some may prefer to take the materials before the booking day in order to preview or to correlate with other teaching materials and lesson plans. This is permissible except in cases in which material is booked on a close schedule and still in use at another school until just before its scheduled date.

In general, audio-visual equipment is not loaned to the schools by the centers. Schools are expected to purchase their own equipment or are assigned district owned equipment for long periods of time. Eleven district audio-visual departments do lend equipment to schools in emergencies to replace their own equipment which is undergoing repairs, and eight send new equipment to the schools for "trying out" and evaluation purposes.

Audio-Visual Libraries

An audio-visual materials library is maintained at the

TABLE 16
FREQUENCY OF DELIVERY OF MATERIALS

| : | Frequency of Delivery | Unified Districts | Elem. Districts | High Sch. Districts | Jr. Col. Districts |
|---|--------------------------|----------------------|--------------------|------------------------|-----------------------|
| - | Daily | 20 | 2 | 1 | Dona |
| | Twice a week | 3 | 3 | | Does |
| | Once a week | 7 | 2 | 2 | not |
| | Other | 2 | 2 | 5 | appl y |

audio-visual center in fifty-one, eighty-four per cent, of the districts. The remaining ten districts either follow a policy of decentralization of materials among the schools or have collections at the center which are not organized into what could be called a library. Of the fifty-one having a library, forty responded to the questions concerning the classification system used. Represented among the various systems are sixteen standard Dewey Decimal systems, one modified Dewey, nine accession number arrangements, four arbitrary schemes, seven combinations of the above systems, two alphabetical arrangements, and one modified Pratt system. Fifteen per cent of the audio-visual directors stated that they believed that some sort of standardized classification system for audio-visual libraries would be of benefit to the centers. Such standardization has long been used in book libraries. The directors thought that if uniform procedures were established, manuals of a general type could be formulated for the guidance of employees who have had no library training. The

Dewey system leads in number of districts, although it is not used in the majority of the districts responding.

Thirty-three district audio-visual departments maintain a card catalog for all holdings at the center, and eight of them supply duplicate card files to the schools. The other twenty-five with card catalogs at the center supply printed catalogs to the schools.

Twenty-three districts, or thirty-eight per cent, have what can properly be called instructional materials centers. In these districts, both audio-visual and printed materials of instruction are housed together and cared for by the same staff. A number of audio-visual departments and libraries have merged within recent years, and several districts have established new instructional materials departments.

Maintenance and Repair Services to School-owned Equipment

The districts were asked whether the audio-visual department provides service to school-owned equipment to the extent of major repairs, minor repairs, cleaning and adjusting, or advisory service only, and whether the department contracts with outside agencies for equipment maintenance and repair. Table 17 shows the reported practices in regard to equipment maintenance among the districts. From this data it is evident that only in the unified districts is there much of an attempt to handle major repairs within the department.

When equipment is sent outside for repair, the general practice seems to be for the audio-visual department to absorb the bill except in cases where the individual school is proved negligent and it is evident that carelessness caused the damage.

TABLE 17

MAINTENANCE AND REPAIR SERVICES PROVIDED BY AUDIO-VISUAL DEPARTMENTS

| Type of Service | Unified Districts | Elem. Districts | High Sch. Districts | Jr. Col. Districts | Total |
|------------------------------|----------------------|--------------------|------------------------|-----------------------|-------|
| Advisory Only | 1 | 0 | 0 | 0 | 1 |
| Clean and ad- just | 3 | 2 | 2 | 2 | 10 |
| Minor Repair | 5 | 3 | 14 | 6 | 18 |
| Major Repair | 13 | 2 | 0 | ı | 16 |
| Major Repair sent outside | 19 | 7 | 8 | 11 | 45 |

Broadcasting Services of Audio-Visual Departments

In one unified district the junior college has its own radio broadcasting studio. This is the only instance in which a district reported having a broadcasting station, although twenty other districts reported that use is made of the facilities of nearby commercial stations. Most of these districts use the facilities only occasionally, but six stated that regular programs are scheduled and conducted. Table 18 shows how many of each type of district use the commercial facilities and whether the use is regular or occasional. It also shows the number and type of districts which direct educational telecasting. It is interesting to note that none of the districts reported that they are able to use nearby college or university stations as is possible in certain other

areas of the country.

TABLE 18

BROADCASTING FACILITIES AVAILABLE
TO AND USED BY DISTRICTS

| Facility | Unified Districts | Elem. Districts | High Sch. Districts | Jr. Col. Districts | Total |
|---------------------------------------|----------------------|--------------------|------------------------|-----------------------|---------------|
| Own Station | 1 | 0 | 0 | 0 | 1 |
| Commercial Regular Use Occasional Use | 12 3 9 | 3 1 2 | 3 1 2 | 2 1 1 | 20 6 14 |
| Telecasting Done | 6 | 1 | 0 | 0 | 7 |

One unified district, the largest in the survey, has a separate radio and television staff which takes care of its educational broadcasting and telecasting.

Provision of Supervisory and Consultant Service

In order to find out what assistance in the use of audio-visual materials is given to teachers, the directors were asked to designate which of the following are used in their district: (1) help in the selection of materials to use, (2) demonstrations involving the use of materials and equipment, (3) conferences with teachers relative to class-room needs, (4) advice on the improvement of room physical conditions, (5) inter-school visitations, and (6) help in planning field trips.

Table 19 shows the number in each type of district which made use of each of the above in helping teachers. It is interesting to note that the four district types are almost entirely consistent in the rank of the

of the items according to frequency of use.

Table 19 shows how many of each type of district and how many out of the total of sixty-one districts give each of six types of assistance.

TABLE 19

TYPES OF ASSISTANCE PROVIDED TO TEACHERS BY AUDIO-VISUAL DEPARTMENTS

| Type of Assistance | Unif. Dist. | Elem. Dist. | H.S. Dist. | J.C. Dist. | Total |
|---------------------------------|----------------|----------------|---------------|---------------|-------|
| Help in selection of materials | 30 · | 8 | 8 | 10 | 514 |
| Demonstrations | 29 | 9 | 5 | 9 | 52 |
| Conferences with teachers | 26 | 8 | 4 | 8 | 46 |
| Advice on Room Conditions | 24 | 8 | 3 | 6 | 41 |
| Inter-School Visitations | 12 | 5 | 2 | 2. | 21 |
| Help in Planning Field Trips | 13 | 4 | 0 | 1 | 18 |

Directors were also asked to designate which of the following were provided for in their in-service education program for teachers:

(1) presenting the theory of audio-visual education, (2) organizing demonstrations, displays, exhibits, workshops, conferences, (3) organizing and using preview committees, (4) providing guidance and counseling on audio-visual problems and use of materials, (5) arranging for and/or conducting the required two-unit course in audio-visual-radio education, (6) participating in school staff and faculty meetings, (7) visiting classrooms upon request, (8) visiting classrooms periodically with proper

follow-up and constructive attention, and (9) utilizing audio-visual building coordinators to assist in this program. Table 20 gives the figures regarding the number of each type of district utilizing each of the above devices for in-service education. It also shows how many of the sixty-one districts use each method.

TABLE 20
FREQUENCY OF USE OF VARIOUS TYPES OF IN-SERVICE EDUCATION DEVICES

| | | | | | ····· |
|---|-----------------|----------------|---------------|---------------|-------|
| Method or Device | Unif. Dist. | Elem. Dist. | H.S. Dist. | J.C. Dist. | Total |
| Presenting theory of Audio-Visual Education | 15 | ŗ | 0 | 3 | 22 |
| Organizing Demonstrations, etc. | 22 [.] | 6 | 0 | 5 | 33 |
| Using Preview Com- mittees | 24 | 6 | 3 | 5 | 38 |
| Counseling on Audio- Visual Problems | 24 | 6 | 4 | 7 | 41 |
| Course in Audio-Visual Education | 9 | 3 | 14 | 1. | 17 |
| Participating in Meetings | 2կ | 7 | 3 | 5 | 39 |
| Visiting Classrooms on Request | 27 | 8 | 3 | 1 | 39 |
| Program of Classroom Visitation | 11 | 6 - | 1 | 0 | 18 |
| Using Building Coordi- nators | 25 | 7 | 2 | 0 | 34 |

Grade level makes a difference here in the type of in-service

device used. For example, classrooms are visited upon request in twentyseven unified districts, and a program of visitation is carried out in
eleven unified districts, while only one junior college director visits
classrooms upon request and none of the junior college directors has a
program of visitation and follow-up.

Assistance to teachers in audio-visual matters is also provided by curriculum workers in twenty-eight districts, by supervisors in twenty-seven districts, by members of the library staffs in ten districts with separate library and audio-visual facilities, and by principals in three districts.

Provision of Information Services

Availability of audio-visual materials must be made known to the people who are going to use them, and the general means of doing so is through the printed catalog. In the districts surveyed, available materials are listed in printed or mimeographed catalogs by forty-two audio-visual departments. Annotations are included in the catalogs in twenty-eight districts. New catalogs are issued annually in seven districts, biennially in three districts, triennially in three districts, and as needed in the remaining districts. Supplements are issued annually in thirteen districts, quarterly in two, monthly in four, twice a year in two, and as needed in the remainder. The catalogs and supplements are provided to every teacher in twenty-three districts, to the principal or the coordinator only in seven districts, and several to each school in the remaining districts. Budget limitations and the expense involved in the duplication of catalogs are the main reasons given for limitation

TABLE 21
PROCEDURES CONCERNING ISSUANCE OF CATALOGS OF AVAILABLE MATERIALS

| | | | No | New Catalogs Issued | | | Supplements Issued | | | | Catalog Distribution | | | | |
|-------------|-------------------|----------------------|----------|------------------------|-------------|-----------|-----------------------|-----------|---------|--------------|-------------------------|------------------------|-----------------------|------------------------|---|
| District | Catalog Issued | Catalog Annotated | Annually | Biennially | Triennially | As Needed | Annually | Quarterly | Monthly | Twice Yearly | As Needed | One to Each Teacher | One to Coordinator | Several to Building | |
| Unified | 27 | 17 | 5 | 2 | 3 | 17 | 12 | 1 | 3 | 1 | 10 | 14 | 6 | 7 | : |
| Elementary | 7 | 6 | 1 | ı | 0 | . 5 | 0 | 1 | 1 | 0 | 5 | 4 | 0 | 3 | |
| High School | 3 | 2 | 0 | 0 | 0 | 3 | 1 | 0 | 0 | 1 | 1 | 3 | 0 | 0 | |
| Jr. College | 5 | 3 | 1 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 5 | 2 | 1 | 2 | |
| Total | 42 | 28 | 7 | 3 | 3 | 29 | 13 | 2 | 4 | 2 | 21 | 23 | 7 | 12 | |

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upon the circulation of the catalogs. Table 21 gives detailed data on the issuing and circulation of catalogs of available materials.

Annotations are included in over half of the catalogs. Although making annotations involves additional work for the audio-visual staff, the value to the teacher is probably great enough to justify their inclusion. It appears that the current practice among the districts surveyed involves issuing catalogs as the need arises, rather than at a fixed time regardless of need. In a number of cases, supplements are issued whenever the supply of new holdings warrants. A copy of each catalog or supplement is given to each teacher in a large per cent of the districts. Table 21 shows procedures which are used in the issuance and distribution of catalogs and supplements.

Another means of informing teachers and other school personnel of available materials and of calling to their attention additions to the collection and news of the audio-visual world is the bulletin or news-letter. The bulletin can serve as a supplement to the catalogs or it can be used more as an informative device. Twenty of the districts issue some sort of audio-visual bulletin. Two are bi-weekly, seven are monthly, one is quarterly, and the others are issued as needed or as there is news to publish.

In other districts, where the audio-visual department does not issue its own bulletin, it is occasionally allowed space in a general district bulletin or superintendent's newsletter. Seven unified, two high school, four elementary, and two junior college departments have access to this sort of publication and are able to keep their teachers informed of changes in the department, new materials, reviews of

outstanding new productions, and the like.

TABLE 22

FREQUENCY OF PUBLICATION OF AUDIO-VISUAL BULLETINS OR NEWSLETTERS

| Frequency of Publication | Unif. Dist. | Elem. Dist. | H.S. Dist. | J.C. Dist. | Total |
|--------------------------|----------------|----------------|---------------|---------------|-------|
| Bi-weekly | | 2 | | | 2 |
| Monthly | 6 | | 1 | | 7 |
| Quarterly | ı | | | | 1 |
| As Needed | 5 | 2 | 2 | 1 | 10 |

Thus, either through their own newsletter or through space in a general bulletin, thirty-five, over half, of the districts in the survey are able to keep their clientele informed concerning the audio-visual department.

Integration of Audio-Visual Materials with the Curriculum

The respondents were given a list of eight means of integrating the audio-visual collection with the curriculum and asked which were followed in their department. The items are: (1) audio-visual director kept aware of needs of the curriculum through participation in its founding or construction, (2) new materials suggested by teachers, supervisors, and administrators, (3) instructional materials chosen to meet curriculum needs, (4) courses of study listing audio-visual materials, (5) study guides suggesting areas and use of audio-visual materials in meeting

curriculum needs, (6) materials suggested by the district office staff which is kept aware of needs, (7) selection of new materials by preview committees versed in curricular needs, and (8) periodic evaluation of instructional materials and discarding of weak items. Table 23 shows the responses by type of district to each of the above.

TABLE 23

INTEGRATION OF AUDIO-VISUAL MATERIALS
WITH THE CURRICULUM

| Means of Integration | Unif. Dist. | Elem. Dist. | H.S. Dist. | J.C. Dist. | Total |
|---|----------------|----------------|---------------|---------------|-------|
| Audio-Visual Director Parti- cipates in Curriculum Construction | 19 | 6 | 2 | 3 | 30 |
| Teachers and Others Suggest New Materials | 28 | 9 | 7 | 12 | 56 |
| Materials Chosen to Meet Curricular Needs | 27 | 9 | 7 | 13 | 56 |
| Courses of Study List Audio-Visual Materials | 19 | 7 | 1 | 0 | 27 |
| Study Guides Suggest Audio-Visual Areas | 15 | 7 | 2 | 0 | 24 |
| District Office suggests New Materials | 20 | 7 | 3 | 1 | 31 |
| Preview Committees Used | 19 | 6 | 14 | 4 | 33 |
| Periodic Evaluation of Materials | 19 | 5 | 4 | 8 | 36 |

The table shows that in most of the districts the teachers suggest new materials and attempt is made to select materials which will

meet curricular needs. Less than half of the districts make use of sources of study and study guides, thus reflecting the current trend away from the formal fixed form of curriculum. Over one-half of the districts make use of periodic evaluation of materials in the collection, discarding weak items, and preview committees.

Audio-Visual Personnel

One of the most important aspects of any audio-visual program and one of the major criteria in its evaluation is its personnel. While it is not necessarily true that the best audio-visual program is the one with the largest staff, qualified personnel are necessary to secure a proper functioning of the program.

The number of certificated employees in audio-visual departments in the state is, on the whole, relatively low. Only one junior college district has more than one certificated employee, and that one has only two such persons.

One high school district has three certificated employees, one has two, and the others have only one. Among the elementary school districts, there are three districts with two certificated employees and five with only one.²

L"Certificated employees" is interpreted to mean those holding an administrative, supervisory, teaching, librarianship, or special credential, and included in the professional salary schedule. No one of these credentials is actually required for the directorship; there is not, at present, an audio-visual credential issued by the state department of education. Any one of the above represents a training at least equivalent to that required of a classroom teacher, and it is necessary for the employee to hold one in order to attain professional as distinguished from clerical or technical classification.

²Bakersfield cannot be classified here since audio-visual duties are divided among eleven employees in the Department of Instruction.

Even in the unified districts, the great majority of districts, twenty-one, have only one certificated employee. Five unified districts have two certificated employees, two districts have three, and one district each has four, five, and nine certificated employees.

The Audio-Visual Director

The time which the director devotes to his audio-viaual duties varies from one-third to full time. Only twenty-two of the districts surveyed have full-time audio-visual directors. At the other extreme, fifteen districts have directors who devote only one-third of their working time to the audio-visual department. Ten districts have half-time directors. The remainder of the directors spend varying amounts of time in audio-visual work. Table 24 gives detailed information as to the number of directors in each classification and the amount of time they give to the audio-visual department.

Of the sixty districts surveyed, forty-four, seventy-three per cent, have directors who spend at least half of their working time in duties connected with the audio-visual program. Only thirty-six per cent, however, have full-time directors.

In Bakersfield City School District, which is an elementary district, the audio-visual duties are performed by eight supervisors, two instructional materials librarians, and by the Director of Instruction.

large those districts where the per cent of time devoted to audio-visual instructional materials was less than one-third were eliminated from the survey, this figure is naturally the lowest percentage. For the purposes of this study, districts in which one person did not spend at least one-third of his working time on audio-visual duties were not considered as having a formal audio-visual program.

TABLE 214

PER CENT OF TIME DIRECTORS DEVOTE
TO AUDIO-VISUAL WORK

| Per cent of time de- voted to Audio-Visual Work | Unif. Dist. | Elem. Dist. | H.S. Dist. | J.C. Dist. | Total |
|---|----------------|----------------|---------------|---------------|-------|
| 100 | 16 | 3 | 2 | 1 | 22 |
| 90 | 2 | | | | 2 |
| 85 | 1 | | | | 1 |
| 80 | . 1 | 1 | 1 | | 3 |
| 60 | 1 | 1 | | 2 | 4 |
| 57 | | | 1 | | 1 |
| 50 | 2 | 1 | 2 | 5 | 10 |
| 4 0 | 2 | | | | 2 |
| 33-1/3 | 7 | 2 | 2 | 4 | 15 |

According to their report, "curriculum development, supervision, and instructional materials of all types" are considered as aspects of one whole. Audio-visual materials are not considered to be "different" from other instructional materials and are not treated separately. For this reason it was impossible for them to designate one person as an audio-visual director or to determine the per cent of time which each employee devoted to materials which are strictly audio-visual in nature.

Work with other types of instructional materials ranked first among other duties of the less than full-time directors. This is true in

sixteen districts. In all but one of these districts (a junior college district) this is the only other type of work done. Teaching is the second most frequent duty. Directors in eleven districts teach in addition to their audio-visual work. Again, in all but the one junior college district this is the only work done in addition to the audio-visual directorship. Subjects taught include photography, driver education, library science, botany, history, and biology. Two directors are also responsible for directing the adult education program. Curriculum work is done by three directors. Other directors serve as Director of Instruction, Music Consultant, Director of Testing and Guidance, or Supervisor of Instructional Music. One works in the photographic production department and one serves as a building principal. Table 25 gives a further breakdown of these data.

Previous Experience of the Directors

In an attempt to ascertain the background of the audio-visual directors in regard to their previous experience, and to determine from which fields audio-visual directors most frequently come, the question-naire listed five general categories of experience: teaching, administrative, library, audio-visual, and other. Each category was further subdivided by grade level or type. For example, audio-visual experience was subdivided into four categories: film specialist, radio specialist, teacher consultant, and assistant director.

Twenty-eight of the directors in unified districts responded to the questions concerning their previous experience background. All had teaching experience, and all but two had some other type as well. Administrative experience was second only to teaching experience, and audiovisual experience was next. Some had experience in as many as four of the categories.

TABLE 25
OTHER DUTIES OF AUDIO-VISUAL DIRECTORS

| Type of Duty | Unif. Dist. | Elem. Dist. | H.S. Dist. | J.C. Dist. | Total |
|----------------------------------|----------------|----------------|---------------|---------------|-------|
| Other instructional Materials | 7 | 2 | 1 | 6 | 16 |
| Teaching | 3 | | 3 | 3 | 11 |
| Curriculum Work | 2 | | 1 | | 3 |
| Adult Education | 1 | | | 1 | 2 |
| Music Supervision | 1 | ı | | • | 2 |
| Director of Instruction | 1 | | | | 1 |
| Director of Testing and Guidance | 1 | | | | 1 |
| Photographic Production | | 1 | | | 1 |
| Building Principal | | 1 | | | 1 |

Eight of the elementary districts have directors who can be classified according to the above categories. All have had teaching experience. Previous audio-visual experience was second in this group. A much lower proportion than in the unified group had previous administrative experience.

Again in the high school districts, all directors have had previous teaching experience, and all but one had other experience in addition. Audio-visual experience was second, and administrative was a very close third in this group.

The eleven junior college directors who responded to this question showed a less wide variety of experience than those in the other three groups. All but one had previous teaching experience. Three other directors had only teaching experience. It is in this group that is found the highest percentage of those with previous library experience and the lowest percentage of those which had educational administrative experience.

Tables 26 through 29 show the previous experience backgrounds of the directors who responded to this section of the questionnaire. It is evident at a glance that the directors in the unified districts have had much more administrative and supervisory experience than the directors in the other three categories. Audio-visual experience was highest among the directors in the unified districts, and second highest in the high school districts. Teaching experience ranked almost equally high in all of the districts.

Responsibilities and Duties of the Directors

The directors were given a list of twenty-three representative duties and asked to designate which ones they performed. All districts responded to this question, making a total of thirty-one departments serving unified grades, and nine elementary, eight high school, and twelve junior college departments. It was decided not to include Bakers-field City School District in the final tabulation because in that district there is no one person who can be called "audio-visual director."

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TABLE 26
PREVIOUS EXPERIENCE OF DIRECTORS IN UNIFIED DISTRICTS

| === | = | | | | | | | | | | | | | | | |
|------------|--------|---------|--------|---------------|-----|------|--------|-----------|--------------|-----------|------|--------|-------------|------------|-------|--------------|
| Dist | | | ching | | | | istrat | | Supe | rvis. | | Auc | lio-Visual | | | _ |
| No. | El. | Sec. | Coll. | Other | El. | Sec. | Coll. | Other | Gen. | Subj. | Film | Radio | Tchr. Con. | Asst. Dir. | Lib. | Coun |
| 1. | x | x | x | | x | | | | \mathbf{x} | | x | x | | | | |
| 2. | x | x | ж | | | x | | Bus. | x | | x | | | | | |
| 3. | | x | | | | | | | | | | | | | x | |
| 4. | x | x | | | | | | | | | | | | | | |
| 5. | x | x | x | Adult | | | | Bus. | | | | x | | | | |
| 6. | | x | | | | | | | | | | | | | | \mathbf{x} |
| 7. | x | x | x | | x | x | | | x | | | | x | | | |
| 8. | | x | x | | x | x | x | Bus. | x | A.V. | x | | | | | |
| 9. | x | x | | | x | | | | x | | | | | | x | |
| 10. | x | x | | Ext. | x | | | | | | | | x | | Study | |
| 11. | X | x | | | | | | | | | | | x | | | |
| 12. | x | x | X | | x | | | | | | | | | | | |
| 13. | x | | | 37 | | | | 27 | | | | | | | | |
| 14. | x | | x | Navy | x | | | Navy | | | | | | x | | |
| 15. | | х | | | | x | | n | | s. s. , s | | | | x | | |
| 16. | x | x | x | | x | x | | Bus. | x | Music | | m | X | | x | |
| 17. | x | x | x | T . | | | | Bus. | x | | Nav | y Trai | ning Films | | | |
| 18. | | x | | Ext. | | | | D.Sup. | | a | | | | | | |
| 19. | x | x | x | | x | | | | | Sci. | | | | | | |
| 20. | | x | x | | | x | | 763 J Z T | | Sci. | | | x | | | |
| 21. | | | x | | | | х | Milit. | x | | | | × | | | |
| 22. | | x | x | | | X | | Bus. | | | x | x | x | | | |
| 23. | | x | x | Nover | | x | | | X | | Mo | A | ation Film | _ | x | |
| 24. | | X | x | Navy Adult | ~ | | | | x | | Marv | at WAT | | 8 | х | |
| 25. 26. | X X | | x | AUULU | x | | | | x | | | | x | | 30 | |
| 27. | | x x | x x | | ж | x | | D. Sup. | x | | | • | | | x | |
| 28. | | • | • | | X | • | | De Dupe | | | | | | • | | |
| 29. | | | | | * | | | | x | | | | | x | | |
| 27. | | | | | | | | | | | | | | | | |

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TABLE 27

PREVIOUS EXPERIENCE OF DIRECTORS IN ELEMENTARY DISTRICTS

| Dist. | | Tea | aching | ζ | Ad | | | | Supe | rvis. | | Aud | dio-Vi | sual | | | |
|-------|-----|------|--------|----------|-------|-----|-------|-----------|------|-------|--------------|-------|---------|------|------------|------|----------|
| No. | El. | Sec. | Coll. | Other | E1. S | ec. | Coll. | Other | Gen. | Subj. | Film | Radio | Tchr. (| Con. | Asst. Dir. | Lib. | Other |
| 1. | ж | | | | | | | | | | | | | | | | |
| 2. | x | | | Music | | | | | x | | | | ж | | | | |
| 3. | x | | | | | | | | | | | | | | | | |
| 4. | | | × | Ad. Mil. | | | x | Bus. Mil. | | | | | x | | x | | |
| 5. | x | | | | | | | | | | | | x | | | x | |
| 6. | x | | | | | | | | | | | | | | x | | Blg. Co. |
| 7. | x | | x | | x | | x | Bus. | | A.V. | \mathbf{x} | | x | | | | |
| 8. | x | | | Milit. | | | x | | x | | | | | | | x | |

TABLE 28

PREVIOUS EXPERIENCE OF DIRECTORS IN HIGH SCHOOL DISTRICTS

| Dist. | | Tea | aching | | Adm | | | | Supe | rvis. | | Au | dio-V | isual | | | |
|-------|-----|------|--------|-------|--------|--------|-----|-------|------|--------|------|-------|-------|-------|-----------|------|--------|
| No. | El. | Sec. | Coll. | Other | El. Se | c. Co. | 11. | Other | Gen. | Sub j. | Film | Radio | Tchr. | Con. | Asst.Dir. | Lib. | Other |
| 1. | | х | ж | | x | | | | | s.s. | x | ж | х | | | | Milit. |
| 2. | | x | | | ж | | | | | A.V. | | | | | | | |
| 3. | x | x | x | | 3 | | | | | | | | | | | x | |
| 4. | | x | x | | | | | | | A.V. | x | x | Co. | A.V. | Dir. | | Milit. |
| 5. | | x | | | | | | | | | | | | | | | |
| | x | x | x | | | | | | | A.V. | x | x | | | x | x | |
| 7. | x | x | x | | x x | | | | | | | | | | | | Curric |

TABLE 29

PREVIOUS EXPERIENCE OF DIRECTORS IN JUNIOR COLLEGE DISTRICTS

| Dist. | | Tea | aching | | | Admin | istrat | ive | Super | rvis. | | Au | dio-Vis | ual | | | |
|-------|-----|------|--------|-------|-----|-------|--------|-------|-------|-------|------|-------|---------|--------------------|------|------|-------|
| No. | El. | Sec. | Coll. | Other | E1. | Sec. | Coll. | Other | Gen. | Subj. | Film | Radio | Tchr. C | on . Ass t. | Dir. | Lib. | Other |
| 1. | | | × | | | | | | | | | | | | | | |
| 2. | | | x | | | | | | | | | | | | | | |
| 3. | x | х | x | Univ. | | | | | | | | | | x | | | |
| 4. | x | | x | | | | | | | | | | | | | x | |
| 5. | | | x | | | | | | | Hist. | | | • | | | x | |
| 6. | | x | x | | | x | | | | | | | x | | | | |
| 7• | x | x | x | | | | | | | | | | | | | x | |
| 8. | | x | x | | | | | | | | | | | | | x | |
| 9. | | | x | | | | | | | | | | | | | | |
| 10. | | x | | Adult | | x | | | x | | | | | | | | |
| 11. | | | | | | | | | | | | | | | | x | |

All of the directors in the unified, elementary, and high school districts, and eight-three per cent of the junior college directors reported that they organize and administer a central audio-visual department. The reason for the apparent discrepancy of a director without an audio-visual department is found in the fact that two junior colleges have a decentralized type of audio-visual program with a director acting as a coordinator and consultant rather than as administrator of a centralized audio-visual department.

