

AN ABSTRACT OF THE THESIS OF

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(Name) (Degree) (Major)

Date Thesis presented June 1941 _____

Title A Suggested Plan for Visual Education in the _____
Corvallis Public Schools _____

Redacted for privacy

Abstract Approved: _____
(Major Professor)

Purposes of the Study

The study was made in order that the following objectives might be reached:

1. To ascertain the present physical facilities for visual education in the Corvallis schools.
2. To obtain data showing the extent to which visual aids are being used by Corvallis teachers.
3. To determine what teachers and administrators believe the needs to be.
4. To suggest practical means for improvement.

Method of Obtaining Data

After general reading on the subject, the study was outlined and methods of obtaining data were devised. It was thought best to have close personal contact with the schools and the staff so far as possible. Accordingly, an interview was obtained with each administrator. This was followed by a group interview of the staff of each school. Other persons such as the curator of the Horner Museum, the Supervisor of Visual Education in Portland, the Corvallis school clerk, and the chairman of the Corvallis visual education committee were also interviewed.

Results of the interviews were made more objective by the use of a check-chart devised for supplemental use in the group interviews. Significant data obtained through both personal and group interviews are charted and graphed in the thesis (Chapter II). Information regarding practices in other cities was secured through reading and interview. A comprehensive study of nation-wide coverage, compiled by the Supervisor of Visual Education in