Table 30 shows the frequency with which each duty is performed by directors in each of the four types of district and in the districts as a whole. Table 31 gives the percentage equivalent of each of these frequencies. It is evident that there is a wide range in the frequency with which the directors perform the duties varying from ninety-six to seventeen per cent of all the districts involved.

Table 32 shows the number of different duties in the list which were performed by any one director. Ranges and arithmetic means for the different types of district are as follows: elementary, five to twenty—two, with a mean of sixteen; high school, five to twenty—one, with a mean of fifteen; junior college, one to eighteen, with a mean of ten; and unified, three to twenty—three, with a mean of sixteen and one—half. The range for all districts combined is one to twenty—three, and this mean is fifteen. Neither the frequency with which the duties are performed nor the number of duties performed in each district follow a normal distribution curve, but are spread almost evenly throughout the entire range.

TABLE 30

NUMBER OF DIRECTORS PERFORMING EACH DUTY

| | Unified | Elementary | н. s. | J. C. | Total |
|---|---------|------------|-------|-------|-------|
| Organize and administer the audio-visual dept | 32 | 9 | 8 | 10 | 59 |
| Order new materials and equipment | 32 | 9 | 7 | 9 | 57 |
| Evaluate materials and equipment | 29 | 8 | 7 | 10 | 54 |
| Supply audio-visual information to teachers | 29 | 9 | 7 | 8 | 53 |
| Supervise distribution to or within schools | 27 | 9 | 6 | 8 | 50 |
| Make and control the audio-visual budget | 25 | 6 | 7 | 10 | 48 |
| Provide advisory services | 26 | 7 | 6 | 9 | 48 |
| Administer the central audio-visual library | 24 | 6 | 7 | 9 | 46 |
| Present demonstrations at teachers meetings | 27 | 7 | 5 | 6 | 45 |
| Supervise the repair and technical services | 21 | 7 | 8 | 8 | 44 |
| Train in the operation of equipment | 21 | 6 | 6 | 9 | 42 |
| Assist teachers in preparing materials | 22 | 7 | 5 | 7 | 41 |
| Discuss utilization with teachers | 23 | 6 | 5 | 5 | 39 |
| Visit classrooms to discover needs, etc | 24 | 6 | 6 | 2 | 38 |
| Instruct and assist building coordinators | 26 | 5 | 5 | 0 | 36 |
| Supervise production of audic-visual materials | 17 | 5 | 5 | 8 | 35 |
| Organize audio-visual phase of institutes | 23 | 5 | 4 | 1 | 33 |
| Maintain public relations with community | 18 | 5 | 5 | 2 | 30 |
| Address community clubs and other groups | 20 | 4 | 4 | 1 | 29 |
| Appoint or supervise building coordinators | 17 | 5 | 3 | 0 | 25 |
| Direct research in the audio-visual field | 16 | 1 | 0 | 3 | 20 |
| Two-unit course in audio-visual education | 10 | 2 | 4 | 0 | 16 |
| Issue audio-visual news- letters to the public | 8 | 11 | 1 | 0 | 10 |

TABLE 31
PER CENT OF DIRECTORS PERFORMING EACH DUTY

| | | Elementary | H. S. | J. C. | Total |
|--|------------|------------|------------|------------|------------|
| Organize and administer | | | | | |
| the audio-visual dept | 100 | 100 | 100 | 83 | 96 |
| Order new materials | | | | | |
| and equipment | 100 | 100 | 88 | 75 | 93 |
| Supply audio-visual | | | | | |
| information to teachers | 90 | 100 | 88 | 67 | 86 |
| Supervise distribution | a. | 100 | mr | <i>(</i> m | da |
| to or within schools Make and control the | 84 | 100 | 7 5 | 67 | 82 |
| audio-visual budget | 80 | 67 | 88 | 83 | 80 |
| Provide advisory | 80 | 07 | 00 | 6) | 00 |
| services | 81 | 78 | 7 5 | 75 | 77 |
| Administer the central | | 10 | 17 | 1) | 1.4 |
| audio-visual library | 73 | 67 | 88 | 7 5 | 75 |
| Present demonstrations | , - | • | | | . • |
| at teachers meetings | 84 | 78 | 63 | 50 | 73 |
| Supervise the repair and | _ | | | _ | |
| technical services | 65 | 78 | 100 | 67 | 72 |
| Train in the operation | | / | | | |
| of equipment | 65 | 67 | 75 | 75 | 71 |
| Assist teachers in | 40 | T O | 42 | ro | 40 |
| preparing materials | 69 | 78 | 63 | 58 | 67 |
| Discuss utilization with teachers | 72 | 67 | 63 | 42 | 6 3 |
| Visit classrooms to | 12 | 07 | 0) | 42 | ره |
| discover needs, etc | 73 | 67 | 75 | 17 | 62 |
| Instruct and assist | 15 | •, | ,, | | |
| building coordinators | 81 | 56 | 63 | 0 | 59 |
| Supervise production of | | • | - | | • |
| audio-visual materials | 53 | 56 | 63 | 67 | 58 |
| Organize audio-visual | | | | | |
| phase of institutes | 72 | 56 | 50 | 8 | 54 |
| Maintain public rela- | | , | | | |
| tions with community | 56 | 56 | 63 | 17 | 49 |
| Address community clubs | 10 | | | | |
| and other groups | 63 | 44 | 50 | 8 | 48 |
| Appoint or supervise | - 2 | r/ | 20 | • | |
| building coordinators | 53 | 56 | 38 | 0 | 41 |
| Direct research in the audio-visual field | 50 | 11 | 0 | 25 | 3 3 |
| Two-unit course in |) U | 4.4. | U | 25 | رر |
| audio-visual education | 31 | 22 | 50 | 0 | 26 |
| Issue audio-visual news- | <i>→</i> | ~~ |)0 | J | 20 |
| letters to the public | 25 | 11 | 13 | 0 | 16 |

TABLE 32

NUMBER OF DIFFERENT DUTIES PERFORMED BY DIRECTORS

| Number | Unif. | Elem. | н.s. | J.C. | Total | Number | Unif. | Elem. | H.S. | J.C. | Total | |
|-------------|-------|-------|------|------|-------|--------|-------|-------|------|------|-------|-----|
| 23 | 3 | | | | 3 | 11 | 1 | | | | 1 | |
| 22 | | 1 | · | | ı | 10 | 1 | 1 | | 2 | 4 | |
| 21. | 3 | 1 | 1 | | 5 | 9 | 1. | | | | 1 | |
| 20 | 4 | | 1 | | 5 | 8 | | | | | | |
| 19 | 5 | | 1 | | 6 | 7 | | | | 2 | 2 | • |
| 18 | 3 | 2 | | 1 | 6 | 6 | | | | | | . ' |
| 17 | 14 | | | | 4 | 5 | | ı | 1 | 1 | 3 | |
| 16 | 1 | 2 | 1 | | 4 | 4 | 1 | | | | 1 | |
| 15 | | | | 1 | 1 | 3 | 2 | | | | 2 | |
| 1]† | 2 | | 2 | ı | 5 | 2 | | | | | | |
| 13 | | | 1 | 2 | 3 | 1 | | | | 1 | ı | |
| 12 | | | | 1 | 1 | | | | | | | |

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Official Titles of the Directors

One of the characteristics of the audio-visual field is its customary lack of uniformity in terminology. Especially is this evident in the wide variety of official titles of the heads of the audio-visual departments. The titles represent varying conceptions of the audio-visual program and of its scope.

Among the thirty-one unified districts there are six AudioVisual Directors, five Directors of Audio-Visual Education, three Supervisors of Audio-Visual Education, two Supervisors of Instructional Materials, and two Audio-Visual Consultants. The following titles are also
represented: Coordinator of Audio-Visual Aids, Director of Audio-Visual
Education and Libraries, Director of Instructional Aids, Coordinator Department of Instructional Materials, Supervisor of Audio-Visual Instruction, Head Supervisor of Audio-Visual Service, Director of Special Services, Curriculum Coordinator, Supervisor of Audio-Visual Services,
Audio-Visual Coordinator, Coordinator of Instruction, Director of Elementary Instruction, and Director of Audio-Visual Instructional Materials.
Represented in this group are sixteen directors, eight supervisors, five
coordinators, and two consultants.

Among the three directors, two consultants, two coordinators, and one supervisor in the elementary districts are two Audio-Visual Consultants, and one each of the following: Instructional Materials Director, Director of Audio-Visual Education, Audio-Visual Director, Audio-Visual Coordinator, Supervisor of Audio-Visual Education, Instructional Materials Coordinator. One elementary district has no official audio-visual head, the duties being shared by two Librarians, six Supervisors of Instruction,

and one Director of Education.

Two Directors of Audio-Visual Education, an Audio-Visual Director, a Curriculum Coordinator, a Librarian, an Audio-Visual Coordinator, a Supervisor of Audio-Visual Aids, and an Instructor (Photography) head the audio-visual departments in the union high school districts.

The same divergence is seen among the junior college districts with three Librarians, three Audio-Visual Coordinators, two Audio-Visual Directors, a Director of Audio-Visual Education, a Director of Audio-Visual Aids, a Chairman of the Audio-Visual Department, and an Assistant Professor all serving in the capacity of head of the audio-visual program.

Among all the districts surveyed there are twenty-five directors, ten supervisors, twelve coordinators, four consultants, four librarians, three with miscellaneous titles, and one district which could not be classified.

Other Certificated Personnel

Only seventeen districts have certificated personnel in addition to the director, and in only fifteen of these districts are they full-time employees. The seventeen districts which fall in this category consist of nine unified, three elementary, three high school, and two junior college districts. All but one of the districts have only one type of certificated employee other than directors. The one exception, Los Angeles City Schools, which is the largest district in the state, has three assistant supervisors (assistant directors), four teacher consultants, and one certificated librarian.

The remaining unified districts all have librarians, or teacher

consultants, or assistant directors, but not a combination. One district has four certificated librarians, one has three assistant directors, one has two assistant directors, one has two teacher consultants, one has one assistant director, two districts each have one teacher consultant, and one district has a combination teacher assistant and graphic artist.

Three elementary school districts have a certificated librarian, as do two high school districts. A third high school district has a certificated assistant director on a part-time basis. One junior college has a certificated librarian as an assistant to the director, and another has two part-time librarians.

Non-Professional Personnel

There is an even wider divergence among districts regarding the amount and type of non-professional personnel than there is in respect to professional employees. The number of non-professional employees ranges from sixty-four to none. Six district directors have no other help than that given by part-time student employees. One unified district with an average daily attendance of 4,100 has three non-professional employees, while another with a similar size average daily attendance, 4,300, has only a few hours of student help per week. A district with an average daily attendance of 15,999 has three non-professional employees, while a similar district with 16,682 in attendance has only one. The number of professional employees sometimes has a bearing on the number of non-professional workers, but such was not the case in the four districts above which have nearly the same number of professional hours. A district of 11,000 average daily attendance has one professional and five non-

professional workers, while a larger district of 16,682 average daily attendance also has one professional employee and only one non-professional. As a rule, the districts with the larger number of non-professional employees also have the greater number of professional employees.

Table 33 shows the number of audio-visual personnel in the districts included in this study, classified according to professional status and by type of position held. Professional employees were classified as director, assistant director, teacher consultant, or librarian for the purposes of this table. Non-professional employees were classified as follows: clerical, film technician, truck-driver, photographer, artist, librarian, and other.

Expenditures for Audio-Visual Education

Audio-visual directors of the districts were queried as to the audio-visual budget for the school year 1954-55, the expenditures for the various phases of their program, and the percentage of the total amount allocated to each phase.

Table 34 shows the amount of the audio-visual budget by district, and the amount of expenditure per student, as determined from the average daily attendance, as well as the amount spent for audio-visual materials, together with its student ratio.

The responses to the questions on the amount of audio-visual expenditure show that there is a great divergence in the amount of money which is being spent in the districts within the state. The overall span of expenditure per average daily attendance for all audio-visual expenses excepting salaries ranged from \$0.14 to \$5.40. The mean expenditure

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TABLE 33

NUMBER AND TYPE OF AUDIO-VISUAL PERSONNEL IN THE DISTRICT DEPARTMENTS

| | · | | | Profes | sional | | | | N | on-Prof | ession | al | | |
|---------------|--------|------|------|---------------|----------------|------|----------------|---------------|------------|---------|--------|------|------------------------|-----------------|
| Type Dist. | A.D.A. | Gr. | Dir. | Asst. Dir. | Tchr. Cons. | Lib. | Cler. | Film Tech. | Tr. | Phot. | Art. | Lib. | Other | Student Only |
| Un. | 1,878 | K-12 | 1/3 | - | | | 호 | | | | | | | |
| Un. | 2,303 | K-12 | 1/3 | | | | | | | | | | | |
| Un. | 2,848 | K-12 | 1/3 | | | | 1/5 | | | | | 1 | Warehous clerk | е |
| Un. | 3,008 | K-12 | 1/3 | | | | 1 | | | | | | | |
| Un. | 4,100 | K-12 | 1/3 | | | | 1 | | 1 | | | | Repairma | n |
| Un. | 4,338 | K-12 | 1/3 | | | | | | as need | | | | | x |
| Un. | 4,390 | K-12 | 호 | ý, | | | | | | | | | | : x |
| Un. | 4,980 | K-12 | ı | | | | 1/10 | | | | | | | |
| Un. | 8,200 | K-14 | ı | | | | 2 | | | | | | inspect | |
| Un. | 9,200 | K-12 | 2/5 | | | | 4/5 | | | | | | opula o | |
| Un. | 9,254 | K-12 | 1 | | | | 1 | | | | | 1 | | |
| Un. | 9,300 | K-12 | 9/10 | | | 4 | 1 | | 1/5 | | | | | |
| Un. | 9,639 | K-14 | 1/3 | | | | 3 1 | | | | | | | |
| Un. | 10,800 | 1-12 | 1 | | | | 2 | 호 | 1 | | | | 2 bus dri for field | |

TABLE 33--Continued

| | | | | Profes | sional | | | | | on-Prof | ession | al | | |
|---------------|--------|--------------|------|---------------|----------------|------|----------------|---------------|-----|---------|--------|------|-----------------------------|----------------|
| Type Dist. | A.D.A. | Gr. | Dir. | Asst. Dir. | Tchr. Cons. | Lib. | Cler. | Film Tech. | | Phot. | Art. | Lib. | Other | Studen Only |
| Un. | 11,000 | K-12 | 1 | | | | 5 | | | | | į | | |
| Un. | 12,340 | K-12 | ı | | | | 2 | | | | | • | Gen. Ass [†] t. | |
| Un. | 14,542 | K-14 | 1 | | | | 1 | | 1/2 | | | | Repair Tech. | |
| Un. | 14,744 | K-12 | 4/5 | | | | 4/5 | 1/4 | 1/3 | | | | | |
| Un. | 15,999 | K-1 2 | 1 | | | | 3 | | | | | • • | | |
| Un. | 16,682 | K- 12 | 1 | | | | 1 | | | | | | | |
| Un. | 18,615 | K-12 | 1 | | | | 2 | ı | 1 | | | 2 | 2 Repair | r- |
| Un. | 18,857 | K-14 | 1 | | | | 2] | 1/3 | 1 | | | | | |
| Un. | 21,494 | K-14 | 1 | | 1 | | 2 1 | 1/4 | | | | | Elec. Tech. | |
| Un. | 25,348 | K-14 | 1 | | | | 4 | | 3/5 | | | | Repair Tech. | |
| Un. | 26,347 | K-12 | ı | 3 | | | 2 | 1 | 1 | | | | Elec. Tech. | |
| Un. | 27,000 | K-14 | 1 | | | | 3 | | | | 1 | | - | |
| Un. | 29,005 | K-14 | 1 | | 2 | | 1 | | 2 | | | 1 | | |
| Un. | 31,343 | K-1 4 | 1 | | | | 5 | 3 | 2 | | | 2 | Elec. Tech. | |

TABLE 33-Continued

| | | | | | sional | | | | | on-Prof | | | | |
|---------------|-----------------|--------------|--------|---------------|----------------|------|-------|---------------|------------|---------|------|------|---------------------|-----------------|
| Type Dist. | A.D.A. | Gr. | Dir. | Asst. Dir. | Tchr. Cons. | Lib. | Cler. | Film Tech. | Tr. Dr. | Phot. | Art. | Lib. | Other | Student Only |
| Uh. | 53,261 | K-14 | 1 | 1 | | | 6 | 1 | 2 | 1 | 2 | 2 | l½ repai | r |
| Un• | 58 , 398 | K-14 | 1 | 2 | | | 6 | 6 | 2 | 2 | 3 | 2 | 1 Dir. | |
| Un. | 61,012 | K-14 | 1 | | 1 | | 4 | 3 | 2 | 1 | 1 | | Cadan | •• |
| Un. | 362,725 | K-14 | 1 | 3 | 4 | ı | 40 | 14 | | 3 | 2 | 2 | Science 1 Prepar | rator |
| El. | 1,442 | K-8 | 1/3 | | | | | | | | | | | x |
| El. | 1,938 | K-8 | 3/5 | | | 1 | | | | | | | | |
| E1. | 4,500 | K-8 | 1 | | | | | | | | | | | |
| El. | 4,900 | K - 6 | 1 | | | | 2/5 | | | | | | | |
| El. | 6 , 550 | K - 6 | 1/3 | | | | | | | | | | | |
| El. | 7,121 | K-8 | 4/5 | | | | ı | | 14 | | | | | |
| El. | 7,275 | K - 8 | 1 | | | 1 | | | | | | | | |
| El. | 7,897 | K- 8 | 12 | | | ı | 2 | 1 | | | | | Super | _ |
| El. | 14,444 | K-8 | 1/3 | | | 2 | | | | | | | 9 visor | S |
| H.S. | 1,506 | 9-14 | 1/3 | | | | 2 | | | | | | | |
| H.S. | 1,740 | 9-12 | 1 2 | | | 1 | | | | | | | | |

TABLE 33-Continued

| | | ··· · · · · · | | | sional | | - | | | on-Prof | | | | |
|---------------|--------|---------------|----------|---------------|----------------|---------------------------------------|-------|---------------|----|--------------|------|------|----------------------|-----------------|
| Type Diet. | A.D.A. | Gr. | Dir. | Asst. Dir. | Tchr. Cons. | Lib. | Cler. | Film Tech. | | Phot. | Art. | Lib. | Other | Student Only |
| H.S. | 1,917 | 9-12 | 효 | | | | | | | | | | | x |
| H.S. | 2,188 | 9-14 | 4/7 | | | | | | | | | | | x |
| H.S. | 2,500 | 9-12 | 1/3 | | | | | | | | | 1/3 | 1/3 Equation Technic | |
| H.S. | 4,709 | 9-14 | 4/5 | 1/5 | | | 1 | | | 1 | | | | |
| H.S. | 5,348 | 7-12 | 1 | | | | | | | | | | | x |
| H.S. | 11,750 | 9-14 | 1 | | | 1 | 1 | | 12 | | | | | |
| J.C. | 796 | 13-14 | 1/3 | | | | 1/3 | | | | | | | |
| J.C. | 862 | 13-14 | 1/3 | | | | | | | | | | | |
| J.C. | 975 | 13-14 | <u>1</u> | | | | 3/5 | | | | | | | |
| J.C. | 1,197 | 13-14 | 1/3 | | | 12 | | | | | | | | |
| J.C. | 1,260 | 13-14 | <u>1</u> | | | | 1 | | | | | 1 | | |
| J.C. | 1,367 | 13-14 | 1/2 | | | | | | | | | | | |
| J.C. | 1,700 | 13-14 | 휥 | | | | 14 | | | | | | | |
| J.C. | 1,700 | 13-14 | 1/3 | | | · · · · · · · · · · · · · · · · · · · | 11 | 1 2 | | | | | | |

TABLE 33--Continued

| | | | | Profes | sional | | Non-Professional | | | | | | | |
|---------------|--------|-------|------|---------------|----------------|------|------------------|---------------|--|-------|------|------|---------------------|-----------------|
| Type Dist. | A.D.A. | Gr. | Dir. | Asst. Dir. | Tchr. Cons. | Lib. | Cler. | Film Tech. | | Phot. | Art. | Lib. | Other | Student Only |
| J.C. | 1,975 | 13-14 | 3/5 | | | | 2 | | | | | | | |
| J.C. | 2,065 | 13-14 | 3/5 | | | | 1 | | | 4 | | | ½ List. Rm. Att. | |
| J.C. | 4,563 | 13-14 | 1 | | | | 6 | | | • | | | | |
| J.C. | 5,435 | 13-14 | 1 2 | | | | 1/2 | <u>1</u> 2 | | | | | | |

for all districts was \$1.83. This shows that the greater per cent of the districts are spending two dollars or less per student in the field of audio-visual education. The high school districts showed the widest range; their range was the same as the over-all range of \$0.14 to \$5.40. The range for the unified districts was \$0.28 to \$4.03. The elementary districts, on the whole, showed the lowest expenditure for audio-visual education, with no district reporting spending over three dollars per student. The junior college districts which reported showed a fairly high range, from \$1.24 to \$4.39. It must be noted, however, that only six of the junior college districts responded to the questions involving actual expenditures. Since these seem to be the districts with the most well-developed audio-visual programs, it might be assumed that if figures were available from all the districts in the survey, this range would be somewhat lowered.

Twelve districts reported spending less than one dollar per average daily attendance, sixteen reported a sum between one and two dollars, nine spent between two and three dollars, two spent between three and four dollars, three spent between four and five dollars, and only one spent more than five dollars per student.

Size of the district in terms of average daily attendance seems to have little bearing upon the amount of expenditure per student. One district of 4,390 average daily attendance spends twenty-eight cents per student, while another with an average daily attendance of 4,100 spends almost three dollars (\$2.83) per student. Among the larger districts, one with an average daily attendance of 29,005 spends only sixty-eight cents per student, while another district with 31,343 average daily

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TABLE 34
AUDIO-VISUAL BUDGETS

| Type of District | A.D.A. | Total Budget | Amount per A.D.A. | Spent for Materials | Amount per A.D.A. |
|---------------------|--------|-------------------|-------------------------|------------------------|-------------------------|
| Unified | 1,878 | \$ 1 , 785 | \$ 0.95 | | |
| Unified | 4,100 | 11,614 | 2.83 | \$ 5,807 | \$1.42 |
| Unified | 4,390 | 1,232 | 0.28 | 234 | 0.05 |
| Unified | 8,200 | 23,175 | 2.83 | 7,040 | 0.86 |
| Unified | 9,200 | 6,800 | 0.74 | | |
| Unified | 9,254 | 10,000 | 1.08 | 500 | 0.05 |
| Unified | 9,639 | 38,826 | 4.03 | 700 | 0.07 |
| Unified | 10,800 | 6,000 | 0.56 | 4,000 | 0.37 |
| Unified | 11,000 | 18,000 | 1.64 | 9,000 | 0.82 |
| Unified | 12,340 | 32,854 | 2.66 | 8,213 | 0.67 |
| Unified | 14,542 | 17,000 | 1.17 | 8,500 | 0.58 |
| Unified | 14,744 | 23,711 | 1.61 | | |
| Unified | 16,682 | 24,754 | 1.48 | 14,940 | 0.90 |
| Unified | 18,615 | 27,766 | 1.49 | 15,549 | 0.84 |
| Unified | 18,857 | 28,760 | 1.52 | 10,641 | 0.57 |
| Unified | 21,494 | با13, 70 | 3.26 | 14,138 | 0.66 |
| Unified | 25,348 | 54,000 | 2.13 | 11,390 | 0.45 |
| Unified | 26,347 | 57,000 | 2.16 | 6,840 | 0.26 |
| Unified | 27,000 | 48,000 | 1.78 | 8,630 | 0.32 |
| Inified | 29,005 | 20,000 | 0.68 | 11,000 | 0.38 |
| Unified | 31,343 | 90,709 | 2.89 | 32,000 | 1.02 |
| | | | | | |

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TABLE 34-Continued

| Type of District | A.D.A. | Total Budget | Amount per A.D.A. | Spent for Materials | Amount per A.D.A. |
|---------------------|-----------------|-----------------|-------------------------|------------------------|-------------------------|
| Unified | 53,261 | \$ 24,790 | \$0.47 | \$ 13,000 | \$0.24 |
| Unified | 58 ,3 98 | 23,000 | 0.39 | 8,050 | 0.14 |
| Unified | 362,725 | 619,308 | 1.71 | 126, 144 | 0.67 |
| Jr. College | 975 | 4,277 | 4.39 | | |
| Jr. College | 1,260 | 3,000 | 2.38 | 915 | 0.73 |
| Jr. College | 1,367 | 1,700 | 1.24 | 200 | 0.15 |
| Jr. College | 1,522 | 3,000 | 1.97 | | |
| Jr. College | 1,700 | 2,200 | 1.29 | 700 | 0.41 |
| Jr. College | 4,563 | 18,000 | 3.94 | 6,300 | 1.38 |
| High School | 1,740 | 3,000 | 1.72 | 150 | 0.09 |
| High School | 1,917 | 1,200 | 0.63 | 240 | 0.13 |
| High School | 2,188 | 2,000 | 0.91 | | |
| High School | 2,221 | 12,000 | 5.40 | | |
| High School | 2,500 | 3,700 | 1.50 | 375 | 0.15 |
| High School | 4,709 | 21,662 | 4.60 | 1,603 | 0.34 |
| High School | 11,750 | 1,600 | 0.14 | 1,600 | 0.14 |
| Elementary | 4,900 | 8,400 | 1.70 | 5,292 | 1.08 |
| Elementary | 6 ,5 50 | 1,500 | 0.23 | | |
| Elementary | 7,121 | 15,000 | 2.11 | 2,250 | 0.32 |
| Elementary | 7,275 | 12,000 | 1.65 | | |
| Elementary | 7,879 | 19,698 | 2.50 | | |
| Elementary | بلبلباربلا | 8,850 | 0.61 | 4,425 | 0.30 |

attendance spends two dollars and eighty-nine cents per student.

Amounts spent for audio-visual materials alone vary greatly, depending upon the percentage of the total budget which is allocated to this one particular expenditure. There is no direct ratio between total audio-visual budget and amount spent for materials. For example, one district with a high total expenditure per average daily attendance (\$4.03) spends only seven cents per student for materials. Districts report one of two major reasons for this divergence. Some districts prefer to rent or borrow the major portion of the audio-visual materials used, rather than to attempt to build up their own collections. In these districts, the per student cost for materials will be low, but the amount spent for rentals will be high. In certain districts, the materials collections are excellent and do not need a relatively high allotment to be used for additional materials. These districts may be spending more of their total budget to build up the equipment supply, for room darkening, or for certain other special projects.

Table 35 gives a percentage breakdown of the amount spent in each of six categories: purchase of equipment, purchase of materials, rental fees, operating expenses, travel expenses, and all other expenditures except salaries. The districts are arranged in ascending order of average daily attendance within district type. Since the response concerning audio-visual salaries was incomplete, it was decided to eliminate this category from the report. In most of the districts the salaries are not paid from the audio-visual budget, and accurate figures were difficult to obtain.

TABLE 35

PER CENT OF BUDGET ALLOCATED TO EACH OF SIX CATEGORIES

| Type of District | Purchase Equipment | Purchase Materials | Rentals | Operating Expenses | Travel Expenses | Other |
|------------------|-----------------------|-----------------------|----------|--|--------------------|-------|
| Unified | 1 | 25 | 20 | 54 | | |
| Unified | 33 | 50 | 17 | | • | |
| Unified | 44 | 37 | 11 | 8 | | ļ |
| Unified | 31 | 52 | 4 | | | 13 |
| Unified | 13 | 5 | 63 | | | 10 |
| Unified | 30 | 50 | 20 | | | |
| Unified | 7 | 55 | 5 | 30 | | . 3 |
| Unified | 16 | 2 | 4 | 32 | | 46 |
| Unified | 56 | 31 | 2 | 7 | 2 | 2 |
| Unified | 40 | 28 | 4 | 14 | 1 | 13 |
| Unified | 24 | 70 | 2 | 3 | 1 | |
| Unified | 3 | 85 | 3 | 3 | 1 | 5 |
| Unified | 26 | 49 | 8 | 16 | 1 | |
| Unified | 39 | 12 | 17 | 22 | 10 | |
| Unified | 10 | 87 | | | | 3 |
| Unified | 15 | 80 | | | 1 | 4 |
| Unified | 30 | 50 | 10 | 10 | | |
| Unified | 25 | 47 | | | | 28 |
| Unified | 46 | 51 | <u> </u> | | | |
| Unified | 67 | | 14 | 16 | 2 | |
| Unified | 46 | 37 | 1 | 16 | | |
| Unified | 47 | 53 | | and the second s | | |

| Type of District | Purchase Equipment | Purchase Materials | Rentals | Operating Expenses | Travel Expenses | Other |
|---------------------|-----------------------|-----------------------|---------|-----------------------|--------------------|-------|
| Unified | | 96 | | 2 | 2 | |
| Jr. College | 39 | 27 | 19 | 15 | | |
| Jr. College | 18 | 12 | 6 | 64 | | |
| Jr. College | 25 | 35 | 40 | | | |
| Jr. College | 20 | 30 | 11 | 33 | | |
| Jr. College | 47 | | 33 | 20 | | |
| Jr. College | 25 | | 36 | 20 | 9 | |
| High School | 75 | 20 | | 5 | | |
| High School | 41 | 12 | 31 | 13 | 3 | |
| High School | 67 | | 2 | 30 | ı | |
| High School | 52 | | 48 | | | |
| High School | 50 | | 25 | 25 | | |
| High School | 70 | 5 | 10 | 15 | | |
| High School | 40 | 10 | 50 | | | |
| Elementary | 50 | | 50 | | | |
| Elementary | 50 | 50 | | | | |
| Elementary | 49 | | 51 | | | |
| Elementary | 25 | 63 | 12 | | | |
| Elementary | 37 | 15 | 45 | 2 | ı | |
| Elementary | 30 | 50 | | 20 | | |

The Use of Audio-Visual Materials

It was difficult to secure data on the use of materials. Only thirty-seven of the districts surveyed were able to report that they keep booking statistics, that is, keep them in any manner which makes them available for consultation. Among the thirty-seven districts, the largest number (twenty-five) keep booking records by title only. Five keep them by subject field, by grade level, and by title; four, by subject field and by title; one, by grade level and title; and two, by subject field only. Many of the circulation reports are incomplete and fragmentary. Records seem to be kept more frequently of the booking of films and filmstrips than of other types of audio-visual materials. Twenty-two districts keep a record of the materials rented from outside sources, and thirteen keep files of evaluations of materials made by teacher users. Statistics which show the utilization of materials such as the number of presentations, the number of showings per teacher, the number of presentations per teacher user, and the average pupil attendance per presentation are kept in only a few districts. Since these are figures which can be used in evaluating an audio-visual program, it seems unfortunate that so few districts are concerned with their preservation. Lack of time and of clerical help are the chief reasons given for failure to keep records. One of the directors of a large unified district reported that they did not have time to keep records or to do research on their program.

That the districts which do keep records use them in improving their audio-visual programs seems evident from the responses to items in the questionnaire concerning this point. Table 36 shows the number of

districts which indicated that they use their records in each of a number of ways to strengthen their programs.

TABLE 36

USE MADE OF BOOKINGS AND OTHER RECORDS

| Use | Number of Districts |
|--|------------------------|
| Evaluating the audio- visual program | 13 |
| Indicating need for in-service education | 6 |
| Tangible measures of utilization | 14 |
| Making up budgets | 16 |
| Purchasing duplicate materials | 19 |
| Purchasing related materials | 14 |
| Weeding materials collections | 12 |
| Deciding to rent materials | 3 |

In an attempt to discover in which of the curricular areas teachers use the largest number of audio-visual materials, the directors were given a list of general curriculum fields and asked to rank them in the order of frequency of audio-visual bookings. From their replies a composite picture for both the elementary and secondary grades was derived. In both elementary and secondary grades, social studies ranked first, science second, and English third in regard to the number of audio-

visual materials of all types which are booked. The remaining areas in the elementary grades ranked in descending order are: music, art, arithmetic, and physical education, or health. In the secondary grades the descending rank order is as follows: homemaking, physical education, art, music, shop work, business education, modern languages, and mathematics.

Directors of unified districts were asked which of the three grade levels, elementary, secondary, and junior college, made the largest use of all types of audio-visual materials in proportion to the number of students and teachers. Basing their replies upon the number of showings per teacher, the directors reported that the elementary grades mank first and the secondary grades next.

Responses from the directors giving actual booking statistics and the total number of presentations were too few in number and too fragmentary to give a clear picture of the actual amount of use of audiovisual materials. Included in Appendix IV are three representative circulation reports which are interesting examples of the way in which such reports can be presented.

The Audio-Visual Program in the Schools

The usual number of audio-visual building coordinators in the districts surveyed is one per school. Twenty-eight out of forty-eight districts follow this pattern. The outstanding variations are found in those unified districts which have building coordinators only in the

The junior college districts are all one-campus institutions and for that reason do not have building coordinators other than the audio-visual director. The joint high school and junior college districts are counted as high school districts in this study. Because of this, the junior college districts are not included in this section.

secondary schools, and those which have coordinators who are responsible for several schools.

Four districts have more than one coordinator per school. In a few districts, the audio-visual director may also serve as building coordinator for one of the schools in the district and for this reason the actual number of building coordinators was reported as one less than the total number of schools.

Most of the building coordinators are regular classroom teachers who are allowed a specified time each day to devote to audio-visual coordinating. In twenty-seven districts all building coordinators are teachers and in all but six districts at least some, and usually most, coordinators are teachers. In six districts no teachers serve as building coordinators. In two of the latter districts the coordinators are vice-principals. In other districts they are vice-principals or librarians, librarians or clerical workers, principals, or full-time employees who have been drawn from the ranks of the former teachers and librarians.

In the districts in which the building coordinator groups are composed of a number of different types of employees, teachers usually predominate. The rank in descending order of frequency of other types of employees is as follows: librarians, principals, clerical workers, vice-principals, and deans.

Time Allowed for Audio-Visual Duties

The amount of time during the regular working day which building coordinators are allowed for their audio-visual duties varies from none to five hours. One district employs nine full-time coordinators who

divide their time among thirty-four schools. This is an exception to the general pattern, however. The two districts which require coordinators to do their audio-visual work in addition to full-time teaching duties are not the smallest of the districts in the survey. One is sixth and the other nineteenth in size.

With the exception of nineteen districts which reported this time as varying, the most frequent fixed amount of time is one hour per day. This amount was reported by ten districts. One-half hour per day was the second most frequent amount (in five districts), and two hours was a close third (in four districts). One district allowed up to one hour, two districts each allowed from one to two hours, and one reported its time allowance as up to two hours. One of the larger districts allowed from two to five hours per day to its audio-visual coordinators, the actual amount depending upon the size of the school and the number of students served.

From these figures we see that the general trend, at least in these districts which provide one coordinator per school, is to allow up to two hours a day for audio-visual coordinating work. Some districts still expect this work to be done on the employee's own time or allow him only a minimum amount of time, such as one-half hour per day.

School Materials Centers

Twelve audio-visual directors reported that the schools in their districts maintain their own audio-visual materials centers within their buildings. In twenty-four districts the individual schools own all of their own audio-visual equipment, and in fifteen districts they own part

of it. In the remainder of the districts, schools are assigned districtowned equipment, either on a yearly or an indefinite basis.

All audio-visual materials and equipment are housed in the school libraries in eight districts and some materials are housed there in five additional districts. Eighteen of the districts, where audio-visual materials or equipment are not housed in the libraries, provide special audio-visual rooms or centers in the schools. In four districts, these materials are kept in the school office and in one district, in the coordinators' rooms. The other districts reported that their schools housed audio-visual materials and equipment in various places about the buildings, in closets, teachers' workrooms, or storage areas. One district reported that they are kept in "any available closet, classroom, or shop."

Provisions for Audio-Visual Showings

Films are shown (except for special occasions) in the regular classrooms and to only one class at a time in the schools of thirty—four districts. Only two districts use the auditorium or a special audio-visual room exclusively and show to more than one class at a time. Nineteen districts reported that they do make use of both systems, usually showing films in the classroom to one class, but occasionally in the auditorium to larger groups when they are studying the same material. In the case of some districts, which may have good audio-visual facilities in some of the newer schools but not in older buildings, procedures vary. One district makes use of the auditorium in the elementary schools, but its secondary school buildings all have room darkening facilities.

The percentage of rooms which are adequately darkened for audiovisual showing varies greatly from district to district, in fact, the
range is from five per cent of the total rooms to one hundred per cent.

The average mean is 38.8 per cent. A number of districts reported long
range plans for adding to the number of darkened rooms each year until
their buildings can be darkened one hundred per cent, or as near to that
figure as is feasible. Budget limitations, of course, make this process
slower than is desired for an optimum audio-visual program. As long as
a continuing program is in effect, however, it is evident that the districts are attempting to reach the goal of total darkening.

TABLE 37
PER CENT OF CLASSROOMS DARKENED PER DISTRICT

| Per Cent of Rooms Darkened | Number of Districts |
|---|---|
| 100 80 75 70 60 50 40 30 25 20 10 | 6 2 1 1 8 2 1 6 4 |
| ラー・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・ | 6 |

Audio-Visual Personnel's Estimates of the Audio-Visual Service and Needs

An attempt was made to secure the opinions and estimates of audio-visual personnel regarding the success of their audio-visual programs and their attitudes toward the current movement for cooperation

between audio-visual departments in different districts or counties. The findings which are reported in the following pages are based entirely upon the opinions of the directors or other school officials who responded to the Questionnaire.

Directors' Evaluations

The directors were asked to give information in the form of percentages on needs being met, teacher use of materials, booking increases, classroom visitation, and the number of teachers who have completed the required course in audio-visual education.

The estimated per cent of needs, based upon requests, which are being met by the audio-visual departments ranged from fifty to one hundred per cent in the unified districts, sixty to ninety-five per cent in the elementary districts, fifty to ninety-five per cent in the high school districts, and seventy to one hundred per cent in the junior college districts. The over-all range is from fifty to one hundred per cent. The mean for the unified districts is 87.7, for the elementary districts 82.5, for the high school districts 76.9, for the junior college districts 86.7, and for all districts 83.5.

It would seem that the audio-visual directors are rather optimistic in their belief that a major share of the needs of the teachers in their districts are being met by their department. Care must be taken here to note that the needs were based upon request, and no account was taken of the fact that teacher requests might be lower than they should be because of a lack of teacher awareness or motivation. A department might be meeting all of the requests and yet might not be doing an

adequate job of teacher motivation. In this manner a district might meet one hundred per cent of the requests but have only a small amount of requests to fill, while another district with a large amount of requests might be able to fill only seventy or eighty per cent of them. The second situation might really be a healthier situation as far as teacher interest and desire to use audio-visual materials are concerned.

The percentage of teachers who use audio-visual materials showed a considerable variance between districts. In the unified districts, the range was fifty-five to ninety-eight per cent; in elementary districts, twenty to one hundred per cent; in the high school districts, forty-five to one hundred per cent; and in the junior college districts, ten to ninety-five per cent. Means were as follows: unified, 78.5; elementary, 74.1; high school, 61.9; junior college, 71.9; and the over-all mean, 71.6. This might lead us to believe that slightly less than three-fourths of the teachers in the districts surveyed make use of audio-visual materials of instruction.

Directors in unified districts were asked to designate by grade level the type of teachers who used audio-visual materials the most. Elementary teachers were believed to make the greatest use of these materials, with estimates ranging from forty-five to one hundred per cent, and a mean of 88.7 per cent. Secondary teachers were next with a wider range of twenty-five to ninety-eight per cent, but with a mean of 69.1 per cent. Junior college teachers were believed to use the fewest. Their range, of twenty-five to ninety per cent, had a mean of only 47.2 per cent.

It is evident from their replies to the questionnaire that most

of the audio-visual directors do not believe that all of the teachers are using audio-visual instructional materials in accordance with the best teaching procedures. Directors in unified districts felt that varying percentages from forty to ninety-five per cent did use the materials in a correct mamer. Their mean was 68.5 per cent. The percentage in high school districts varied from twenty-five to one hundred per cent, with a mean of 50.8; in elementary school districts, from fifteen to ninety-five per cent, with a mean of 58.2 per cent, and in junior college districts from sixty to one hundred per cent with a mean of 77.5 per cent. From these figures it is evident that, at least in the opinion of the audio-visual directors, only from one-half to three-fourths of the teachers who do use audio-visual materials are using them according to recommended and tested procedures. If this opinion be true, there is certainly a need for an improved program of in-service education, aimed at reaching a larger proportion of teachers than has hitherto been reached.

Since July 1, 1947, all teachers, who have been granted a credential or who have renewed a credential authorizing public school teaching in the state, have been required to present credit for a two unit course in audic-visual-radio education. Thirty-five of the districts surveyed were able to supply the information as to the per cent of their teachers who had completed the required course. The mean percentage for these districts is 82.2. The elementary districts were highest with a mean of 94.2, and the unified districts were lowest with a mean of 72.1. On the basis of these figures we can probably assume that around four-fifths of the teachers in the state have had at least the basic audic-visual training represented by this course.

The percent of classrooms in their districts which were visited by audio-visual directors varied considerably, from only one per cent in one district to one hundred per cent in another with an arithmetic mean of 40.8 per cent. Table 38 gives the responses and the number of districts giving each percentage.

TABLE 38

PER CENT OF CLASSROOMS IN DISTRICT VISITED BY AUDIO-VISUAL DIRECTOR DURING YEAR

| Per Cent | t | Number of Districts |
|--|---|---|
| 100 95 90 80 75 50 40 35 30 25 10 5 | | 1 2 1 3 1 4 2 2 4 2 1 7 1 |

In an attempt to discover a trend, the directors were asked to give the per cent of increase in the number of audio-visual items booked during the last five years. The returns failed to show a significant trend, with percentages from five to one thousand being reported. The mean percentage increase was 159.7. Table 39 shows how widely the responses were scattered and the number of districts which reported the same amount of increase. Some of the districts reporting a smaller increase had older, well-established audio-visual departments which have

probably been functioning near capacity for a number of years. Again, some of the districts reporting tremendous increases were those with recently formed audio-visual departments which were hardly functioning five years ago. Growth in circulation of materials may also be accounted for in some instances by phenomenal population growth with a resultant growth in the number of schools, pupils, and teachers using the materials. Although the validity of this measurement may be questioned, it does seem to give support to the belief that circulation of audio-visual materials has seen an enormous growth in recent years, regardless of the cause.

TABLE 39

PER CENT OF INCREASE IN AUDIO-VISUAL BOOKINGS
IN THE FIVE YEARS, 1950-1954

| Per Cent o | of | Number of Districts |
|------------|---|------------------------|
| 1,000 | ••••• | ı |
| 500 | • • • • • • • • • • • | 2 |
| 300 | ••••• | 1 |
| 250 | ••••• | 2 |
| 200 | ••••• | 3 1 |
| 120 | • | 1 |
| 100 | • | 4 |
| 95 | • • • • • • • • • • • | 1. |
| 90 | • • • • • • • • • • • • | 1 |
| 75 | • • • • • • • • • • • | 1 |
| 60 | • • • • • • • • • • | 1 5 |
| 50 | • • • • • • • • • • • • | 5 |
| 40 | • • • • • • • • • • • | 1 |
| 30 | • | 1 |
| 2 5 | | 1 |
| 20 | • • • • • • • • • • • • • | 2 |
| 5 | | 1 |

Cooperation between Districts

Since cooperation between counties in the state in regard to audio-visual services has been successful in several instances, and since

such cooperation seems to be a growing trend, information was sought as to the extent which the audio-visual departments of the local districts could serve the schools of nearby districts. The directors were also asked to state their plans, if any, for cooperation with other districts, and to tell their attitude toward such extension of service. Tables 40 through 42 summarize the findings.

TABLE 40

DIRECTORS' ESTIMATES OF THE ABILITY OF THEIR
DEPARTMENT TO SERVE OTHER DISTRICTS

| | Unified | Elem. | H.S. | J.C. |
|-------------------------------------|---------|-------|------|------|
| Could Serve Another District | 2 | 1 | 2 | 1 |
| Unable to Serve Another District | 28 | 8 | 6 | 11 |
| Undecided | 2 | | | |

The directors of only two of the thirty-two unified districts believe that their departments could extend service to the schools of another district. One of these, Richmond, now gives audio-visual service to the nearby Pinole-Hercules District. The director in the other district, Oakland, believes that, while such service would be possible with the present facilities of his department, it does not seem desirable. Of the elementary districts only one, North Sacramento, has facilities which are sufficient to serve another district. This is one of the more progressive and better organized audio-visual departments in the state, and it would most likely be able to extend its services with a minimum of

effort and inconvenience. Another district, Bellflower, was considering unification with that of Bellflower Union High School District within a year. With the added facilities such extended service would be possible, although it would not be possible at the present time. Among the high school districts, Fullerton Union High School and Covina Union High School are capable of providing such services to other schools, but have no definite plans for doing so. Orange Coast College is the only junior college district which believes that its department could serve other schools, but it has no plans for extension of service. Thus it is seen that, even though five districts believe that they could provide service to schools beyond their district, at the present time only one actually does, and only one other is seriously considering the possibility of extending its services.

TABLE 41
PLANS FOR COOPERATION BETWEEN DISTRICTS

| | Unified | Elem. | H.S. | J.C. |
|--|---------|-------|------|------|
| Have plans for cooperation with another district | 1 | 1 | | |
| No plans for cooperation with another district | 31 | 8 | 8 | 12 |

The majority of the directors do not favor an extension of services beyond their own district. Those who gave qualified approval usually specified that they favor cooperation between districts when facilities permit it, when the staff is large enough to provide the service, or when the districts are geographically near enough. One junior college

director would like to see cooperation among junior colleges on a regional basis, with a joint film depository, but, because of the differences in materials for the different grade levels, does not favor cooperation with districts other than junior college districts, or those maintaining junior colleges.

It would seem that cooperation between districts is an area which could be developed, especially in the field of cooperative film libraries.

TABLE 42
ATTITUDES OF DIRECTORS TOWARD
COOPERATION BETWEEN DISTRICTS

| | Unified | Elem. | H.S. | J.C. |
|--|---------|-------|------|------|
| Favor cooperation between districts - definitely | 3 | 1 | 1 | 1 |
| Favor cooperation between districts - qualified | 7 | | 1 | 2 |
| Do not favor cooperation between districts | 15 | 6 | 4 | 6 |
| Undecided | 7 | 2 | 2 | 3 |

CHAPTER IV

SUMMARY

In an attempt to ascertain the present status of audio-visual education programs in California public schools districts and to discover some of the characteristics of these programs, a survey was made of all districts which have an audio-visual program meeting certain arbitrary standards. By these standards a district had to have either (1) a director who devotes half of his working time to the audio-visual department, or (2) a library of audio-visual materials, a director who spends at least one-third of his time on audio-visual duties, and plans for continuing and expanding their programs. Sixty-nine districts in the state met the above standards and, of these, sixty-one are represented in this study.

The data for the study were obtained from audio-visual directors or other school officials within the districts, either by written questionnaires or by a scheduled interview, during which the questionnaires were filled in. Only one study of a similar nature has been done in the state, and, since it was made in 1937, the findings are entirely out-of-date. At the present time, a survey is being made of the audio-visual programs of the county school departments in California. For that reason, this study does not touch upon the county programs except as they

directly affect the sixty-one districts. The two studies are intended to complement each other.

Formal district audio-visual programs had their beginning in California in the decade from 1920 to 1930. It was also during this period that the experiments in radio education began. The next decade saw the well-known Santa Barbara film experiment, the McPherson survey and the resultant movement toward establishment of a state department of audio-visual education, and the almost disastrous O'Conner decision.

During the period from 1940 to 1955 audio-visual education as we know it today came into being with the actual establishment, in 1945, of the Bureau of Audio-Visual Education in the State Department of Education, the passage of the law requiring all teachers applying for new credentials or renewals of credentials to present credit for a two-unit course in audio-visual-radio education, the establishment of many new city and district audio-visual departments, and the complete extension of county audio-visual services to the small districts of the state.

For purposes of clarity, the sixty-one districts in the survey were classified into the following four categories: elementary districts, high school districts, junior college districts, and districts with a unified administration. Such a classification was decided upon not only because it identifies the type of district in terms of grades served but also because that form of grouping has been adopted by the State Department of Education for many statistical reports where a comparison by kind of district is needed.

Information was collected from the districts in terms of the following broad subjects: background information, involving relationship

with the county audio-visual department and curriculum patterns; resources of the audio-visual departments in terms of holdings of materials and equipment and physical plant; services provided by the audio-visual department to the teachers and students in its district; audio-visual personnel; expenditures for audio-visual education; use of audio-visual personnel's estimates of their services and needs.

Summary of Findings

Materials and Equipment

- 1. Over one-half of the audio-visual directors believe that their collections of materials are sufficiently adequate to meet the normal needs of their schools promptly and efficiently and to allow adequate loan time.
- 2. Only in two areas, 2 by 2 slide projectors and record players, do even half of the districts meet the Seaton standards in regard to equipment holdings.
- 3. Thirty-eight per cent of the districts have instructional materials centers which combine printed and audio-visual materials of instruction into one unit.
- 4. Evaluation and selection of new materials and equipment is made by preview groups of teachers and supervisors or audio-visual staff members in three-fourths of the districts surveyed.
- 5. Classroom evaluations of materials and equipment are made by teachers and pupils working together in two thirds of the districts.
- 6. In sixty-two per cent of the districts purchases of materials and equipment may be made at any time during the year as need arises.

They may be made only once a year in as many as twenty-one per cent of the districts.

7. In fifty-one per cent of the districts, materials and equipment may be purchased from any dealer designated by the audio-visual director. In the remainder, a bid list must be submitted and the order given to the lowest bidder.

Integration of Materials with the Curriculum

- 1. Teachers are encouraged to suggest materials, and new selections are made to meet curricular needs in almost all of the districts.
- 2. The trend is away from formal courses of study listing audio-visual materials toward general framework statements with the teacher relied upon to choose the materials used.
- 3. Periodic evaluation and discarding of obsolete materials is done in over half of the districts.
- 4. Audio-visual directors participate in curricular construction in half of the districts.

Services of the Departments

- 1. In eighty-three per cent of the districts, films requested by teachers but not owned by the audio-visual department are rented or borrowed from outside sources.
- 2. The frequency with which booking requests may be submitted by the schools varies from once a year in four districts to daily in thirty-two districts.
 - 3. In slightly over one-half of the districts, teachers are

able to book materials no longer than one month ahead of the showing date and be fairly certain of receipt. In the remaining districts, they must book from six months to one year in advance.

- 4. Almost all of the directors believe that their delivery services are adequate.
- 5. In general, equipment is not loaned to the schools for short time use by the district audio-visual department. Equipment is either the property of the individual schools or is district property which is given to them on a long term assignment.
- 6. A large number of districts, fifty-five, do not attempt to do major repair work on their district's audio-visual equipment but send it to outside agencies for such service.
- 7. Two-thirds of the districts issue printed or mimeographed catalogs of available audio-visual materials. Sixty-nine per cent of these issue revisions and new catalogs as needed rather than at fixed intervals.
 - 8. Annotations are included in over one-half of the catalogs.
- 9. Less than half of the districts provide an individual copy of each catalog to every teacher.
- 10. Approximately one-third of the districts issue audio-visual bulletins or newsletters, and another one-fourth are allowed space in general district bulletins.

Materials Libraries

1. Audio-visual materials libraries are maintained in eightyfour per cent of the districts. The remaining districts either follow

- a policy of decentralization or have collections which are as yet unorganized.
- 2. There is a lack of uniformity in library practices among the audio-visual centers with a number of different classifications systems and procedures being used.

Radio Education

- 1. Only one district has a radio broadcasting station.
- 2. Six districts make regular use of the facilities of nearby commercial stations, and fourteen other districts make occasional use of commercial facilities.

Teacher Training

- 1. Most districts attempt to provide some sort of in-service education program.
- 2. Approximately four-fifths of the teachers in the districts surveyed have had the basic two-unit course in audio-visual-radio education.

Personnel

- 1. Only twenty-two districts have full-time directors, but almost three-fourths, forty-four districts, have directors who give at least half-time to the audio-visual program.
- 2. The largest percentage of part-time audio-visual directors spend their remaining time working with other types of instructional materials. Teaching is second in frequency.
 - 3. Most directors have quite extensive experience backgrounds.

All but one have had previous teaching experience, and the number of directors with just one type of previous experience is low. Administrative experience ranks next to teaching experience in frequency, with more persons going into audio-visual directorships from administration than from subordinate positions in the audio-visual field. Previous audio-visual experience ranks third, supervision fourth, and library experience fifth.

- 4. Most directors administer the audio-visual department, select and order new materials and equipment, supply information to teachers, supervise the distribution of materials, make and control the audio-visual budget, and provide advisory services. Less frequently they administer the audio-visual library, present demonstrations at teachers meetings, train others in the operation of equipment, assist teachers in preparing materials, discuss utilization of materials, visit classrooms, and instruct building coordinators. Fewer still supervise the production of materials, organize the audio-visual phase of institutes, maintain public relations, address groups, appoint building coordinators, direct research, give audio-visual courses, and issue information bulletins to the public.
- 5. There is a great lack of uniformity among the titles of audio-visual directors and even in the rank of the position.
- 6. The number of professional personnel other than the directors is low.

Expenditures

1. There is a great divergence in the amount of money spent from district to district for audio-visual education. The range is from

- \$0.14 to \$5.40 per average daily attendance, with a mean expenditure of \$1.83.
- 2. The size of the district in terms of average daily attendance has little bearing upon the amount of expenditure per pupil.

Use of Materials

- 1. Only thirty-seven districts keep booking statistics and records on the use of their materials. Even among these districts, the records are often incomplete or not organized.
- 2. The records kept are used for the most part in deciding upon the purchase of duplicate or related materials, in making up budgets, as tangible measures of utilization, and in evaluating the programs.
- 3. Social studies ranks first, science second, and English third in both elementary and secondary grades in the use of audio-visual materials.
- 4. The greater proportion of use of materials is found in the elementary grades.

Programs within the Buildings

- 1. The usual number of building coordinators is one per school.
- 2. Most building coordinators are regular classroom teachers who are allowed a specified amount of time each day to devote to audiovisual coordinating.
- 3. The most frequent amount of time allowed to building coordinators is one hour per day. Very few districts allow over two hours per day.
 - 4. Most directors believe that space for housing and storing

school-owned and borrowed audio-visual materials and equipment is not adequate.

- 5. Films are shown in regular classrooms and to only one class at a time in most districts.
- 6. The percentage of rooms which can be darkened varies from five per cent to one hundred per cent, with a mean of thirty-nine per cent. Most districts reported long range plans for increasing the number of darkened rooms each year.

Estimates and Opinions of the Directors

- 1. Audio-visual directors are rather optimistic in the belief that a major share of the needs of their teachers is being met by their audio-visual departments. The mean estimated percentage of needs being met is eighty-four per cent.
- 2. According to the directors, slightly less than three-fourths of the teachers make use of audio-visual materials.
- 3. According to the directors, only one-half to three-fourths of those who do use the materials use them according to recommended and tested procedures.
- 4. Six directors believe that their facilities and holdings are adequate to serve the needs of schools in neighboring districts, but only one district does serve another at the present time. One other district has plans for the extension of its services to another district.
- 5. Of the sixty-one directors, thirty-one do not favor cooperation among districts and six definitely do favor it. Ten gave qualified answers in favor, and fourteen are undecided.

Classroom Visitation

The directors visited, on the average, approximately forty per cent of the classrooms in their districts during the last school year.

Recommendations

While it must be understood that this study is a status survey and limited in its purpose to the collection of data which will show us the present audio-visual situation, the writer has attempted to make several suggestions for the improvement of audio-visual programs throughout the state. The following recommendations represent her opinion, based upon the data collected in this survey.

- 1. If we accept the assumption, based upon statements from almost half of the audio-visual directors, that the supply of materials in half of the district collections is inadequate to meet normal needs and to allow sufficient time for proper use, it seems evident that attempts should be made to increase the amount of available materials.
- 2. Application of the Seaton standards shows that in most districts equipment holdings do not meet the recommended minimum quantities. Assuming these standards to be valid, there should be an increase in the number of items of audio-visual equipment.
- 3. One-third of the districts do not make use of teacher and pupil evaluation of new materials and equipment. If we assume that these methods are reliable and desirable evaluation devices, it would appear that increased use of these methods would be desired.
- 4. Directors in forty-eight per cent of the districts are unable to make purchases of materials and equipment during the year as the

need arises or as requests are made. In forty-nine per cent of the districts, needed items may be purchased only from the lowest bidder, regardless of the quality of his product or services. If we accept the theory that materials and equipment should be made available to the teacher when needed or desired, changes should be made in the existing school regulations so that a director is able to purchase what is requested at the time of greatest need and to buy the best equipment or materials for the purpose.

- 5. A number of directors and audio-visual employees expressed the opinion that a standardized procedure for the cataloging and library handling of audio-visual materials would be of great benefit. If this is the desire of the people working in the field, steps could be taken, perhaps through the state audio-visual organization, to formulate certain guides and standard procedures.
- 6. There is much opportunity for experimentation in the fields of educational broadcasting and telecasting. It appears that audio-visual personnel might have an opportunity to lead in this venture, in which area little has heretofore been done in the state.
- 7. The directors stated in response to the questionnaire that less than three-fourths of the teachers in the state use audio-visual materials in their teaching, one-half to three-fourths of this number use them correctly, there are insufficient demonstrations of new equipment and methods, and that there is need for an extension and improvement of in-service education programs.
- 8. One-third of the districts do not issue printed or mimeographed catalogs of their available materials. A number of the

catalogs which are issued do not include annotations. If we agree that it is helpful to teachers and administrators to have such information available, it seems that those districts which have not issued catalogs might well do so, and those whose catalogs do not include annotations might take steps to present more complete information on their holdings.

- 9. Over one-half of the district directors give time to the evaluation of their collections and to the discarding of obsolete materials. It is this writer's opinion that all districts should engage in regular periodic evaluation of their collections and discarding of worthless material.
- 10. If the district administrators believe that audio-visual directors should participate in curriculum development, it will be necessary to allow them greater opportunities to work with teachers and curriculum department staff members in such projects.
- ll. Whenever possible, and whenever there is need, the personnel of the audio-visual departments should be increased so that the director will have more time to attend to professional matters rather than spend his time doing routine work which could efficiently be done by assistants or by clerical workers.
- 12. It would be of great help to research workers and to those engaged in evaluating audio-visual programs to have improved and more inclusive systems of record keeping employed in the audio-visual departments. This survey has shown that most districts do not have statistics on the use of their materials.
- 13. Sufficient time should be allowed all building coordinators so that they may effectively perform their functions. The exact amount

will depend upon the size of their school, the number of other audiovisual personnel in the district, and peculiar local conditions.

14. More attention should be given to the provision of space for the housing and storing of materials and equipment in the schools and to the extension of the room darkening programs in those districts where the audio-visual personnel are not satisfied with prevailing conditions.

Suggestions for Further Study

This study has indicated the need for further studies in at least four areas.

Analyses of the use of audio-visual materials of instruction from the standpoint of the teacher user would be of much value. One study of this type has been made, but it included only a selected number of teachers in one county. Similar studies in other sections of the state are needed for comparison and to give a more complete picture. Little has been done in collecting and interpreting data on such topics as the number of presentations per teacher user, attendance at each showing, the number of one-class and one-item showings, or presentations by type of material, by subject field, or by grade level.

The place and function of the audio-visual building coordinator in the total audio-visual program has been studied only in specific school districts. A comparative study on a state-wide basis would be of much help to local school administrators in planning the building phase of their audio-visual programs.

Integration of audio-visual materials with the curriculum is

another area which merits careful analysis. Studies of this nature, together with critical studies of the effect of curriculum patterns upon instructional materials programs, are necessary for a complete picture of the present status of audio-visual education in the state.

More study of the possibilities of cooperation between districts could well be made. This is especially true in the area of cooperative film libraries.

Prognosis of Future Trends

In view of the progress which has been made in recent years, and the present situation as seen through this survey, it is probable that the future will see the establishment of an increasing number of instructional materials centers which care for both audio-visual and printed materials. This will be brought about either through the combination of existing audio-visual departments and district school libraries, or through formation of new materials centers.

There will undoubtedly be improvement both in the number and type of facilities for using projected materials and in the provision of better storage facilities for materials and equipment within the school buildings. As new buildings are built, these features will be considered a necessary part of the instructional equipment.

Because of the rapid and tremendous growth of the population, it will probably be some time before holdings of equipment and available sources of materials will be entirely adequate to an optimum instructional program. Cooperation between districts might help to solve this problem, but, with the present feeling among audio-visual directors regarding

cooperation, it does not seem likely that very much will be done in this area. The pressing need for larger materials and equipment holdings makes it impossible to divert funds to the enlargement of audio-visual department staffs in the immediate future. Progress is being made in this area, however, and there is no need for pessimism.

Present trends indicate that the future will see further decentralization of equipment in many districts, with progress toward the goal of having projection and play-back equipment available in the class-rooms as needed. Increases in the amount of equipment holdings will help in the accomplishment of this goal.

The requirement of a two-unit course in audio-visual education for all new and renewed credentials will bring about an increasing number of teachers who have had an opportunity to learn about audio-visual materials, equipment, and methods. This should result in an increase in the percentage of teachers who make use of audio-visual materials.

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APPENDIX I

POSTAL CARD QUESTIONNAIRE

Claremont, California date

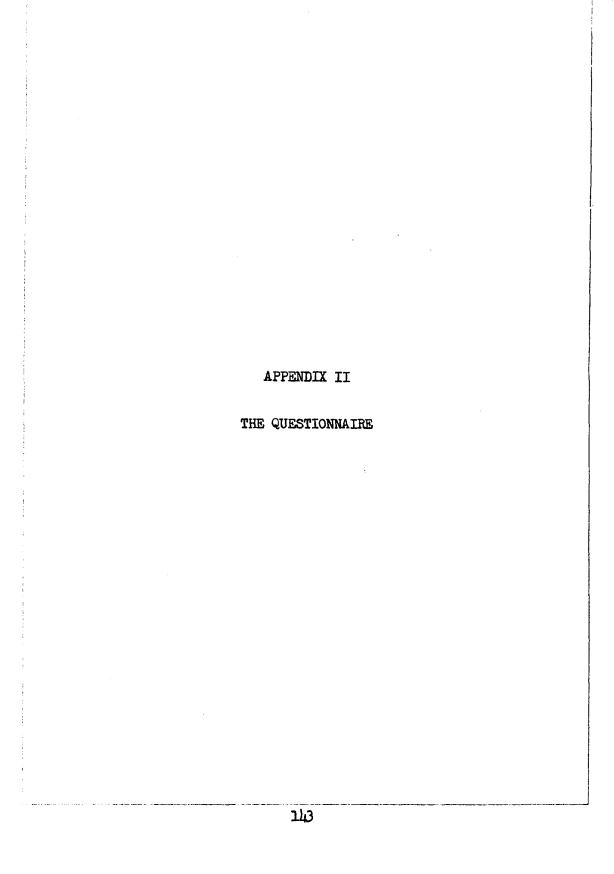
Gentlemen:

I am attempting to collect information on audiovisual education in California for a research study. If you will fill in the information requested on the lower half of this card and return it to me, your help will be greatly appreciated.

Yours truly,

Shirley L. Hopkinson

| mentary , Secondary |
|----------------------|
| umber of teachers: |
| Junior College . |
| , Secondary |
| have an audio-visual |
| harged with av. |
| Per cent of |
| Do you maintain a |
| Do you receive av. |
| av. dept.? |
| used? |
| |



| Name of School District | |
|--|-------------|
| Address | |
| 1. BACKGROUND INFORMATION | |
| 1.1 Type of audio-visual department: (Please check proper blank) | |
| 1.11 Completely independent of county audio-visual department. | |
| 1.12 Affiliated with county audio-visual department | |
| 1.121 District contracts for service from county | |
| 1.122 District is served without contract | |
| 1.123 County supplies film only | |
| 1.124 County supplies other materials as well | |
| 1.2 The curriculum pattern of the district in general is: (Place | |
| number of correct answer in each blank) (1) Separate sub- | |
| jects, (2) Broad fields, (3) Integrative core, (4) Child | |
| centered, (5) Other. If number 5 is given as answer, please | |
| explain. | |
| 1.21 At elementary level | |
| 1.22 At secondary level | |
| 1.3 The curriculum of the district is: (Check proper blank) | |
| 1.31 A printed course of study adopted by the Board of Education | |
| 1.32 In the main, a series of resource units based on subject | |
| areas | |
| 1.33 In the main, a series of resource units based on areas | |
| of experience | |
| 1.34 A framework statement that is the result of cooperative | |
| effort, is general in nature, and is on-going | |
| 1.35 A framework supplemented by resource units | |
| | |
| | |
| 2.1 Materials, give total number of: (from latest inventory, dated | |
| 2.101 Prints of 16mm sound film | |
| 2.1011 Number of titles | |
| 2.102 Prints of 16mm silent film | |
| 2.1021 Number of titles | |
| 2.103 Filmstrips | |
| 2.104 Study print sets | |
| 2.105 Records and transcriptions | |
| 2.106 Magnetic recordings | |
| 2.107 Slide sets | |
| 2.1071 2 x 2 slides | |
| 2.10/2 3音 x / slides | _ |
| 2.108 Models | |
| 2.109 Dioramas | |
| 2.1.10 Maps | |
| 2.111 Charts | |
| 2.112 Specimens | |
| 2.113 Mounted pictures and illustrations | |
| 2.2 Equipment, give total number of: | |
| 2.210 16mm sound film projectors | |

| 2.202 Silent film projectors |
|--|
| 2.203 Filmstrip projectors |
| 2.204 Slide projectors |
| 2.205 Overhead projectors |
| 2.206 Opaque projectors |
| 2.207 Stereoscopes |
| 2.208 Screens |
| 2.209 Projector stands |
| 2.209 Projector Stands |
| 2.210 Microphones |
| 2.211 Record players |
| 2.2111 3 speed |
| 2.2112 78 rpm |
| 2.2113 45 rpm |
| 2.2114 33 1/3 rpm |
| 2.2115 33 1/3 transcription players |
| 2.212 Recorders |
| 2.2121 Wire |
| 2.2122 Disc |
| 2.2123 Tape |
| 2.213 Radios |
| 2.214 Other |
| 2.215 Servicing and production equipment: (Check if owned) |
| 2.219 Servicing and production equipments: (oneck in owned) |
| 2.2151 Splicing machines |
| 2.2152 Film editors |
| 2.2155 Still cameras |
| 2.2154 Motion picture cameras |
| 2.2155 Dry Mount Press |
| 2.2156 Slide production materials |
| 2.2157 Spare parts for equipment |
| 2.2158 Photographic processing equipment |
| 2.3 Physical plant: |
| 2.31 Location of department: (Check blanks applying) |
| O 213 To the complementation with attendiated affice |
| 2.311 In the same building with other district offices 2.312 In own building adjacent to district office building(s) 2.313 In own building some distance from other district |
| 2.313 In own building some distance from other district |
| offices |
| 0.27). To some about and the healt library |
| 2.314 In same office area as the book library |
| 2.315 Adjacent to book library |
| 2.316 Completely separate from the book library |
| 2.32 Size of physical plant: |
| 2.321 Total number of square feet covered |
| 2.322 Check blanks if room or area is included in plant. If |
| more than one of each, give number following check. |
| 2.32201 Office |
| 2.32202 Conference room |
| 2.32203 Storage room or area |
| 2.3220u Maintenance and repair room |
| 2.32205 Shipping room |
| 2.32206 Preview room |
| 2.32207 Curriculum laboratory |
| 2.32208 Display room |
| Esheron menhad Innmessessessessessessessessessesses |

| 2.32209 Garage |
|---|
| 2.32210 One room for all purposes |
| 2.32211 Other |
| 2.33 Space occupied by audio-visual plant is: |
| 2.331 Owned by school district |
| 2.332 Rented by school district |
| 2.3321 Rent paid from audio-visual funds |
| |
| 3. SERVICES PROVIDED BY THE AUDIO-VISUAL DEPARTMENT |
| 3.1 Selection and procurement of materials and equipment: |
| 3.11 Evaluation and selection of new materials and equipment |
| is made by: |
| 3.111 The audio-visual director alone |
| 3.112 Preview groups of interested teachers, supervisors, |
| and audio-visual staff members |
| 3.113 Committees of supervisors |
| 3.114 Audio-visual building coordinators |
| 3.115 The audio-visual director upon the request of interest- |
| ed groups and individuals |
| 3.12 Classroom evaluations are made by teachers and pupils |
| 3.13 Purchase of materials and equipment is made: |
| 3.131 Whenever need arises |
| 3.132 At stated times during the year |
| 3.133 Once a year only |
| 3.14 Materials and equipment may be purchased: |
| 3.141 From any dealer |
| 3.142 Only upon the receipt of bids from jobbers |
| 3.15 Requested films and filmstrips are rented from outside |
| sources when not owned by the district |
| 3.151 Number of 16mm prints rented during the last fiscal |
| year |
| 3.152 Number of filmstrips rented during last fiscal year |
| 3.153 Approximate cost of rental program last fiscal year |
| 3.16 Number of films borrowed without charge from county |
| 3.2 Distribution or circulation of materials: (Booking policy |
| and procedures) |
| 3.21 Schools may make: |
| 3.211 Multiple order of materials for specific dates |
| 2.515 Studie from order of materials for specific dates |
| 3.213 Order for materials for general period of time but |
| not for specific dates |
| 3.22 Booking requests may be submitted: |
| 3.221 Daily |
| 3.222 Weekly |
| 3.223 Other |
| 3.23 To be fairly certain of use on date requested, |
| materials must be booked in advance: |
| 3.231 One week. |
| 3.232 One month |
| 3.233 Six months |
| 3.234 Other |

| 3.24Delivery service of audio-visual materials: |
|---|
| 3.241 Delivery is made by vehicle (Yes or No) |
| 3.2411 Number of vehicles owned by department |
| 3.2412 Number of vehicles available from other sources |
| 3.2413 Per cent of time latter are available |
| 3.242 Delivery and pick-up is made at all schools: |
| 3.2421 Daily |
| 3.2422 Twice a week |
| 3.2425 Once a week |
| 3.2424 Other |
| 3.243 Delivery by other than vehicle (Yes or No) |
| 3.2431 By U. S. Mails |
| 3.2432 Through pick-up by teachers or school representa- |
| tive at audio-visual center |
| 3.2433 Other |
| 3.25 Audio-visual equipment is loaned to schools: |
| 3.251 To replace school owned equipment undergoing repair |
| 3.252 On a permanent basis |
| 3.253 For "trying out" purposes only |
| 3.254 Other |
| 3.3 District maintains an audio-visual materials library |
| 3.31 Classification system used: (Check proper blank) |
| 3.311 Dewey Decimal System |
| 3.312 Accession number |
| 3.313 Arbitrary symbol |
| 3.314 Other |
| 3.32 A card catalog file is maintained at the audio-visual |
| center (Yes or No) |
| 3.321 Duplicate card files are supplied to schools |
| 3.322 Printed catalogs only are supplied to schools |
| 3.33 The audio-visual library staff cares for: |
| 3.331 Audio-visual materials only |
| 3.4 Maintenance and repair service to school owned equipment: |
| 3.41 Advisory servi only |
| 3.42 Cleaning and adjusting |
| 3.43 Minor repairs |
| 3.44 Major repairs |
| 3.45 Contracts are made with outside agency for maintenance |
| and repair |
| 3.451 School is billed for parts only |
| 3.452 School is billed for labor and parts |
| 3.453 Total bill is absorbed by audio-visual department |
| 3.5 Broadcasting services of audio-visual department: |
| 3.51 Audio-visual department has ownbroadcasting station |
| 3.52 Use is made of the facilities of commercial stations |
| 3.521 Regular programs are scheduled and conducted |
| 3.522 The facilities are used only occasionally |
| 3.53 Use is made of nearby college or university stations |
| 3.54 Educational telecasting is done under the cirection of the |
| audio-visual department staff |

| | sion of supervisory and consultant services: |
|----------------|--|
| | sistance to teachers in the use of audio-visual |
| | terials is provided by the audio-visual staff and/or |
| | ilding coordinators by: |
| | Help in the selection of materials to use |
| 3.612 | Demonstrations involving the use of materials and |
| | equipment |
| | Conferences with teachers relative to classroom needs |
| | Advice on improvement of room physical conditions |
| | Inter-school visitations |
| | Help in planning field trips |
| | in-service education program for teachers is provided |
| by: | |
| | Presenting the theory of audio-visual education |
| 3.622 | Organizing demonstrations, displays, exhibits, work- |
| 2 (22 | shops, conferences, etc |
| | Organizing and using preview committees |
| 3.624 | Providing guidance and counseling on audio-visual |
| 2 (27 | problems and use of materials |
| 3.625 | Arranging for and/or conducting the required two-unit |
| 2 (2) | course in audio-visual-radio education |
| | Participating in school staff and faculty meetings |
| | Visiting classrooms upon request |
| 3.628 | Visiting classrooms periodically with proper follow- |
| 2 (00 | up and constructive attention |
| 3.629 | Utilizing audio-visual building coordinators to assist |
| 2 (2 4 | in this program |
| | sistance to teachers in audio-visual matters is also |
| pro | ovided by: |
| 3.631 3.631 | Curriculum department staff |
| | Library staff |
| | Supervisory staff |
| | sion of information services: |
| 2 73 Azz | ailable materials are listed in printed catalogs |
|)•/I AVe | Number of printed catalogs comprising total |
| 3 712 | Are annotations included in the printed catalogs? |
| | r catalogs are issued: |
| | Annually |
| 3.722 | Biennially |
| | As needed |
| 3.724 | |
| - | alog supplements are provided: |
| 3,737 | Annually |
| 3.732 | Quarterly |
| 3.733 | Monthly |
| 3-731 | As needed |
| 3.735 | |
| | alogs and supplements are provided: |
| 3.7),7 | To each teacher in the district |
| 3.7),2 | To teachers upon request only |
| J+145 | To account whom reduces and account accounts and account to the second s |

| 3. | 743 To principal or audio-visual coordinator only |
|-----------|---|
| | Information bulletins or newsletters are issued: |
| • | 751 Weekly |
| | 752 Bi-weekly |
| | 753 Monthly |
| | 754 Annually |
| 3. | 755 As needed |
| | 756_0ther |
| 3.76 | The department does not issue its own bulletin, but is |
| _ | allowed space in a general district bulletin |
| | tegration of audio-visual materials with the curriculum: |
| 3.81 | The audio-visual director is kept aware of needs of the |
| | curriculum through participation in its foundation |
| 3.82 | New materials are suggested by teachers, supervisors, |
| | and administrators |
| 3.03 | Instructional materials are chosen to meet curriculum |
| . a 91. | meds |
| | The courses of study list audio-visual materials |
| 3.05 | Study guides suggest areas and use of audio-visual materials in filling curriculum needs |
| 3 86 | The district office staff is kept aware of audio-visual |
| 00•ر | needs and suggests new materials to fill these needs |
| 3.87 | Selection of new material is made by preview committees |
| J•01 | versed in curricular needs |
| 3.88 | There is periodic evaluation of instructional materials |
| ,,,,, | so that weak items are discarded |
| 3.89 | The quantity of instructional materials is sufficiently |
| | adequate to meet the normal needs of the schools promptly |
| | and efficiently and to allow adequate loan time for |
| | proper use |
| | |
| 4. Persoi | · · · · · |
| | mber and type of employees: |
| | Total number of certificated (professional) employees |
| 4.12 | The audio-visual director's official title is |
| ١. | |
| | 21 Per cent of time devoted to audio-visual duties |
| 4. | 22 If less than 100%, list other duties with per cent |
| | of time devoted to each: |
|). ¬ | .23 Previous experience background of director (Please |
| 4•- | check all fields in which there has been previous |
| | experience) |
|) | 1.1231 Teaching experience |
| 4 | 4.12311 Elementary |
| | 4.12312 Secondary |
| | 4.12313 College |
| | 1. 2021. 044 |
| 1 | 1.12311 Other 1.1232 Administrative experience |
| • | 4.12321 Elementary school |
| | 4.12322 Secondary school |
| | e ota energen en la comercia de el comercia de este en la comercia de la comercia del la comercia de la comercia de la comercia de la comercia del la comercia de la comercia del la comercia de la comercia del la comer |

| 4 | .12323 College | | |
|---|---|---------------------|---|
| 14 | .12324 Business | • • • • • • • • • | • • • |
| | | | |
| 4.1 | .12325 Other 233 Library experience | • • • • • • • | • • • |
| 4.1 | 234 Supervisory experience | • • • • • • • • • | |
| Ъ | .12341 General | | |
|). | .12342 Subject field: What field | | |
| ь.i | .12342 Subject field: What field 235 Audio-visual experience | | |
| <u>, , , , , , , , , , , , , , , , , , , </u> | .12351 Film specialist | | |
| , i | .12352 Radio specialist | | |
| 1 | .12353 Assistant director | | |
| $\vec{\lambda}$ | .12354 Teacher consultant | | |
| 1.1 | 236 Other | | · · · |
| | her certificated personnel (Number of each t | vne and | |
| de | signate if other than full-time) | | |
| 1, 7 37 | Assistant directors | | |
| 1,132 | Teacher consultants | | |
| 1, 133 | Librarians | | `` |
| | Other | | ··- |
| | n-certificated personnel (Number and per cen | t of time | |
| de | roted to andio-rignal duties) | | |
| 1, 71,7 | Clerical workers | | |
| 1, 11,2 | Film technicians | | · · · — — |
| 1, 11,3 | Truck drivers | • • • • • • • • • • | ·· |
| ربيده بد | Photographers | • • • • • • • • • | •• |
| 1, 11,5 | Film inspectors | • • • • • • • • • | •• |
| 1, 11,6 | Artist-illustrators | • • • • • • • • • | • |
| 1, 11,7 | Librarians and catalogers (non-certificated | , | •• |
| 1, 11,8 | Others | , | •• |
| | nsibilities and duties of professional person | nnol | |
| | se check duties performed) | Director | Othoma |
| | ministration and organization of the audio- | DILECTOL | Oniers |
| | sual department | | |
| | Organizing and administering the central | | |
| 4.577 | audio-visual library | | |
| 1, 212 | Evaluating and selecting new materials and | | |
| 4.575 | equipment | | |
| 1, 213 | Ordering new materials and equipment | | |
| | Supervising distribution of materials and | | |
| 4.574 | equipment to the schools | | |
| 1, 215 | Making and controlling the expenditure of | | |
| 4.21 | the audio-visual budget | | |
| J. 216 | Supervising the production of audio-visual | | |
| 4.210 | materials | | |
| 1. 217 | Appointing and/or supervising building | | |
| 4.571 | coordinators | | |
|), 27 Q | Visiting schools to determine needs and to | | |
| 4.210 | | | |
| | suggest procedures for improving the utilization of materials | | |
| 1. 210 | | | |
| 4.617 | Supervising the repair and technical services | | |
| | DOT ATCOD ************************************ | | |

| • | T+55 TI | n-service education of teachers |
|------|----------|--|
| | 4.221 | Instructing and assisting the building |
| | | coordinators |
| | 1,222 | Providing advisory services |
| ! | | Training teachers and students in the |
| ! | 4.22 | operation of equipment |
| , | 1. 201. | |
| : | 4.224 | Presenting demonstration lessons and talks |
| | ١ ٥٥٢ | at teachers' meetings |
| i | 4.225 | Organizing the audio-visual phase of local |
| 7 | | institutes, workshops, and conferences |
| | 4.226 | Assisting teachers in preparing audio- |
| | | visual materials |
| ; | 4.227 | Discussing utilization procedures with |
| | | teacher groups |
| | 4.228 | Supplying teachers and administrators with |
| ! | | audio-visual information |
| | 4.229 | Arranging for and/or conducting the |
| | 42 | required two-unit course in audio- |
| | | visual-radio education |
| | 1,23 Put | clic relations |
| • | | Maintaining public relations with parents |
| | 4.271 | and community |
| | 1. 000 | Addressing community and service clubs |
| | | |
| | 4.233 | Issuing newsletters and bulletins addressed |
| | 1 01 5. | to the public |
| | | recting research into the effective utiliza- |
| | | on of materials and in the field of new |
| | mat | cerials and equipment |
| _ | | |
| 5. E | XPENDITU | IRES FOR AUDIO-VISUAL EDUCATION |
| 5. | 1 Budget | for the year 1954-55 (amount) |
| | 5.11 Per | cent of budget allocated to professional salaries |
| | 5.12 Per | cent of budget allocated to non-professional salaries |
| | 5.13 Per | cent allocated to travel expenses |
| | 5.∐ı Per | cent allocated to purchase of equipment |
| | 5.15 Per | cent allocated to purchase of materials |
| | 5.16 Per | cent allocated to rental of materials |
| ' | 5.17 Per | cent allocated to operating expenses |
| , | 5.18 Per | cent allocated to all other expenditures |
| ۲. | 2 Tf the | ere is a contract with the county, what is the basis |
| ٠,٠ | | e contract? |
| ב | 5 Expose | liture in 1954-55 for audio-visual materials? |
| ノ•. | C 31 MP | at per cent of the materials budget was allocated to: |
| • | L 211 | to ber cente or one materials profer was allocated to: |
| | 2 • 27 T | Elementary grades |
| | 2.512 | Secondary grades |
| | לגניל | Junior college |
| | | there an established budget for the expenditure of |
| | fun | ds for: |
| | 5.321 | The various grade levels |
| | 5.322 | The subject areas of the curriculum |
| | 5.323 | Types of materials |
| | | |

| 5.4 Final authority for the expenditure of funds is vested in | |
|---|-------------|
| | |
| 5.5 Do individual schools within the district have their own | |
| audio-visual budgets? | |
| 5.51 If so, are the materials and equipment purchased from | _ |
| these funds considered the property of the school? | |
| | |
| 6. USE OF AUDIO-VISUAL MATERIALS | |
| (from records and statistics kept by the audio-visual dept.) | |
| 6.1 Booking statistics (Check if kept) | |
| 6.11 By subject field | |
| 6.12 By grade level | |
| 6.13 By title | |
| 6.2 Data from statistics kept by audio-visual department: | |
| 6.21 Number of each type circulated during year. | Sec. |
| 6-211 Films | |
| 0-212 F1 (mstrins | |
| h.213 Slides (total) | |
| 6.2131 2 x 2 slides | |
| りかける 音 T U Stides | |
| D.ZIII Recordings (Total) | |
| 0-21/11 1)7-SC | |
| Deville Magnetile | |
| 6.215 Flat pictures and study prints | |
| 6.216 Dioramas. | |
| 6.217 Specimens. | |
| 6.218 Models | |
| 6.22 Curriculum fields (Please assign a number from 1 | |
| to 11 to each field given below to show booking | |
| rank for all types of materials, letting 1 repre- | |
| sent the field with highest rank, etc.) Elem. | Sec. |
| 6.2201 Social studies | 5001 |
| 6.2202 English | - |
| 6.2203 Science | |
| 6.2204 Mathematics | |
| 6.2205 Art. | |
| 6.2206 Music | |
| 6.2207 Physical education | |
| 6.2208 Modern languages | |
| 6.2209 Homemaking | |
| 6.2210 Shop work | |
| 6.2211 Business training | |
| 6.23 Grade level use (Please assign a number from 1 to | _ |
| 3 to show relative rank for all types of materials. | |
| 6.231 Elementary | |
| 6.232 Secondary | |
| 6.233 Junior college | |
| 6.3 Statistics which show the utilization of audio-visual | |
| · · · · · · · · · · · · · · · · · · · | |
| materials: (If the records are kept, please check first | |
| column. If data are available in your department, give | |
| figures in second and third columns.) | |

| | Kept. | \mathtt{Elem}_{ullet} | Sec. |
|---|-------------|-------------------------|-------------|
| 6.31 Total number of presentations of all types | | | |
| 6.311 Number by type of material | | | |
| 6.312 Number of subject field | | | |
| 6.313 Number of grade level | | | |
| 6.32 Number of showings per teacher | | - | |
| 4 32 Number of teachers who are suit a misself | | | |
| 6.33 Number of teachers who use audio-visual | | | |
| materials | | | |
| 6.331 What per cent is this of the total number | • | | |
| of teachers in the district? | | | |
| 6.34 Number of presentations per teacher used | | | |
| 6.35 Average publicattendance per presentation | , | | |
| 0.30 Number of one-class presentations | 1 | | |
| 6.37 Number of one-item presentations | | | |
| 6.37 Number of one-item presentations | | | |
| 6.5 Evaluations of materials made by teachers (kept | ?) | | |
| 6.6 Other records (specify) | , | ' | |
| 6.7 Are the records which are kept used: | | | |
| 6.71 In evaluating the district's audio-visual pr | 0000000 | | |
| 6.71 In evaluating the district's audio-visual pr | OStami | ••••• | |
| 6.72 To indicate need for in-service education? | | •••••• | |
| 6.73 As tangible measures of the utilization of m | ateria | ıs? | |
| 6.74 In making up budgets? | • • • • • | • • • • • • | |
| 6.75 In deciding upon purchase of duplicate mater | ials?. | • • • • • • | |
| 6.76 In deciding upon purchase of related materia | ls? | • • • • • • | |
| 6.77 In weeding out collections of materials? | | | |
| 6.78 In other ways? (Explain) | | | |
| 6.8 Where are films shown? | | | |
| 6.81 In classrooms? | | | |
| 6.811 How many classrooms out of total are dark | ened?. | | |
| 6.82 In auditorium or single darkened audio-visua | 7 room | ? | |
| 6.821 To only one class at a time? | - 100m | , | |
| 6.822 To more than one class at one time? | • • • • • • | | |
| 0.022 to more chair one crass at one crime; | • • • • • • | •••••• | |
| 7 MILE AUDIO STOUAT DROUDAN IN MILE COMOCIO | | | |
| 7. THE AUDIO-VISUAL PROGRAM IN THE SCHOOLS | 44 | -h1- | |
| 7.1 Number of audio-visual building coordinators in | | CHOOTS | |
| of the district | | | |
| 7.11 Number of hours per school day devoted to co | | | |
| duties | • • • • • • | • • • • • • • | |
| 7.12 Person or persons serving as coordinator(s) | | | |
| otherwise employed as: (Give number in each | catego: | ry) | |
| 7.121 Teacher | | | |
| 7.122 Principal | | | |
| 7.123 Vice-principal | | | |
| 7.124 Librarian | | | |
| 7.125 Clerical worker | | • • • • • • | |
| 7.126 Other | | | |
| 7.2 Do the schools maintain materials centers withi | n thei | r own | |
| | | | |
| buildings? | • • • • • • | • • • • • • • • • | |
| 7.21 Do they own all of their own equipment? | •••• | • • • • • • • | |
| 7.22 If not all, do they own part? | • • • • • • | ••••• | |
| 7.23 Are the schools materials housed in the scho | ol lib: | rary? | |

| 7.24 If not in library, where? | |
|---|-----------------------------------|
| 8. AUDIO-VISUAL PERSONNEL'S ESTIMATES OF THE AUDIO NEEDS | -VISUAL SERVICE AND |
| 8.1 Estimated per cent of needs (based on reques | sts) being met |
| by audio-visual department | |
| 8.2 Estimated per cent of teachers in schools se audio-visual materials | erved who use |
| 8.21 Elementary teachers | |
| 8.22 Secondary teachers | |
| 8.23 Junior college teachers | |
| according to recommended procedures | TSUAL MAVELIALS |
| 8.4 Per cent of increase in the number of items | of audio-visual |
| materials booked in the last five years 8.5 Per cent of teachers in schools served who h | orro completed |
| the required two-unit course in audio-visual | ave completed -radio education |
| 8.6 What per cent of the teachers served by your | department |
| did you visit in the classroom during 1954-5 | 5? |
| 8.7 Could your audio-visual department serve the another district? | |
| 8.71 Do you have any plans for joint cooperati | on or service |
| with another school district in the near | future? |
| 8.72 If so, please explain | |
| 8.73 Would you favor such cooperation between | school districts? |
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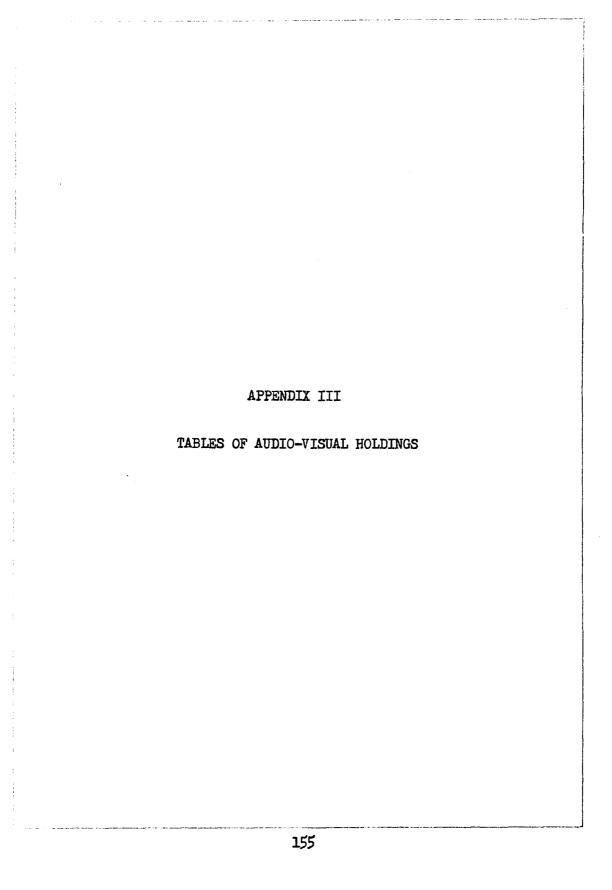


TABLE 43
AUDIO-VISUAL HOLDINGS IN ELEMENTARY DISTRICTS

| istrict | A.D.A. | Number of Teachers | Sound Films | Pupil Ratio | Teacher Ratio | Titles | Pupil Ratio | Teacher Ratio | Silent Films | Pupil Ratio | Teacher Ratio |
|---------|---------------|-----------------------|----------------|----------------|------------------|--------|----------------|------------------|-----------------|----------------|------------------|
| 1. | 1,442 | 40 | | | | | | | | | |
| 2 | 1,938 | 58 | | | | | | | ı | 1938.0 | 58.0 |
| 3 | 4,500 | 160 | | | | | | | | | |
| 4 | 4,900 | 161 | 136 | 36.0 | 1.2 | 136 | 36.0 | 1.2 | | | |
| 5 | 6,550 | 200 | | | | | | | 4 | 1838.5 | 50.0 |
| 6 | 7,121 | 262 | 150 | 47.5 | 1.1 | 150 | 47.5 | 1.1 | | | |
| 7 | 7,275 | 285 | ı | 7275.0 | 285.0 | ı | 7275.0 | 285.0 | | | |
| 8 | 7, 897 | 331 | 436 | 18.1 | •7 | 436 | 18.1 | •7 | | | |
| 9 | 14,444 | 620 | 672 | 21.5 | •9 | 561 | 25.7 | 1.1 | | | |
| Totals | 3 | | 1,395 | | | 1,284 | | | 5 | | |

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TABLE 43--Continued

| District | Film- strips | Pupil Ratio | Teacher Ratio | Slide Sets | Pupil Ratio | Teacher Ratio | Study Prints | Pupil Ratio | Teacher Ratio |
|----------|-----------------|----------------|------------------|---------------|----------------|------------------|-----------------|----------------|------------------|
| 1 | 200 | 7.2 | .2 | | | | 30 | 48.1 | 1.3 |
| 2 | 410 | 4.7 | .1 | 9 | 215.4 | 6.4 | 60 | 32.3 | •9 |
| 3 | 1,500 | 3.0 | .1 | 2 | 2250.0 | 80.0 | 50 | 90.0 | 3.2 |
| 4 | 735 | 6.7 | •2 | 35 | 140.0 | 4.6 | 75 | 65.3 | 2.1 |
| 5 | 300 | 21.8 | •6 | | | | | | |
| 6 | 420 | 16.9 | .8 | 275 | 25.9 | •9 | | | |
| 7 | 150 | 48.5 | 1.9 | | | | 35 | 207.8 | 8.1 |
| 8 | 1,010 | 7.8 | •3 | | | | 670 | 11.8 | •5 |
| 9 | 2,446 | 5•9 | •2 | 400 | 36.1 | 1.5 | 740 | 19.5 | .8 |
| Totals | 7,171 | | | 721 | | | 1,660 | | |

TABLE 43--Continued

| District | Mounted P ic tures | Pupil Ratio | Teacher Ratio | Models | Pupil Ratio | Teacher Ratio | Specimens | Pupil Ratio | Teacher Ratio |
|----------|------------------------------|----------------|------------------|--------|----------------|------------------|-----------|----------------|------------------|
| 1 | | | | | | | | | |
| 2 | 1,000 | 1.9 | .1 | 4 | 484.5 | 14.5 | 30 | 64.6 | 1.9 |
| 3 | | | | 2 | 2250.0 | 80.0 | | | |
| 4 | | | | 11 | 445.5 | 14.6 | | | |
| 5 | | | | | | | | | |
| 6 | 1,200 | 5•9 | .2 | | | | 15 | 474.7 | 17.6 |
| 7 | 2,000 | 3.6 | .1 | | | | | | |
| 8 | | | | | | | | | |
| 9 | | | | 101 | 143.0 | 6.1 | | | |
| Totals | 4,200 | | | 118 | | | 45 | | |

TABLE 43—Continued

| District | Records | Pupil Ratio | Teacher Ratio | Magn. Record. | Pupil Ratio | Teacher Ratio | Maps | Pupil Ratio | Teacher Ratio |
|----------|---------|----------------|------------------|------------------|----------------|---------------------------------------|------|----------------|------------------|
| 1 | 65 | 22.2 | . 6 | | | | 60 | 24.0 | •7 |
| 2 | 612 | 3.2 | .1 | | | | 91 | 21.4 | •6 |
| 3 | 500 | 9.0 | •3 | | | | 195 | 23.8 | .8 |
| 4 | 170 | 28.9 | •9 | | | | | | |
| 5 | | | | | | | | | |
| 6 | 600 | 11.9 | •4 | | | | 20 | 356.0 | 13.1 |
| 7 | 3,000 | 1.5 | .1 | | | | 429 | 428.0 | .6 |
| 8 | | | | | | | | | |
| 9 | 2,269 | 6.3 | .2 | 15 | 963.0 | 41.3 | 133 | 108.6 | 4.6 |
| Totals | 7,216 | | | 15 | | · · · · · · · · · · · · · · · · · · · | 928 | | |

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TABLE 43--Continued

| District | Charts | Pupil Ratio | Teacher Ratio | Dioramas | Pupil Ratio | Teacher Ratio | Microphones | Pupil Ratio | Teache: Ratio |
|----------|--------|----------------|------------------|----------|----------------|------------------|-------------|----------------|------------------|
| 1 | 6 | 240.0 | 6.6 | | | | 3 | 480.7 | 13.3 |
| 2 | | | | 1 | 1938.0 | 58.0 | 8 | 242.5 | 7.3 |
| 3 | 10 | 450.0 | 16.0 | | | | 13 | 346.2 | 12.3 |
| 4 | | | | | | | 12 | 408.3 | 13.4 |
| 5 | | | | | | | 2 | 3275.0 | 100.0 |
| 6 | 10 | 712.1 | 26.2 | 30 | 204.1 | 8.7 | 22 | 323.7 | 11.9 |
| 7 | | | | 3 | 2425.0 | 95.0 | 35 | 207.9 | 8.1 |
| 8 | | | | | | | 15 | 526.5 | 22.0 |
| 9 | 47 | 307.3 | 13.2 | | | | 29 | 498.1 | 21.4 |
| Totals | 73 | | | 34 | | | 139 | | - - |

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TABLE 43--Continued 16mm Sound Pupil Silent Teacher Slide District Teacher Pupil Pupil Teacher Ratio Projectors Ratio Ratio Projectors Ratio Projectors Ratio Ratio 360.5 40.0 1 4 10.0 1 1442.0 8 242.5 7.3 3 646.0 19.3 2 409.1 160.0 11 14.5 1 4500.0 3 14.6 11 445.4 4 6 1091.7 33.3 5 309.6 11.4 6 23 16.8 7 17 427.9 16 454.7 17.8 464.5 19.5 3 2632.3 110.3 8 17 32 451.4 26 9 19.4 555.5 23.9 Totals 129 50

TABLE 43—Continued

| District | Filmstrip-slide Projectors | Pupil Ratio | Teacher Ratio | Opaque Projectors | Pupil Ratio | Teacher Ratio | Stereo- scopes | Pupil Ratio | Teacher Ratio |
|----------|-------------------------------|----------------|------------------|----------------------|----------------|------------------|-------------------|----------------|------------------|
| 1 | 5 | 288.4 | 8.0 | 1 | 1442.0 | 40.0 | | | |
| 2 | 14 | 138.4 | 4.1 | 1 | 1938.0 | 58.0 | 6 | 323.0 | 9•7 |
| 3 | 26 | 173.1 | 5•9 | 5 | 900.0 | 32.0 | | | |
| 4 | 13 | 376.9 | 12.4 | 2 | 2450.0 | 80.5 | 24 | 204.2 | 6.7 |
| 5 | 8 | 818.8 | 25.0 | | | | 2 | 3275.0 | 40.0 |
| 6 | 35 | 203.5 | 7.5 | ı | 7121.0 | 262.0 | | | |
| 7 | 15 | 485.0 | 19.0 | 16 | 454.7 | 17.8 | 10 | 727.5 | 28.5 |
| 8 | 12 | 658.1 | 27.6 | 3 | 2632.3 | 110.3 | | | |
| 9 | 35 | 412.7 | 17.7 | 7 | 2063.4 | 88.5 | 50 | 288.8 | 12.4 |
| Totals | 163 | ···· | | 36 | | | 92 | | |

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TABLE 43--Continued

| District | Overhead Projectors | Pupil Ratio | Teacher Ratio | Screens | Pupil Ratio | Teacher Ratio | Projector Stands | Pupil Ratio | Teacher Ratio |
|----------|------------------------|----------------|------------------|---------|----------------|------------------|---------------------|----------------|------------------|
| 1 | | | | 5 | 288.4 | 8.0 | 4 | 360.5 | 10.0 |
| 2 | | | | 11 | 176.4 | 5•3 | 19 | 102.0 | 3.0 |
| 3 | | | | 80 | 250.0 | 2.0 | 18 | 250.0 | 8.8 |
| 4 | ı | 4900.0 | 161.0 | 48 | 102.1 | 3.3 | 13 | 376.9 | 12.4 |
| 5 | | | | | | | 5 | 1310.0 | 40.0 |
| 6 | 3 | 2373.7 | 87.3 | 30 | 237.4 | 8.7 | 17 | 418.9 | 15.7 |
| 7 | | | | 17 | 427.9 | 16.8 | 55 | 132.3 | 5.2 |
| 8 | | | | 30 | 263.2 | 11.0 | 36 | 219.4 | 9.2 |
| 9 | 4 | 3611.0 | 155.0 | 55 | 262.6 | 11.3 | 67 | 215.6 | 9•3 |
| Totals | 8 | | | 276 | | | 234 | | |

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Record District Pupil Teacher Recorders Pupil Teacher Radios Pupil Teacher Players Ratio Ratio Ratio Ratio Ratio Ratio 6.6 1 6 240.3 1 1442.0 40.0 92.3 2.8 969.0 2 21 2 29.0 18 107.7 3.2 3 65 69.2 2.4 900.0 32.0 5 3 1500.0 53.3 33 148.5 4.9 5 980.0 32.2 980.0 32.2 4 5 28 233.9 7.1 100.0 5 2 3275.0 727.8 22.2 9 6 134.4 5.0 890.1 53 8 32.8 29 245.5 9.0 81 898.1 3.5 17 16.8 7 427.9 13 427.9 21.9 18 8 438.7 18.4 13 607.5 25.5 12 658.1 27.6 9 286 50.5 2.2 8 1805.5 77.5 107 134.9 5.7 61 Totals 591 196

TABLE 43--Continued

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TABLE 44
AUDIO-VISUAL HOLDINGS IN HIGH SCHOOL DISTRICTS

| District | A.D.A. | Number of Teachers | Sound Films | Pupil Ratio | Teacher Ratio | Titles | Pupil Ratio | Teacher Ratio | Silent Films | Pupil Ratio | Teacher Ratio |
|----------|--------|-----------------------|----------------|----------------|------------------|--------|----------------|------------------|-----------------|----------------|------------------|
| 1 | 1,506 | 70 | | | | | | | 30 | 50.2 | 2.3 |
| 2 | 1,740 | 75 | 4 | 435.0 | 18.7 | 4 | 435.0 | 18.7 | | | |
| 3 | 1,917 | 100 | | | | | | | | | |
| 4 | 2,188 | 104 | | | | | | | | | |
| 5 | 2,500 | 120 | 1 | 2500.0 | 120.0 | 1 | 2500.0 | 120.0 | | | |
| 6 | 4,709 | 210 | 6 | 784.8 | 35.0 | 6 | 784.8 | 35.0 | 10 | 470.9 | 21.0 |
| 7 | 5,348 | 229 | 115 | 46.5 | 2.0 | 115 | 46.5 | 2.0 | 1 | 5,348.0 | 229.0 |
| 8 | 11,750 | 571 | 46 | 255•5 | 12.4 | 46 | 255•5 | 12.4 | 1 | 11,750.0 | 571.0 |
| Totals | 3 | | 172 | | | 172 | | | 18 | | |

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TABLE 44--Continued

| District | Film- strips | Pupil Ratio | Teacher Ratio | Slide Sets | Pupil Ratio | Teacher Ratio | Study Prints | Pupil Ratio | Teacher Ratio |
|----------|-----------------|---------------------------------------|------------------|---------------|----------------|------------------|-----------------|----------------|------------------|
| 1 | 62 | 24.3 | 1.1 | | | | | _ | |
| 2 | 90 | 19.3 | .8 | | | | | | |
| 3 | 300 | 60.4 | •3 | | | | | | |
| 4 | 153 | 14.3 | •7 | 4 | 547.0 | 26.0 | | | |
| 5 | 331 | 7.5 | •4 | | | | 1,500 | 1.7 | .1 |
| 6 | 50 | 94.2 | 4.2 | 10 | 470.9 | 21.0 | | | |
| 7 | 743 | 7.2 | •3 | 4 | 1337.0 | 57•2 | | | |
| 8 | 890 | 13.2 | •6 | 60 | 195.8 | 9•5 | 70 | 167.9 | 8.1 |
| Totals | 2,619 | · · · · · · · · · · · · · · · · · · · | | 78 | | | 1,570 | · | |

TABLE 44--Continued

| District | Mounted Pictures | Pupil Ratio | Teacher Ratio | Models | Pupil Ratio | Teacher Ratio | Specimens | Pupil Ratio | Teacher Ratio |
|----------|---------------------|----------------|---------------------|--------|----------------|------------------|-----------|----------------|------------------|
| 1 | | | | | | | | | |
| 2 | | | | | | | | | |
| 3 | | | | | | | | | |
| 4 | | | | | | ÷ | | | |
| 5 | | | | | | | | | |
| 6 | | | | | | | | | |
| 7 | | | | | | | | | |
| 8 | 321 | 36.6 | 1.8 | 2 | 5875.0 | 285.5 | | | |
| Totals | 321 | | <u></u> | 2 | | | | | |
| | | · | <u>.</u> , <u>.</u> | | | | | | |
| | | | | | | | | | |

TABLE 44--Continued

| District | Records | Pupil Ratio | Teacher Ratio | Magn. Record. | Pupil Ratio | Teacher Ratio | Maps | Pupil Ratio | Teacher Ratio |
|----------|---------|----------------|------------------|------------------|----------------|------------------|------|----------------|------------------|
| 1 | 658 | 2.3 | •1 | | | | · · | | |
| 2 | | | | | | | 100 | 17.4 | .8 |
| 3 | | | | | | | | | |
| 4 | 75 | 29.2 | 1.4 | 10 | 218.8 | 10.4 | | | |
| 5 | 75 | 33.3 | 1.6 | | | | | | |
| 6 | 15 | 313.9 | 14.0 | 25 | 188.3 | 8.4 | | | |
| 7 | 153 | 34.3 | 1.5 | 56 | 95•5 | 4.0 | | | |
| 8 | 691 | 17.1 | .8 | 10 | 1175.0 | 57.1 | 32 | 367.1 | 18.0 |
| Totals | 1,667 | | | 101 | | | 132 | | |

TABLE 44--Continued

| District | Charts | Pupil | Teacher | Dioramas | Pupil | Teacher | Microphones | Pupil | Teacher |
|----------|------------|--|---------|----------|-------|-------------|-------------|-------|---------|
| | | Ratio | Ratio | | Ratio | Ratio | | Ratio | Ratio |
| 1 | | | | | | | 2 | 753.0 | 35.0 |
| 2 | 5 | 348.0 | 15.0 | | | | 4 | 435.0 | 18.7 |
| 3 | | | | | | | 2 | 958.5 | 50.0 |
| 4 | | | | | | | 8 | 273.5 | 13.0 |
| 5 | | | | | | | 6 | 416.7 | 20.0 |
| 6 | | | | | | | 10 | 470•9 | 21.0 |
| 7 | | | | | | | 24 | 222.8 | 9•7 |
| 8 | 12 | 979.1 | 47•5 | | | | 50 | 235.0 | 11.4 |
| | | | | ···· | | | | | |
| Totals | 17 | | | | | | 106 | | |
| | - <u>-</u> | ·· · · · · · · · · · · · · · · · · · · | | | | | | | |

TABLE 44--Continued

| District | 16mm Sound Projectors | Pupil Ratio | Teacher Ratio | Silent Projectors | Pupil Ratio | Teacher Ratio | Slide Projectors | Pupil Ratio | Teacher Ratio |
|----------|--------------------------|----------------|------------------|----------------------|-------------------------|------------------|---------------------|----------------|------------------|
| 1 | 3 | 502.0 | 23.3 | | | | 7 | 1506.0 | 70.0 |
| 2 | 7 | 248.5 | 10.7 | | | | 3 | 580.0 | 25.0 |
| 3 | 9 | 213.0 | 11.1 | 2 | 958.5 | 50.0 | 4 | 479.3 | 25.0 |
| 4 | 6 | 364.7 | 17.3 | | | | 1 | 2188.0 | 104.0 |
| 5 | 4 | 625.0 | 30.0 | | | | | | |
| 6 | 16 | 294.3 | 13.1 | | | | 6 | 672.7 | 35.0 |
| 7 | 25 | 213.8 | 4.1 | | | | 12 | 445.7 | 19.1 |
| 8 | 70 | 167.0 | 8.2 | 6 | 1 958 . 3 | 95•2 | 42 | 279.8 | 13.6 |
| Totals | 140 | | | . 8 | | | 69 | | |

TABLE 44--Continued

| District | Filmstrip-Slide Projectors | Pupil Ratio | Teacher Ratio | Opaque Projectors | Pupil Ratio | Teacher Ratio | Stereo- scopes | Pupil Ratio | Teacher Ratio |
|----------|-------------------------------|----------------|------------------|----------------------|----------------|------------------|-------------------|----------------|------------------|
| 1 | 2 | 753.0 | 35.0 | 1 | 1506.0 | 70.0 | | | |
| 2 | 6 | 290.0 | 12.5 | 1 | 1740.0 | 75.0 | | | |
| 3 | 3 | 639.0 | 33.3 | ı | 1917.0 | 100.0 | | | |
| 4 | 7 | 312.6 | 14.8 | 2 | 1094.0 | 52.0 | | | |
| 5 | 4 | 625.0 | 30.0 | 1 | 2500.0 | 120.0 | 4 | 625.0 | 30.0 |
| 6 | 8 | 588.6 | 26.2 | 6 | 784.8 | 35.0 | | | |
| 7 | 14 | 382.0 | 16.2 | 5 | 1069.6 | 45.8 | | | |
| 8 | 34 | 345.6 | 16.8 | 16 | 734•4 | 35•7 | | | |
| Totals | 78 | | | 33 | | | 4 | | |

TABLE 44--Continued

| District | Overhead Projectors | Pupil Ratio | Teacher Ratio | Screens | Pupil Ratio | Teacher Ratio | Projector Stands | Pupil Ratio | Teacher Ratio |
|----------|------------------------|----------------|------------------|---------|----------------|------------------|---------------------|----------------|------------------|
| 1 | 2 | 753.0 | 35.0 | 7 | 215.2 | 10.0 | | | |
| 2 | | | | 9 | 193.3 | 8.3 | 2 | 870.0 | 37.5 |
| 3 | 1 | 1917.0 | 100.0 | 10 | 191.7 | 10.0 | | | |
| 4 | , 1 | 2188.0 | 104.0 | 6 | 364.7 | 17.3 | 6 | 364.7 | 17.3 |
| 5 | • | | | 4 | 625.0 | 30.0 | 4 | 625.0 | 30.0 |
| 6 | 7 | 672.7 | 30.0 | 12 | 392.4 | 17.5 | 8 | 588.6 | 26.2 |
| 7 | 2 | 2674.0 | 114.5 | 54 | 99.0 | 4.2 | 18 | 297.1 | 12.7 |
| 8 | 9 | 130.6 | 63.4 | 170 | 69.1 | 3•4 | 75 | 156.7 | 3.7 |
| Totals | 22 | | | 272 | | | 113 | | |

TABLE 44--Continued

| District | Record Players | Pupil Ratio | Teacher Ratio | Recorders | Pupil Ratio | Teacher Ratio | Radios | Pupil Ratio | Teacher Ratio |
|----------|-------------------|----------------|------------------|-----------|----------------|------------------|--------|----------------|------------------|
| 1 | 8 | 188.2 | 8.7 | 6 | 251.0 | 11.7 | 2 | 753.0 | 35.0 |
| 2 | 6 | 290.0 | 12.5 | 4 | 435.0 | 18.8 | | | |
| 3 | 2 | 958.5 | 50.0 | | | | 1 | 1917.0 | 100.0 |
| 4 | 6 | 364.7 | 17.3 | 7 | 312.6 | 14.9 | 4 | 547.0 | 26.0 |
| 5 | 4 | 625.0 | 30.0 | 3 | 833.3 | 40.0 | ı | 2500.0 | 120.0 |
| 6 | 24 | 197.5 | 8.8 | 17 | 277.0 | 12.3 | 4 | 1177.3 | 52.5 |
| 7 | 27 | 198.1 | 8.5 | 15 | 356.5 | 15.3 | 2 | 2674.0 | 105.0 |
| 8 | 49 | 239.8 | 11.6 | 37 | 317.6 | 15.4 | 10 | 1175.0 | 57.1 |
| Totals | 126 | | | 89 | | | 24 | | |

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TABLE 45
AUDIO-VISUAL HOLDINGS IN JUNIOR COLLEGE DISTRICTS

| | | | | | | | | | | | | - |
|----------|--------|-----------------------|----------------|----------------|------------------|--------|----------------|------------------|-----------------|----------------|------------------|---|
| District | A.D.A. | Number of Teachers | Sound Films | Pupil Ratio | Teacher Ratio | Titles | Pupil Ratio | Teacher Ratio | Silent Films | Pupil Ratio | Teacher Ratio | |
| 1 | 796 | 50 | 42 | 18.9 | 1.2 | 42 | 18.9 | 1.2 | | | | |
| 2 | 862 | 52 | | | | | | | | | | |
| 3 | 975 | 53 | | | | | | | | | | |
| 4 | 1,197 | 60 | 36 | 33.3 | 1.7 | 36 | 33.3 | 1.7 | | | | |
| 5 | 1,260 | 70 | 5 | 252.0 | 14.0 | 3 | 420.0 | 25.3 | | | | |
| 6 | 1,367 | 60 | 3 | 455.7 | 20.0 | 3 | 455•7 | 20.0 | | | | |
| 7 | 1,700 | 72 | | | | | | | 15 | 113.3 | 4.8 | |
| 8 | 1,700 | 76 | | | | | | | | | | |
| 9 | 1,975 | 75 | 116 | 17.0 | •6 | 116 | 17.0 | •6 | | | | |
| 10 | 2,065 | 78 | 80 | 25.8 | •9 | 80 | 25.8 | •9 | | | | |
| 11 | 4,563 | 91 | 400 | 11.4 | .2 | 400 | 11.4 | •2 | | | | - |
| 12 | 5,435 | 7 5 | 33 | 164.7 | 2.3 | 33 | 164.7 | 2.3 | | | | |
| Totals | | | 715 | | | 713 | | | 15 | | | - |

| | 175 |
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| 1 | |

| District | Film- strips | Pupil Ratio | Teacher Ratio | Slide Sets | Pupil Ratio | Teacher Ratio | Study Prints | Pupils Ratio | Teacher Ratio |
|----------|-----------------|----------------|------------------|---------------|----------------|------------------|-----------------|-----------------|------------------|
| 1 | 189 | 4.2 | •3 | 6 | 132.7 | 8.3 | | | |
| 2 | | | | | | • | | | |
| 3 | | | | | | | | | |
| 4 | | | | | | | | | |
| 5 | 165 | 7.6 | •4 | 57 | 22.1 | 1.2 | 242 | 5.2 | •3 |
| 6 | 125 | 10.9 | •5 | 300 | 4.5 | •2 | | | |
| 7 | 150 | 11.3 | •5 | 4 | 425.0 | 18.0 | 100 | 170.0 | •7 |
| 8 | 27 9 | 60.9 | •3 | | | | | | |
| 9 | 500 | 3.9 | .2 | 50 | 39.5 | 1.5 | 300 | 6.6 | .2 |
| 10 | 87 | 23.7 | •9 | 200 | 10.3 | •4 | | | |
| 11 | 600 | 7.6 | .2 | 20 | 228.6 | 4.5 | | | |
| 12 | 155 | 35.1 | •5 | | | | | | |
| Totals | 2,250 | | | 637 | | | 642 | | <u> </u> |

| District | Mounted Pictures | Pupil Ratio | Teacher Ratio | Models | Pupil Ratio | Teacher Ratio | Specimens | Pupil Ratio | Teache: Ratio |
|----------|---------------------|----------------|------------------|--------|----------------|------------------|-----------|----------------|------------------|
| 1. | | | | | | | | | |
| 2 | | | | | | | | | |
| 3 | | | | | | | | | |
| 4 | | | | | | | | | |
| 5 | 10 | 126.0 | 7.0 | | | | | | |
| 6 | | | | 6 | 227.8 | 10.0 | 18 | 75•9 | 3.3 |
| 7 | 100 | 170.0 | •7 | | | | | | |
| 8 | | | | | | | | | |
| 9 | 1,000 | 2.0 | .1 | 100 | 19.8 | •7 | | | |
| 10 | | | | | | | | | |
| 11 | | | | | | | | | |
| 12 | | | | | | | | | |
| Totals | 1,110 | | | 106 | | | 18 | | |

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| | |
| - | _ |

| District | Records | Pupil Ratio | Teacher Ratio | Magn. Record. | Pupil Ratio | Teacher Ratio | Maps | Pupil Ratio | Teacher Ratio |
|----------|---------|----------------|------------------|------------------|----------------|------------------|------|----------------|------------------|
| ı | 200 | 3.9 | •3 | | | | 60 | 13.2 | •9 |
| 2 | 98 | 8.8 | •5 | | | | | | |
| 3 | | | | | | | | | |
| 4 | | | | | | | | • | |
| 5 | 242 | 5.2 | •3 | | | | 7 | 180.0 | 10.0 |
| 6 | | | | | | | | | |
| 7 | 109 | 15.6 | •7 | | | | 65 | 26.2 | 1.1 |
| 8 | 1,500 | 1.7 | •1 | 100 | 17.0 | 7.6 | | | |
| 9 | | | | 1,000 | 1.9 | •7 | 100 | 19.8 | 7.5 |
| 10 | 500 | 4.1 | •2 | 50 | 41.3 | 1.6 | | | |
| 11 | 400 | 11.4 | .2 | 700 | 6.5 | .2 | | | |
| 12 | 225 | 24.2 | •3 | 40 | 135.9 | 1.9 | | | |
| Totals | 3,274 | | | 1,890 | | | 232 | | |

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| - | |
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| | |

| District | Charts | Pupil | Teacher | Dioramas | Pupil | Teacher | Microphones | Pupil | Teacher |
|-------------|-------------|---|---------|----------|-------------|---------------------------------------|-------------|-------|---------|
| | | Ratio | Ratio | | Ratio | Ratio | | Ratio | Ratio |
| 1 | | | | | | | 8 | 99•5 | 8.2 |
| 2 | | | | | | | | | |
| 3 | | | | • | | | 7 | 139.3 | 7.6 |
| 4 | | | | | | | 4 | 299.3 | 15.0 |
| 5 | | | | | | | 3 | 420.0 | 23.3 |
| 6 | 2 | 683.5 | 30.0 | | | | 6 | 227.8 | 10.0 |
| 7 | 15 | 113.3 | 4.8 | | | | 3 | 566.7 | 24.0 |
| 8 | | | | | | | | | |
| 9 | 250 | 7•9 | •3 | 45 | 43.9 | 1.7 | 12 | 164.6 | 6.3 |
| 10 | | | | | | | | | |
| 11 | | | | | | | 24 | 190.1 | 3.9 |
| 12 | | | | | | | | | |
| Totals | 267 | · - · · · · · · · · · · · · · · · · · · | | 45 | | · · · · · · · · · · · · · · · · · · · | 67 | | |

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TABLE 45--Continued

| District | 16mm Sound Projectors | Pupil Ratio | Teacher Ratio | Silent Projectors | Pupil Ratio | Teacher Ratio | Slide Projectors | Pupil Ratio | Teacher Ratio |
|----------|--------------------------|----------------|------------------|----------------------|----------------|------------------|---------------------|----------------|------------------|
| 1 | 6 | 502.0 | 8.3 | | | | 4 | 199.0 | 12.5 |
| 2 | 4 | 215.5 | 13.0 | | | | | | |
| 3 | 5 | 195.0 | 10.6 | | | | | | |
| 4 | 6 | 119.5 | 10.0 | ı | 1197.0 | 60.0 | 6 | 199.5 | 10.0 |
| 5 | 4 | 315.0 | 17.5 | 1 | 1260.0 | 70.0 | 8 | 157.5 | 8.7 |
| 6 | 3 | 455.7 | 20.0 | 1 | 1367.0 | 60.0 | 3 | 455.7 | 20.0 |
| 7 | 5 | 340.0 | 14.4 | 2 | 850.0 | 36.0 | ı | 1700.0 | 72.0 |
| 8 | 24 | 70.8 | 3.2 | | | | | | |
| 9 | 15 | 131.7 | 5.0 | | | | 25 | 79.0 | 3.0 |
| 10 | 5 | 413.0 | 15.6 | 2 | 1032.5 | 39.0 | | | |
| 11 | 19 | 240.2 | 4.8 | | | | 6 | 760.5 | 15.2 |
| 12 | 10 | 545•5 | 7•5 | | | | 5 | 1087.0 | 15.0 |
| Totals | 106 | | | 7 | | | 58 | | |

TABLE 45--Continued

| District | Filmstrip-Slide Projectors | Pupil Ratio | Teacher Ratio | Opaque Projectors | Pupil Ratio | Teacher Ratio | Stereo- scopes | Pupil Ratio | Teacher Ratio |
|----------|-------------------------------|----------------|------------------|----------------------|----------------|------------------|-------------------|----------------|------------------|
| 1 | 5 | 159.2 | 10.0 | 1 | 796.0 | 50.0 | | | |
| 2 | 2 | 431.0 | 26.0 | | | | | | |
| 3 | 5 | 195.0 | 10.6 | 1 | 975.0 | 53.0 | | | |
| 4 | 3 | 399.0 | 20.0 | 2 | 598.5 | 30.0 | | | |
| 5 | 8 | 157.5 | 8.7 | 4 | 315.0 | 17.5 | | | |
| 6 | 2 | 683.5 | 30.0 | 2 | 683.5 | 30.0 | | | |
| 7 | 6 | 283.3 | 12.0 | 3 | 566.7 | 24.0 | 1 | 1700.0 | 72.0 |
| 8 | 10 | 170.0 | 7.6 | 14 | 121.4 | 5•4 | | | |
| 9 | 25 | 79.0 | 3.0 | 10 | 197.5 | 7.5 | 2 | 987.5 | 37.5 |
| 10 | 5 | 413.0 | 15.6 | 2 | 413.0 | 39.0 | | | |
| 11 | 9 | 507.0 | 10.1 | 8 | 570.4 | 11.4 | ı | 4563.0 | 91.0 |
| 12 | 7 | 776.4 | 10.7 | 1 | 5435.0 | 75.0 | | | |
| Totals | 87 | | | 48 | | | 4 | | |

TABLE 45--Continued

| District | Overhead | Pupil | Teacher | Screens | Pupil | Teacher | Projector | Pupil | Teacher |
|----------|-----------------|--------|---------|---------|-------------|---------|-----------|-------------|---------|
| DISCITEC | Projectors | Ratio | Ratio | ocreens | Ratio | Ratio | Stands | Ratio | Ratio |
| 1 | 2 | 398.0 | 25.0 | 24 | 33.2 | 2.0 | 5 | 159.2 | 10.0 |
| 2 | 2 | 431.0 | 26.0 | | | | | | , |
| 3 | 1 | 975.0 | 53.0 | 6 | 162.5 | 8.8 | 1 | 975.0 | 53.0 |
| 4 | 2 | 598.5 | 30.0 | 12 | 99.8 | 5•0 | | | |
| 5 | 2 | 630.0 | 35.0 | 15 | 84.0 | 4.7 | 6 | 210.0 | 11.7 |
| 6 | 1 | 1367.0 | 60.0 | 6 | 227.8 | 10.0 | 2 | 683.5 | 30.0 |
| 7 | 1 | 1700.0 | 72.0 | 15 | 113.3 | 4.8 | 3 | 566.7 | 24.0 |
| 8 | 3 | 566.7 | 25.3 | | | | | | |
| 9 | 4 | 493.8 | 18.7 | 30 | 62.5 | 2.5 | 30 | 62.5 | 2.5 |
| 10 | 2 | 413.0 | 39.0 | | | | | | |
| 11 | 7 | 651.9 | 13.0 | 55 | 82.9 | •2 | 30 | 152.1 | 3.0 |
| 12 | 3 | 1811.7 | 25.0 | 12 | 452.9 | 6.3 | | | |
| Totals | 30 | | | 175 | | | 77 | | |

TABLE 45--Continued

| District | Record Players | Pupil Ratio | Teacher Ratio | Recorders | Pupil Ratio | Teacher Ratio | Radios | Pupil Ratio | Teacher Ratio |
|----------|-------------------|----------------|------------------|-----------|----------------|------------------|--------|----------------|------------------|
| 1 | 7 | 113.8 | 7.1 | 3 | 265.3 | 16.7 | 1 | 796.0 | 50.0 |
| 2 | 4 | 215.5 | 13.0 | · 1 | 862.0 | 52.0 | | | |
| 3 | 3 | 325.0 | 17.7 | 2 | 487.5 | 26.5 | | | |
| 4 | 4 | 299•3 | 15.0 | 8 | 149.6 | 7•5 | 4 | 299.3 | 15.0 |
| 5 | 5 | 252.0 | 14.0 | 2 | 630.0 | 35.0 | | | |
| 6 | 4 | 341.8 | 15.0 | 3 | 455•7 | 20.0 | | | |
| 7 | 5 | 340.0 | 14.4 | 3 | 566.7 | 24.0 | | | |
| 8 | 8 | 212.5 | 9•5 | ı | 1700.0 | 76.0 | 2 | 850.0 | 38.0 |
| 9 | 24 | 82.3 | 3.1 | 24 | 82.3 | 3.1 | 12 | 164.6 | 6.2 |
| 10 | 7 | 295.0 | 11.1 | 7 | 295.0 | 11.1 | ı | 2065.0 | 78.0 |
| 11 | 15 | 304.2 | 6.0 | 20 | 228.2 | 4.5 | 4 | 1140.8 | 22.8 |
| 12 | 9 | 603.9 | 8.3 | 5 | 1087.0 | 15.0 | | | |
| Totals | 95 | | | 79 | | | 24 | | |

TABLE 46

AUDIO-VISUAL HOLDINGS IN UNIFIED DISTRICTS

| District | A.D.A. | Number of Teachers | Sound Films | Pupil Ratio | Teacher Ratio | Titles | Pupil Ratio | Teacher Ratio | Silent Films | Pupil Ratio | Teacher Ratio |
|----------|--------|-----------------------|----------------|----------------|------------------|--------|----------------|------------------|-----------------|----------------|------------------|
| 1 | 1,878 | 90 | | | | | | | | | |
| 2 | 2,303 | 96 | 1 | 2303.0 | 96.0 | 1 | 2303.0 | 96.0 | | | |
| 3 | 2,848 | 101 | | | | | | | | | |
| 4 | 3,008 | 105 | | | | | | | | | |
| 5 | 4,100 | 165 | 225 | 18.2 | •7 | 225 | 18.2 | •7 | | | |
| 6 | 4,338 | 160 | 12 | 361.5 | 13.3 | 12 | 361.5 | 13.3 | | | |
| 7 | 4,390 | 165 | | | | | | | | | |
| 8 | 4,980 | 268 | 65 | 76.6 | 4.1 | 65 | 76.6 | 4.1 | | | |
| 9 | 8,200 | 375 | 265 | 30.9 | 1.4 | 264 | 31.1 | 1.4 | 10 | 820.0 | 37.5 |
| 10 | 9,200 | 430 | 36 | 255.5 | 11.9 | 36 | 255.5 | 11.9 | | | |
| 11 | 9,254 | 341 | 10 | 925.4 | 34.1 | 10 | 925.4 | 34.1 | 4 | 2313.5 | 85.3 |
| 12 | 9,300 | 340 | 6 | 1550.0 | 56.7 | 6 | 1550.0 | 56.7 | | | |
| Totals | | | 620 | | | 619 | | | 14 | | |

TABLE 46--Continued

| District | A.D.A. | Number of Teachers | Sound Films | Pupil Ratio | Teacher Ratio | Titles | Pupil Ratio | Teacher Ratio | Silent Films | Pupil Ratio | Teacher Ratio |
|----------|--------|-----------------------|----------------|--|------------------|--------|----------------|------------------|-----------------|----------------|------------------|
| 13 | 9,639 | 497 | 193 | 49.9 | 2.5 | 193 | 49.9 | 2.5 | | | |
| 14 | 10,800 | 450 | 150 | 72.0 | 3.0 | 150 | 72.0 | 3.0 | | | |
| 15 | 11,000 | 350 | 109 | 100.9 | 3.2 | 109 | 100.9 | 3.2 | | | |
| 16 | 12,340 | 500 | 400 | 30.8 | 1.2 | 400 | 30.8 | 1.2 | | | |
| 17 | 14,542 | 686 | 500 | 29.1 | 1.4 | 500 | 29.1 | 1.4 | 3 | 4846.3 | 228.7 |
| 18 | 14,744 | 497 | 702 | 21.0 | •7 | 702 | 21.0 | •7 | 3 | 4914.7 | 165.7 |
| 19 | 15,999 | 550 | 110 | 145.5 | 5.0 | 110 | 145.5 | 5.0 | | | |
| 20 | 16,682 | 634 | 271 | 61.5 | 2.3 | 270 | 61.5 | 2.3 | | | |
| 21 | 18,615 | 1,100 | 1,375 | 13.5 | 8. | 1,100 | 16.9 | 1.0 | | | |
| 22 | 18,857 | 842 | 900 | 20.9 | •9 | 875 | 21.5 | 1.0 | 4 | 4714.3 | 210.5 |
| 23 | 21,494 | 777 | 953 | 22.5 | .8 | 952 | 22.6 | .8 | 117 | 183.7 | 6.6 |
| 24 | 25,348 | 904 | 373 | 67.9 | 2.4 | 316 | 80.2 | 2.8 | 14 | 1810.9 | 64.6 |
| Totals | | - | 6,036 | ······································ | | 5,677 | | - | 141 | | |

TABLE 46-Continued

| District | A.D.A. | Number of Teachers | Sound Films | Pupil Ratio | Teacher Ratio | Titles | Pupil Ratio | Teacher Ratio | Silent Films | Pupil Ratio | Teacher Ratio |
|------------|---------|-----------------------|----------------|----------------|------------------|--------|----------------|------------------|-----------------|----------------|------------------|
| 25 | 26,347 | 1,017 | 440 | 59•9 | 2.3 | 400 | 65.9 | 2.5 | 2 | 13,173.5 | 508.6 |
| 2 6 | 27,000 | 984 | | | | | | | | | |
| 27 | 29,005 | 1,165 | 1,098 | 26.4 | 1.1 | 800 | 36.3 | 1.4 | 320 | 90.6 | 3.6 |
| 28 | 31,343 | 908 | 2,577 | 12.4 | •3 | 2,379 | 12.2 | •3 | | | |
| 29 | 53,261 | 1,500 | 1,843 | 28.9 | .8 | 926 | 57.3 | 1.6 | 131 | 406.9 | 11.4 |
| 30 | 58,398 | 1,750 | 4,100 | 14.2 | •4 | 2,300 | 45•4 | •7 | 100 | 583.9 | 17.5 |
| 31 | 61,012 | 2,332 | 1,472 | 41.5 | 1.6 | 1,120 | 54•5 | 2.1 | | | |
| 32 | 362,725 | 18,701 | 20,521 | 17.7 | •9 | 2,898 | 125.1 | 6.5 | 215 | 1,687.0 | 86.9 |
| Totals | | • | 32,051 | | | 10,823 | | | 768 | | |

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| 1 | C |
| П | \sim |

TABLE 46--Continued

| District | Film- strips | Pupil Ratio | Teacher Ratio | Slide Sets | Pupil Ratio | Teacher Ratio | Study Prints | Pupil Ratio | Teacher Ratio | |
|----------|-----------------|----------------|------------------|---------------|----------------|------------------|-----------------|----------------|------------------|---|
| 1 | 350 | 5•4 | •3 | 4 | 469.5 | 22.5 | 21 | 89.4 | 4.3 | |
| 2 | | | | | | | | | | |
| 3 | 800 | 3.5 | .1 | | | | | | | |
| 4 | | | | | | | | | | |
| 5 | 400 | 10.2 | •4 | 50 | 82.0 | 3.3 | 353 | 12.0 | •5 | |
| 6 | 750 | 5.8 | •2 | 112 | 39.0 | 1.4 | 12 | 361.5 | 13.3 | |
| 7 | 26 | 16.9 | 6.3 | | | | | | | |
| 8 | 700 | 7.1 | •4 | 9 | 553.3 | 29.8 | 24 | 207.5 | 11.1 | |
| 9 | 2,300 | 3.6 | .2 | 3 | 2733.3 | 125.0 | 92 | 89.1 | 4.1 | |
| 10 | 1,572 | 5.8 | •3 | 20 | 460.0 | 21.5 | | | | |
| 11 | 400 | 23.1 | .8 | 25 | 370.1 | 13.6 | 600 | 15.4 | .6 | |
| 12 | | | | | | | | | | |
| otal | 7,298 | | | 223 | | | 1,102 | | | _ |

TABLE 46--Continued

| District | Film- strips | Pupil Ratio | Teacher Ratio | Slide Sets | Pupil Ratio | Teacher Ratio | Study Prints | Pupil Ratio | Teacher Ratio |
|----------|-----------------|----------------|------------------|---------------|----------------|------------------|-----------------|----------------|------------------|
| 13 | 830 | 11.6 | •6 | 24 | 401.6 | 20.7 | 98 | 98.4 | 9•9 |
| 14 | 1,000 | 10.8 | •5 | 225 | 48.0 | 2.0 | 500 | 21.6 | •9 |
| 15 | 1,126 | 9.8 | •3 | 63 | 174.6 | 5•5 | 158 | 69.6 | 2.2 |
| 16 | 1,000 | 12.3 | •5 | 100 | 123.4 | 5.0 | 400 | 30.8 | 1.2 |
| 17 | 700 | 20.8 | •9 | 75 | 193.9 | 9.1 | 151 | 96.9 | 4.5 |
| 18 | 1,197 | 12.2 | •4 | 88 | 167.5 | 5.6 | 166 | 88.88 | 3.0 |
| 19 | 1,260 | 12.6 | •4 | 200 | 79•9 | 2.8 | | | |
| 20 | 1,914 | 8.7 | •3 | 1,153 | 13.4 | •5 | 524 | 31.8 | 1.2 |
| 21 | 3,400 | 547.5 | •3 | 175 | 106.3 | 6.3 | 3,000 | 6.2 | •4 |
| 22 | 1,500 | 12.6 | •6 | 80 | 236.0 | 10.5 | 572 | 33.0 | 1.5 |
| 23 | 2,839 | 7.6 | •3 | 421 | 51.5 | 1.8 | 350 | 61.4 | 2.2 |
| 24 | 2,580 | 9.8 | •4 | 500 | 50.7 | 1.8 | 1,540 | 17.0 | •6 |
| Totals | 19,346 | | · · | 3,104 | | | 7,458 | | |

TABLE 46-Continued

| District | Film- strips | Pupil Ratio | Teacher Ratio | Slide Sets | Pupil Ratio | Teacher Ratio | Study Prints | Pupil Ratio | Teacher Ratio |
|----------|-----------------|----------------|------------------|---------------|----------------|------------------|-----------------|----------------|------------------|
| 25 | 3,000 | 8.8 | •3 | 230 | 114.5 | 4.4 | 300 | 87.7 | 3.4 |
| 26 | 3,500 | 7.7 | •2 | 300 | 270.0 | 3.3 | 1,500 | 18.0 | •6 |
| 27 | 1,699 | 17.1 | •7 | 240 | 120.8 | 4.9 | 125 | 232.0 | 9•3 |
| 28 | 2,278 | 13.9 | •4 | 762 | 41.1 | 1.2 | 7,960 | 3.9 | .1 |
| 29 | 7,280 | 7.3 | .2 | 75,000 | •7 | .1 | 60,000 | •9 | .1 |
| 30 | 11,000 | 5.3 | •2 | 1,100 | 53.1 | 1.6 | 9,000 | 6.5 | .2 |
| 31 | 1,775 | 34.3 | 1.3 | 400 | 152.5 | 5.8 | 6,000 | 10.1 | •4 |
| 32 | 36,486 | 9.9 | •5 | 10,825 | 3.3 | 1.7 | 60,052 | .6 | •3 |
| | | | | | | | | | |
| Totals | 66,418 | | | 88,657 | | | 144,937 | | |

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| District | Mounted Pictures | Pupil Ratio | Teacher Ratio | Models | Pupil Ratio | Teacher Ratio | Specimens | Pupil Ratio | Teacher Ratio |
|----------|---------------------|----------------|------------------|--------|----------------|------------------|-----------|----------------|------------------|
| 1 | 500 | 3.7 | •2 | | | | | | |
| 2 | | | | | | | | | |
| 3 | | | | | | | | | |
| 4 | | • | | | | | | | |
| 5 | | | | | | | | | |
| 6 | | | | 12 | 361.5 | 13.3 | 200 | 21.6 | .8 |
| 7 | | | | | | | | | |
| 8 | | | | | | | | | |
| ^ | . 50 | 164.0 | 7•5 | | | | | | |
| 10 | | | | | | | 3 | 3066.6 | 143.3 |
| n | | | | | | | | | |
| 12 | | | | | | | | | |
| Totals | 550 | | | 12 | | | 203 | | |

TABLE 46--Continued

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| | | | • | TABLE 46 | Continued | <u>l</u> | | | |
|----------|---------------------|----------------|------------------|----------|----------------|------------------|-----------|----------------|------------------|
| District | Mounted Pictures | Pupil Ratio | Teacher Ratio | Models | Pupil Ratio | Teacher Ratio | Specimens | Pupil Ratio | Teacher Ratio |
| 13 | 17,000 | •6 | .1 | 21 | 459.0 | 23.7 | | | |
| 14 | 150 | 72.0 | 3.0 | 25 | 432.0 | 18.0 | | | |
| 15 | | | | 7 | 1571.4 | 50.0 | | | |
| 16 | 200 | 61.7 | 2.5 | 150 | 82.3 | 3.3 | 15 | 822.6 | 33.3 |
| 17 | 200 | 72.7 | 3.4 | | | | | | |
| 18 | | | | 371 | 39.7 | 1.3 | | | |
| 19 | | | | | | | • | | : |
| 20 | 10,385 | 1.5 | .1 | | | | 35 | 476.6 | 18.1 |
| 21 | 2,500 | 7.4 | •4 | | | | 100 | 186.1 | 11.0 |
| 22 | 439 | 43.0 | 1.9 | 50 | 377.0 | 16.8 | 60 | 314.0 | 14.0 |
| 23 | 25,135 | •9 | .1 | 55 | 390.8 | 14.1 | 325 | 66.1 | 2.4 |
| 24 | 135 | 188.0 | 6.7 | 30 | 844.9 | 30.0 | 20 | 1267.4 | 45.2 |
| Totals | 56,144 | | | 709 | | | 555 | | |

19

TABLE 46--Continued

| District | Mounted Pictures | Pupil Ratio | Teacher Ratio | Models | Pupil Ratio | Teacher Ratio | Specimens | Pupil Ratio | Teacher Ratio |
|----------|---------------------|----------------|------------------|--------|----------------|------------------|----------------|----------------|------------------|
| 25 | * | | | | | | | | |
| 26 | * | | | | | | | | |
| 27 | 110 | 263.7 | 10.6 | | | | | | |
| 28 | 132,162 | 23.7 | .1 | 329 | 95•3 | 2.8 | 2,945 | 10.6 | •3 |
| 29 | 5,000 | 10.7 | •3 | 600 | 88.88 | 2.5 | 25 | 2130.4 | 60.0 |
| 30 | 800 | 72.9 | 2.2 | 250 | 233.6 | 7.0 | 200 | 291.9 | 8.8 |
| 31 | * | | | 900 | 67.8 | 2.6 | 900 | 67.8 | 2.6 |
| 32 | 4 , 690 | 7•7 | 4.0 | | | | 1,690 | 21.3 | 11.1 |
| Totals | 142,762 | | | 2,079 | | · | 5 ,7 60 | | |

^{*}Included with study prints.

| | | | | | | | | | |
|-------------|---------|----------------|------------------|------------------|----------------|------------------|------|----------------|------------------|
| District | Records | Pupil Ratio | Teacher Ratio | Magn. Record. | Pupil Ratio | Teacher Ratio | Maps | Pupil Ratio | Teacher Ratio |
| 1 | 950 | 1.9 | .1 | | | | 300 | 6.3 | •3 |
| 2 | | | | | | | | | |
| 3 | | | | | | | | | |
| 4 | | | | | | | | | |
| 5 | 375 | 10.9 | •4 | | | | 76 | 53.9 | 2.2 |
| 6 | 800 | 5.4 | •2 | 12 | 361.5 | 13.3 | 200 | 21.7 | -8 |
| 7 | 9 | 487.8 | 18.3 | 9 | 487.8 | 18.3 | | | |
| 8 | 60 | 83.0 | 4.5 | | | | | | |
| 9 | 675 | 12.1 | •6 | | | | | | |
| 10 | 2,519 | 3.7 | •2 | 74 | 124.3 | 5•9 | 19 | 484.2 | 22.5 |
| 11 | | | | | | | | | |
| 12 | 250 | 37.2 | 1.4 | | | | | | |
| Totals | 5,638 | | | 95 | | | 595 | | |

TABLE 46--Continued

Totals

TABLE 46--Continued

| District | Records | Pupil Ratio | Teacher Ratio | Magn. Record. | Pupil Ratio | Teacher Ratio | Maps | Pupil Ratio | Teacher Ratio |
|----------|---------|----------------|------------------|------------------|----------------|------------------|------|----------------|------------------|
| 13 | 230 | 41.9 | 2.2 | | | | 47 | 205.1 | 10.6 |
| 14 | 600 | 18.0 | .8 | | | | | | |
| 15 | 532 | 20.7 | •6 | 10 | 1100.0 | 35.0 | 106 | 103.8 | 3.3 |
| 16 | 300 | 41.1 | 1.7 | 25 | 493.6 | 20.0 | 6 | 2056.7 | 83.3 |
| 17 | 200 | 72.7 | 3.4 | | | | | | |
| 18 | 374 | 39.4 | 1.3 | 5 | 2948.8 | 99•4 | 92 | 160.3 | 5.4 |
| 19 | 500 | 31.9 | 1.1 | 25 | 639•9 | 22.0 | | ٠ | |
| 20 | 4,549 | 3.7 | •1 | | | | 375 | 44.5 | 1.7 |
| 21 | 1,700 | 10.9 | •7 | 12 | 1551.3 | 91.7 | | | |
| 22 | 2,943 | 6.4 | •3 | | | | | | |
| 23 | 2,348 | 9.2 | •3 | 15 | 1432.9 | 51.8 | 40 | 537.4 | 19.4 |
| 24 | 3,000 | 8.4 | •3 | 100 | 253.5 | 9•0 | 10 | 2534.8 | 90.4 |
| Totals | 17,276 | | | 192 | | | 676 | | |

TABLE 46--Continued

| District | Records | Pupil Ratio | Teacher Ratio | Magn. Record. | Pupil Ratio | Teacher Ratio | Maps | Pupil Ratio | Teacher Ratio |
|----------|---------|----------------|------------------|------------------|----------------|------------------|-------|----------------|------------------|
| 25 | 200 | 131.7 | 5.1 | 12 | 2195.6 | 84.8 | | | |
| 26 | 3,500 | 7.7 | •2 | 400 | 67.5 | 2.5 | | | |
| 27 | 790 | 36.7 | 1.4 | 200 | 145.0 | 5.8 | | | |
| 28 | 1,686 | 18.6 | •5 | 1,462 | 21.4 | .6 | 132 | 59•4 | 6.8 |
| 29 | 2,000 | 26.6 | .8 | 300 | 177.5 | 5.0 | 2,000 | 26.6 | .8 |
| 30 | 6,000 | 9•7 | •3 | 50 | 1167.9 | 35.0 | | | |
| 31 | 1,100 | 55•5 | 2.1 | | | | | | |
| 32 | 10,542 | 34.4 | 1.8 | | | | | | |
| Totals | 25,818 | | | 2,424 | | | 2,132 | | |

| TABLE | 46Continued |
|-------|-------------|
| | |

| District | Charts | Pupil Ratio | Teacher Ratio | Dioramas | Pupil Ratio | Teacher Ratio | Microphones | Pupil Ratio | Teacher Ratio |
|----------|-------------|----------------|------------------|----------|----------------|------------------|-------------|----------------|------------------|
| 1 | 20 | 93•9 | 4•5 | | | | 3 | 626.0 | 30.0 |
| 2 | | | | | | | 5 | 460.6 | 19.2 |
| 3 | | | | | | | 13 | 219.1 | 7.8 |
| 4 | | | | | | | 2 | 1504.0 | 52.5 |
| 5 | | | | | | | | | |
| 6 | 1 50 | 28.9 | 1.0 | | | | 13 | 33.7 | 12.3 |
| 7 | | | | | | | 3 | 1463.3 | 55.0 |
| 8 | į | | | | | - | 12 | 415.0 | 22.3 |
| 9 | | | | | | | 25 | 328.0 | 15.0 |
| 10 | 22 | 418.2 | 19.5 | | | | 2 | 4600.0 | 215.0 |
| 11 | | | | | | | 20 | 462.7 | 17.0 |
| 12 | | | | | | | | | |
| Totals | 192 | | | | | | 98 | - | |

| District | Charts | Pupil Ratio | Teacher Ratio | Dioramas | Pupil Ratio | Teacher Ratio | Microphones | Pupil Ratio | Teacher Ratio |
|----------|--------|----------------|------------------|----------|----------------|------------------|-------------|----------------|------------------|
| 13 | 300 | 32.1 | 1.7 | 10 | 963.9 | 49•7 | 5 | 1927.8 | 99•4 |
| 14 | 50 | 216.0 | 9.0 | 1 | 10,800.0 | 450.0 | 14 | 777.4 | 32.1 |
| 15 | | | | | | | 3 9 | 282.1 | 8.9 |
| 16 | 5 | 2468.0 | 100.0 | | | | 63 | 195.9 | 7.9 |
| 17 | | | | | | | 50 | 290.8 | 13.7 |
| 18 | 95 | 155.2 | 5.2 | 1 | 14,744.0 | 686.0 | 3 | 4914.7 | 228.7 |
| 19 | | | | | | | | | |
| 20 | 2 | 8341.0 | 327.0 | | | | | | |
| 21 | | | | | | | 50 | 372.3 | 22.0 |
| 22 | | | | 9 | 2,095.2 | 93.6 | 27 | 698.4 | 31.2 |
| 23 | 1,139 | 18.8 | •7 | 39 | 551.1 | 20.4 | 47 | 457•3 | 16.5 |
| 24 | 50 | 506.9 | 18.0 | | | | 15 | 1689.9 | 60.3 |
| Totals | 1,641 | | | 60 | | | 313 | | |

TABLE 46--Continued

TABLE 46--Continued

| District | Charts | Pupil Ratio | Teacher Ratio | Dioramas | Pupil Ratio | Teacher Ratio | Microphones | Pupil Ratio | Teacher Ratio |
|----------|--------|----------------|--|----------|----------------|------------------|-------------|----------------|------------------|
| 25 | | | | | | | 60 | 439.1 | 16.9 |
| 26 | | | | | | ` | 75 | 135.0 | 13.1 |
| 27 | | | | | | | 150 | 193.4 | 7.7 |
| 28 | 132 | 59•4 | 6.8 | 17 | 1843.7 | 53.4 | 14 | 2238.8 | 64.8 |
| 29 | 500 | 106.5 | 3.0 | | | | 30 | 1775.4 | 50.0 |
| 30 | 2,000 | 29.2 | •9 | 50 | 1167.9 | 35.0 | 170 | 343.5 | 10.3 |
| 31 | | | | | | | | | |
| 32 | 10,551 | 34•4 | 1.8 | | | | 1,000 | 362.7 | 18.7 |
| Totals | 13,183 | | ······································ | 67 | | | 1,499 | | |

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TABLE 46--Continued

| District | 16mm Sound Projectors | Pupil Ratio | Teacher Ratio | Silent Projectors | Pupil Ratio | Teacher Ratio | Slide Projectors | Pupil Ratio | Teacher Ratio | |
|----------------|--------------------------|----------------|------------------|----------------------|----------------|------------------|---------------------|----------------|------------------|---|
| 1 | 8 | 234.8 | 11.2 | | | | | | | |
| 2 | 12 | 191.9 | 8.0 | | | | | | | |
| 3 | 6 | 474.7 | 18.0 | | | | 2 | 1424.0 | 50.5 | |
| 4* | 6 | 501.3 | 17.5 | | | | | | | |
| 5 [*] | 10 | 410.0 | 16.5 | | | | 5 | 820. 0 | 33.0 | |
| 6 | 7 | 619.7 | 22.8 | | | | 2 | 4338.0 | 80.0 | 1 |
| 7* | 2 | 2195.0 | 82.5 | | | | | | | |
| 8 | 18 | 276.7 | 14.9 | | | | | | | |
| 9 | 19 | 431.6 | 19.7 | ı | 8200.0 | 375.0 | 3 | 2733.3 | 125.0 | |
| 10 | 2 | 4600.0 | 215.0 | | | | 1 | 9200.0 | 430.0 | |
| 11 | 24 | 385.6 | 14.2 | | | | 11 | 841.3 | 31.0 | |
| 12 | 35 | 265.7 | 9.7 | | | | 30 | 310.0 | 11.3 | |
| Totals | 149 | | | 1 | | | 54 | | | • |

^{*}Individual schools have their own equipment in these districts.

TABLE 46--Continued

| District | 16mm Sound Projectors | Pupil Ratio | Teacher Ratio | Silent Projectors | Pupil Ratio | Teacher Ratio | Slide Projectors | Pupil Ratio | Teacher Ratio |
|----------|--------------------------|----------------|------------------|----------------------|----------------|------------------|---------------------|----------------|------------------|
| 13 | 30 | 321.3 | 16.4 | | | | 10 | 963.9 | 49.7 |
| 14 | 21 | 514.3 | 21.4 | 1 | 10,800.0 | 450.0 | 25 | 432.0 | 18.0 |
| 15 | 23 | 478.3 | 15.2 | 1 | 11,000.0 | 350.0 | 5 | 2,200.0 | 70.0 |
| 16 | 55 | 224.4 | 9.1 | | | | 25 | 493.6 | 20.0 |
| 17 | 50 | 290.8 | 13.7 | | | | 60 | 242.4 | 11.4 |
| 18* | 3 | 4914.7 | 165.7 | ı | 14,744.0 | 497.0 | | | |
| 19* | 59 | 271.2 | 9.3 | | | | 1. | 15,999.0 | 550.0 |
| 20* | 30 | 556.1 | 21.1 | | | | ı | 16,682.0 | 634.0 |
| 21 | 112 | 166.2 | 9.8 | | | | 10 | 1,861.5 | 110.0 |
| 22 | 70 | 269.4 | 12.0 | | | | 18 | 1,047.6 | 46.8 |
| 23 | 77 | 279.1 | 10.1 | 1 | 21,494.0 | 777.0 | 8 | 2,686.8 | 97.1 |
| 24 | 92 | 275•5 | 9.8 | 7 | 3,621.1 | 129.1 | | | |
| Totals | 622 | | | 11 | | | 163 | | |

*Individual schools have their own equipment in these districts.

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TABLE 46--Continued

| District | 16mm Sound Projectors | Pupil Ratio | Teacher Ratio | Silent Projectors | Pupil Ratio | Teacher Ratio | Slide Projectors | Pupil Ratio | Teacher Ratio |
|----------|--------------------------|----------------|------------------|----------------------|----------------|---------------------------------------|---------------------|----------------|------------------|
| 25 | 87 | 302.8 | 11.6 | | | | 36 | 731.9 | 28.2 |
| 26 | 75 | 360.0 | 13.1. | 1 | 27,000.0 | 984.0 | | | |
| 27 | 81 | 358.1 | 14.4 | 30 | 966.8 | 38.8 | 35 | 828.7 | 33.3 |
| 28* | 11 | 2849.4 | 82.5 | 6 | 5,223.8 | 151.3 | 25 | 1253.7 | 36.3 |
| 29 | 350 | 152.2 | 4.3 | 4O | 1,331.5 | 37•5 | 280 | 190.2 | 5•4 |
| 30 | 220 | 265.4 | 7.9 | | | | 110 | 530.9 | 15.9 |
| 31 | 180 | 338.9 | 12.9 | | | | 50 | 1220.2 | 46.6 |
| 32 | 2,500 | 145.1 | 7.5 | 5 | 72,545.0 | 3740.2 | 600 | 604.5 | 31.2 |
| | | | | | | · · · · · · · · · · · · · · · · · · · | | | |
| Totals | 3,504 | | | 82 | | | 1,136 | | |

 $^{{}^{*}}$ Individual schools have their own audio-visual equipment in this district.

TABLE 46—Continued

| District | Filmstrip-Slide Projectors | Pupil Ratio | Teacher Ratio | Opaque Projectors | Pupil Ratio | Teacher Ratio | Stereo- scopes | Pupil Ratio | Teacher Ratio | |
|----------------|-------------------------------|----------------|------------------|----------------------|----------------|------------------|-------------------|----------------|------------------|-----|
| 1 | 9 | 208.6 | 10.0 | | | | | | | _ |
| 2 | 12 | 191.9 | 8.0 | 2 | 1151.5 | 48.0 | | | | |
| 3 | 11 | 258.9 | 9.2 | 1 | 2848.0 | 101.0 | 3 | 949•3 | 33.6 | |
| 4* | 6 | 501.3 | 17.5 | 1 | 3008.0 | 105.0 | | | | |
| 5 [*] | 5 | 820.0 | 33.0 | | | | | | | |
| 6 | 15 | 289.2 | 10.6 | 2 | 2169.0 | 80.0 | 2 | 2169.0 | 80.0 | 107 |
| 7** | 1 | 4390.0 | 165.0 | 1 | 4390.0 | 165.0 | | | | 1 |
| 8 | 18 | 276.7 | 14.8 | 1 | 4980.0 | 268.0 | | | | |
| 9 | 24 | 341.7 | 15.6 | 8 | 1025.0 | 46.9 | 32 | 256.3 | 11.7 | |
| 10 | 2 | 4600.0 | 215.0 | 1 | 9200.0 | 430.0 | 24 | 383.3 | 17.9 | |
| 11 | 11 | 841.3 | 31.0 | 3 | 3084.7 | 113.7 | 35 | 264.4 | 9•7 | |
| 12 | 30 | 310.0 | 11.3 | 4 | 2325.0 | 85.0 | | | | |
| Totals | 344 | | | 24 | | | 96 | | | - |

^{*}Individual schools have their own equipment in these districts.

TABLE 46--Continued

| District | Filmstrip-Slide Projectors | Pupil Ratio | Teacher Ratio | Opaque Projectors | Pupil Ratio | Teacher Ratio | Stereo- scopes | Pupil Ratio | Teacher Ratio | |
|----------|-------------------------------|----------------|------------------|----------------------|----------------|------------------|-------------------|----------------|------------------|---|
| 13 | 27 | 357.0 | 18.4 | 5 | 1927.8 | 99•4 | 5 | 1927.8 | 99•4 | - |
| 14 | 25 | 432.0 | 18.0 | 8 | 1350.0 | 56.3 | 30 | 360.0 | 15.0 | |
| 15 | 33 | 333.3 | 10.6 | 7 | 1571.4 | 50.0 | | | | |
| 16 | 42 | 293.8 | 11.9 | 8 | 1542.5 | 62.5 | 10 | 1234.0 | 50.0 | |
| 17 | 60 | 242.4 | 11.4 | 10 | 1454.2 | 68.6 | | | | |
| 18* | 4 | 3686.0 | 24.2 | 2 | 7373.0 | 248.5 | 30 | 491.5 | 16.4 | |
| 19* | 30 | 533.3 | 18.3 | 1 | 15999•0 | 550.0 | | | | |
| 20* | 25 | 667.3 | 25.4 | 2 | 8341.0 | 317.0 | 8 | 2085.3 | 79.3 | |
| 21 | 55 | 388.4 | 20.0 | 10 | 1861.5 | 11.0.0 | | | | |
| 22 | 68 | 277.3 | 12.4 | 14 | 1346.9 | 60.1 | | | | |
| 23 | 71 | 302.7 | 10.9 | 18 | 1194.1 | 97.1 | 36 | 597.1 | 21.6 | |
| 24 | 86 | 298.2 | 10.5 | 17 | 1491.1 | 53.2 | 1 | 25348.0 | 904.0 | |
| Totals | 526 | | | 102 | | | 120 | | | _ |

^{*}Individual schools have their own equipment in these districts.

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TABLE 46--Continued

| District | Filmstrip-Slide Projectors | Pupil Ratio | Teacher Ratio | Opaque Projectors | Pupil Ratio | Teacher Ratio | Stereo- scopes | Pupil Ratio | Teacher Ratio |
|-----------------|-------------------------------|----------------|------------------|----------------------|----------------|------------------|-------------------|---------------------------------------|------------------|
| 25 | 94 | 280.3 | 10.8 | 37 | 712.1 | 27.5 | | | |
| 26 | 150 | 180.0 | 6.6 | 10 | 2700.0 | 98•4 | | | |
| 27 | 45 | 644.6 | 25.9 | | | | | | |
| 28 [#] | 15 | 2089.8 | 60.5 | 7 | 4477.6 | 129.7 | 250 | 125.4 | 3.6 |
| 29 | 400 | 133.2 | 3.8 | 32 | 1664.4 | 68.1 | 2,500 | 21.3 | •6 |
| 30 | 180 | 324.4 | 9•7 | 45 | 1297.7 | 39.1 | 250 | 233.6 | 7.0 |
| 31 | 125 | 488.1 | 18.7 | 25 | 2440.5 | 93.3 | 375 | 162.7 | 6.2 |
| 32 | 2,500 | 145.1 | 7.5 | 50 | 7254.5 | 374.0 | | | |
| | a a | | | ···· | | | | · · · · · · · · · · · · · · · · · · · | |
| Totals | 3,509 | | | 206 | | | 3,375 | | |

 $^{^{*}}$ Individual schools have their own equipment in this district.

TABLE 46--Continued

| District | Overhead Projectors | Pupil Ratio | Teacher Ratio | Screens | Pupil Ratio | Teacher Ratio | Projector Stands | Pupil Ratio | Teacher Ratio |
|----------------|------------------------|----------------|------------------|---------|----------------|------------------|---------------------|----------------|---------------------------------------|
| ı | | | | | | | | | |
| 2 | 5 | 460.6 | 19.2 | 12 | 191.9 | 8.0 | 6 | 383.8 | 16.0 |
| 3 | | | | 10 | 284.8 | 10.1 | 3 | 949•3 | 33.7 |
| 4** | 2 | 1504.0 | 52.5 | 7 | 429.7 | 15.0 | 4 | 759.0 | 26.2 |
| 5 [*] | | | | | | | | | |
| 6 | ı | 4338.0 | 160.0 | 15 | 289.2 | 10.7 | 12 | 361.5 | 13.3 |
| 7** | ı | 4390.0 | 165.0 | 2 | 2195.0 | 82.5 | | | |
| 8 | | | | 34 | 146.5 | 7.8 | | | |
| 9 | 4 | 2050.0 | 93•7 | 125 | 65.6 | 3.0 | 20 | 410.0 | 18.8 |
| 10 | | | | 3 | 3066.7 | 143.3 | | • | |
| 11 | 3 | 3084.7 | 113.7 | | | | | | |
| 12 | 4 | 2325.0 | 85.0 | | | | | | |
| Totals | 20 | | | 208 | | | 45 | | ·· ·· · · · · · · · · · · · · · · · · |

^{*}Individual schools have their own equipment in these districts.

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TABLE 46--Continued

| District | Overhead Projectors | Pupil Ratio | Teacher Ratio | Screens | Pupil Ratio | Teacher Ratio | Projector Stands | Pupil Ratio | Teacher Ratio |
|----------|------------------------|----------------|------------------|-------------|----------------|---|---------------------|----------------|------------------|
| 13 | 1 | 9639.0 | 497.0 | 35 | 275.4 | 14.2 | 15 | 642.6 | 33.1 |
| 14 | 1 | 10800.0 | 450.0 | 50 | 216.0 | 9.0 | 13 | 830.8 | 34.6 |
| 15 | 2 | 5500.0 | 175.0 | 68 | 161.8 | 5.1 | 60 | 183.3 | 5.8 |
| 16 | 5 | 2468.0 | 100.0 | 300 | 41.1 | 1.7 | 60 | 205.7 | 8.3 |
| 17 | 5 | 2908.4 | 137.2 | 100 | 145.4 | 6.8 | 40 | 363.6 | 17.2 |
| 18* | 1 | 14744.0 | 497.0 | 4 | 3686.0 | 124.3 | 4 | 3686.0 | 124.3 |
| 19* | | | | | | | | | |
| 20* | 2 | 8341.0 | 327.0 | | | | | | |
| 21 | 15 | 1241.0 | 73•3 | 95 | 195.9 | 11.6 | 110 | 169.2 | 10.0 |
| 22 | 9 | 2095.2 | 93.6 | 27 9 | 67.6 | 3.0 | 107 | 176.2 | 7.8 |
| 23 | 38 | 565.6 | 20.5 | 159 | 135.2 | 4.9 | 89 | 241.5 | 8.7 |
| 24 | 1 | 25348.0 | 904.0 | 145 | 174.8 | 6.2 | 25 | 1013.9 | 36 .2 |
| Total | 80 | | <u> </u> | 1,235 | | *************************************** | 523 | | |

^{*}Individual schools have their own equipment in these districts.

TABLE 46--Continued

| District | Overhead Projectors | Pupil Ratio | Teacher Ratio | Screens | Pupil Ratio | Teacher Ratio | Projector Stands | Pupil Ratio | Teacher Ratio | |
|-----------------|------------------------|----------------|------------------|---------|----------------|------------------|---------------------|----------------|---------------------------------------|-----|
| 25 | | | | 200 | 131.7 | 5.0 | 70 | 376.4 | 14.5 | |
| 26 | 10 | 2700.0 | 98.4 | 250 | 108.0 | 3.9 | 75 | 360.0 | 13.1 | |
| 27 | 7 | 4142.6 | 116.4 | 100 | 290.0 | 11.7 | 100 | 290.0 | 11.7 | |
| 28 [*] | 7 | 4477.6 | 129.7 | 10 | 3143.3 | 90.8 | 3 | 10447.7 | 302.7 | 700 |
| 29 | 4 | 13315.2 | 375.0 | 50 | 1065.2 | 30.0 | 50 | 1065.2 | 30.0 | |
| 30 | 10 | 5839.8 | 175.0 | 350 | 166.9 | 5.0 | 300 | 194.7 | 5.8 | |
| 31 | 10 | 6101.2 | 233.2 | 180 | 338.9 | 13.0 | | | | |
| 32 | 100 | 3627.3 | 18.7 | 2,500 | 145.1 | 7.5 | 1,000 | 362.7 | 1.9 | |
| Totals | 148 | | | 3,640 | | *. · | 1,598 | | · · · · · · · · · · · · · · · · · · · | |

^{*}Individual schools have their own equipment in this district.

TABLE 46--Continued

| District | Record Players | Pupil Ratio | Teacher Ratio | Recorders | Pupil Ratio | Teacher Ratio | Radios | Pupil Ratio | Teacher Ratio | - |
|-----------------|-------------------|----------------|------------------|-----------|----------------|------------------|--------|----------------|------------------|---------------|
| 1 | 29 | 64.7 | 3.1 | 4 | 169.5 | 22.5 | 5 | 375.6 | 18.0 | |
| 2 | 5 | 460.6 | 19.2 | | | | 2 | 1151.5 | 48.0 | |
| 3 | 2 3 | 123.8 | 4.4 | 6 | 474.7 | 16.8 | 2 | 1424.0 | 50.5 | |
| 4* | | | | 2 | 1504.0 | 52.5 | | | | |
| 5 ^{**} | 8. | | | | | | | | | |
| 6 | 20 | 216.9 | 8.0 | 8 | 542.3 | 20.0 | 7 | 619.7 | 22.9 | |
| 7* | 2 | 2195.0 | 82.5 | 1 | 4390.0 | 165.0 | | | | |
| 8 | 12 | 415.0 | 22.3 | 7 | 711.4 | 38.3 | 2 | 2490.0 | 134.0 | i |
| 9 | 80 | 102.5 | 4.7 | 27 | 303.7 | 13.9 | 28 | 292.9 | 13.4 | |
| 10 | 1 | 9200.0 | 430.0 | 1 | 9200.0 | 430.0 | 1 | 9200.0 | 430.0 | |
| 11 | | | | 8 | 1156.8 | 42.6 | | | | |
| 12 | 70 | 132.9 | 4.9 | 26 | 357•7 | 13.1 | 70 | 132.9 | 4.9 | |
| Totals | 242 | | | 90 | | | 117 | | | |

^{*}Individual schools have their own equipment in these districts.

8

TABLE 46--Continued

| Di | strict | Record Players | Pupil Ratio | Teacher Ratio | Recorders | Pupil Ratio | Teacher Ratio | Radios | Pupil Ratio | Teacher Ratio |
|----|-----------------|-------------------|----------------|------------------|-----------|----------------|------------------|--------|----------------|------------------|
| | 13 | 95 | 101.5 | 5.2 | 10 | 963.9 | 49.7 | 30 | 321.3 | 16.4 |
| | 14 | 73 | 147.9 | 6.2 | 21 | 514.3 | 21.4 | 30 | 360.0 | 15.0 |
| : | 15 | 147 | 74.8 | 2.4 | 15 | 733•3 | 23.3 | 7 | 1571.4 | 50.0 |
| | 16 | 120 | 102.8 | 4.1 | 19 | 649.5 | 26.3 | 50 | 246.8 | 10.0 |
| | 17 | 140 | 103.9 | 4.9 | 31 | 469.1 | 22.1 | 25 | 581.7 | 27.4 |
| | 18* | 4 | 3686.0 | 124.3 | 4 | 3686.0 | 124.3 | 1 | 14744.0 | 497.0 |
| | 19** | 95 | 168.4 | 5.8 | 15 | 1066.6 | 36.6 | | | |
| | 20 [#] | 125 | 133.5 | 5.1 | 15 | 1112.1 | 42.3 | 99 | 168.5 | 6.4 |
| | 21 | 235 | 79.2 | 4.7 | 48 | 387.8 | 22.9 | 100 | 186.2 | 11.0 |
| | 22 | 152 | 124.0 | 5•5 | 32 | 589•3 | 26.3 | 61 | 309.1 | 13.8 |
| : | 23 | 274 | 78.4 | 2.8 | 20 | 1074.7 | 38.8 | 87 | 247.1 | 8.9 |
| | 24 | 5 | 5069.6 | 180.0 | 26 | 974•9 | 34.7 | 2 | 12674.0 | 452.0 |
| Тс | otals | 1,465 | | | 256 | | | 492 | | |

^{*}Individual schools have their own equipment in these districts.

TABLE 46--Continued

| District | Record Players | Pupil Ratio | Teacher Ratio | Recorders | Pupil Ratio | Teacher Ratio | Radios | Pupil Ratio | Teacher Ratio |
|----------|-------------------|----------------|------------------|-----------|----------------|---------------------------------------|--------|----------------|------------------|
| 25 | 222 | 118.7 | 4.5 | 43 | 612.7 | 23.6 | | | |
| 26 | 250 | 109.0 | 3.9 | 50 | 540.0 | 19.7 | 75 | 360.0 | 13.1 |
| 27 | 85 | 341.2 | 13.7 | 42 | 690.6 | 27.7 | 125 | 232.0 | 9.3 |
| 28* | 9 | 3482.5 | 100.9 | 10 | 3143.3 | 90.8 | 2 | 15671.5 | 454.0 |
| 29 | 900 | 59.2 | 1.7 | 60 | 887.7 | 25.0 | 280 | 190.2 | 5•4 |
| 30 | 300 | 194.7 | 5.8 | 115 | 507.8 | 15.2 | 145 | 402.7 | 12.1 |
| 31 | | | | | | | : | | |
| 32 | 4,000 | 90.7 | 4.7 | 310 | 1170.1 | 6.3 | 5,000 | 72.5 | 3.7 |
| Totals | 5 ,7 66 | | | 631 | | · · · · · · · · · · · · · · · · · · · | 5,627 | | |

^{*}Individual schools have their own equipment in this district.

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| | A TOTAL TOTAL COMPANY |
| | APPENDIX IV |
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| , | CIRCULATION REPORTS FROM THREE DISTRICTS |
| | CIRCULATION REPORTS FROM INREE DISTRICTS |
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NORTH SACRAMENTO SCHOOL DISTRICT AUDIO-VISUAL DEPARTMENT

Report on Audio-Visual Program for the years 1954 and 1955

I. USE OF SOUND FILMS

| School | Last Year | This Year | Average pe Last Year | r Teacher This Year |
|--------------|-----------|-----------|-------------------------|------------------------|
| Spec. Ed. | 32 | 151 | 8.0 | 30.2 |
| A. B. Smythe | 228 | 301 | 14.2 | 14.3 |
| Ben Ali | 91 | 84 | 13.0 | 12.0 |
| Dos Rios | 209 | 369 | 17.4 | 30.7 |
| Hagginwood | 469 | 494 | 22.3 | 24.7 |
| McClellan | 536 | 629 | 19.1 | 21.0 |
| Noralto | 125 | 295 | 7.0 | 12.0 |
| Northwood | 208 | 146 | 13.0 | 7•7 |
| Woodlake | 161 | 103 | 12.3 | 8.0 |
| Total | 2059 | 2572 | 14.6 | 17.1 |

II. USE OF FILM STRIPS

| School | Last Year | This Year | Average p Last Year | er Teacher This Year |
|--------------|-----------|-----------|------------------------|-------------------------|
| Spec. Ed. | 152 | 167 | 38.0 | 33.4 |
| A. B. Smythe | 254 | 200 | 11.5 | 9•5 |
| Ben Ali | 139 | 88 | 19.8 | 12.6 |
| Dos Rios | 260 | 268 | 21.7 | 22.8 |
| Hagginwood | 184 | 184 | 8.8 | 9.2 |
| McClellan | 284 | 245 | 10.1 | 8.2 |
| Noralto | 141 | 241 | 7.8 | 10.5 |
| Northwood | 199 | 111 | 13.2 | 5.8 |
| Woodlake | 126 | 160 | 9.8 | 12.3 |
| Total | 1739 | 1664 | 12.3 | 11.1 |

PASADENA CITY SCHOOLS Audio-Visual Service 581 North Garfield Avenue Pasadena, California

CIRCULATION RECORD

1954-1955

| I TYPE O | F MATERIAL . | TOTAL CIRC | CULATION |
|------------------|-----------------------------|------------|----------|
| <u>FI</u> | IM LIBRARY | | |
| | Motion Pictures (400 reels) | 53,742 | |
| | Film Strips | 6,205 | |
| | Records | 3,397 | |
| | Slides | 1,238 | |
| | Tape Recordings | 800 | |
| | TOTAL | 65,382 | |
| VI | SUAL LIBRARY | | |
| | Flat Materials (Items) | 21,902 | } |
| | GRAND TOTAL | | 87,284 |
| II <u>TEACHE</u> | R ORDERS, NUMBER OF | | |
| | Film Library | 23,073 | |
| | Visual Library | 5,326 | |
| | TOTAL Teacher Orders | | 28,399 |
| | | | |
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SAN DIEGO CITY SCHOOLS INSTRUCTIONAL MATERIALS DEPARTMENT

AUDIO-VISUAL CIRCULATION REPORT

| | 1952-53 | 1953-54 | Per Cent of Increase |
|--|----------------|-----------------------------------|----------------------|
| Films | 30,107 | 40,970 | 36+ |
| Dioramas | 307 | 325 | 6 |
| Exhibits | 1,401 | 1,722 | 23 |
| Lantern slide sets | 991 | 1,140 | 15 |
| Records and albums | 6,051 | 7,504 | 24 |
| Stereograph sets | 1,608 | 1,798 | 11+ |
| Study print sets, art prints, posters Filmstrips | 7,531 7,387 | 10 , 729 9 ,2 45 | 42+ 25+ |
| Total | 55,383 | 73,433 | 33+ |

Average number of items per teacher (1953-54): 34.

APPENDIX V

COVER AND APPRECIATION LETTERS SENT BY STATE DEPARTMENT OF EDUCATION AUDIO-VISUAL BUREAU

Roy E. Simpson Superintendent of Public Instruction AV-236 June 2, 1955

STATE OF CALIFORNIA DEPARTMENT OF EDUCATION SACRAMENTO

TO:

City and District Audio-Visual Directors

FROM:

Francis W. Noel, Chief, Bureau of Audio-Visual Education

SUBJECT:

Survey of City and District Audio-Visual Education

Service Centers

Because of the increasing necessity that the Bureau of Audio-Visual Education be better informed regarding the services offered by the city and district audio-visual departments, it is sponsoring a study designed to obtain valuable data concerning them. The study is similar to and will augment one recently completed on the county level.

Attached is a questionnaire constructed to obtain the data believed necessary for the study. It is recognized that the questionnaire
is long and detailed; however, if the study is to be of maximum value,
it is believed necessary that it be very comprehensive. It would be
greatly appreciated if you will take the time to provide the information
requested as completely as possible not later than July 1, 1955. As soon
as the questionnaire is completed, please forward it to the Bureau of
Audio-Visual Education in the enclosed, self-addressed envelope.

Roy E. Simpson Superintendent of Public Instruction

STATE OF CALIFORNIA

DEPARTMENT OF EDUCATION

State Education Building, 721 Capitol Avenue, Sacramento 14

May 17, 1955

Dear

The Bureau of Audio-Visual Education is continually being asked to provide information relative to the development and extent of audio-visual services on both the county and city or district levels. To date we have been able to supply pertinent data regarding county audio-visual services because of research done at that level. Research at the city and district levels, however, has been negligible due to many deterring factors and sorely needed information is lacking.

I am very happy to be able to inform you that we have interested Miss Shirley L. Hopkinson of La Mesa in making a study of city and district audio-visual services similar to a county study which the Bureau is now completing. Miss Hopkinson will do the work as a part of her doctoral program being completed at Oklahoma University.

Because of the size of your department, Miss Hopkinson will arrange a scheduled interview with you to obtain the information she will need. I sincerely hope it will be possible for you to assist her in pursuing the study.

Cordially,

Francis W. Noel, Chief, Bureau of Audio-Visual Education Roy E. Simpson Superintendent of Public Instruction

STATE OF CALIFORNIA

DEPARTMENT OF EDUCATION

State Education Building, 721 Capitol Avenue, Sacramento 14

August 1, 1955

Dear

Under covering letter dated June 2, 1955, this office mailed you a questionnaire concerning the extent of the audio-visual services provided by your department. Although it is recognized that considerable thought and time must be taken to answer the questionnaire correctly, it is sincerely hoped that you will take time to do so at the very first opportunity. The covering letter stated that this office would like to receive the completed questionnaire by July 1, 1955. It now seems necessary to postpone that date until September 15, since we realize that vacation time has been a factor in the delay.

We realize that you are aware of how necessary studies of this kind are for the promotion and direction of audio-visual education in California and will appreciate your assistance in the completion of this project.

Cordially,

(Sgd.) Francis W. Noel

Francis W. Noel, Chief Bureau of Audio-Visual

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Roy E. Simpson Superintendent of Public Instruction

STATE OF CALIFORNIA

DEPARTMENT OF EDUCATION

State Education Building, 721 Capitol Avenue, Sacramento 14

Dear

This letter is an expression of appreciation to you for returning the completed questionnaire relative to the study of city and district audiovisual service centers. We recognize that finishing the rather lengthy questionnaire imposed an added burden on you during a busy season.

The information provided through the questionnaire will be collated and a summary will be available to you upon completion of the study. In the meantime, best wishes for continued success and thanks again for your cooperation.

Cordially,

Francis W. Noel, Chief Buresu of Audio-Visual

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APPENDIX VI

DISTRICTS INCLUDED IN THE STUDY

DISTRICTS INCLUDED IN THE STUDY

Elementary Districts

Anaheim City School District
Arcade School District
Bakersfield City School District
Bellflower Elementary School District
Hayward Elementary Schools
LaMesa-Spring Valley School District
North Sacramento Elementary School District
Oroville Elementary Schools
Roseville City Elementary

High School Districts

Chaffey Union High School District
Covina Union High School District
Fullerton Union High School and Junior College District
Grant Union High School District
Kern County Union High School and Junior College District
Monterey Union High School and College District
Porterville High School and Junior College District
Tulare Union High School District

Junior College Districts

Chaffey College District
College of the Sequoias District
East Contra Costa Junior College District
El Camino College District
Mount San Antonio College District
Orange Coast College District
San Bernardino Valley College District
San Mateo Junior College District
Santa Ana College District
Santa Rosa Junior College District
Sierra College District
West Contra Costa Junior College District

Unified Districts

Alameda Unified School District Alhambra City Schools District Beverly Hills Unified School District Burbank Unified School District Chino Unified Schools Corona Unified School District El Segundo Unified School District Eureka City Schools Fresno City Unified School District Glendale Unified School District Inglewood Unified School District Long Beach Public Schools Los Angeles City School District Montebello Unified School District Oakland Public Schools Palm Springs Unified School District Palo Alto Unified School District Palo Verde Unified School District Pasadena City Schools Pomona Unified School District Richmond Elementary and High School District Riverside City Schools Sacramento Unified School District Salinas City Schools and Union High School District San Bernardino City Schools San Diego City Schools San Jose Unified School District San Leandro Unified School District Santa Barbara Unified School District Santa Monica Unified School District Stockton Unified School District Vista Unified School District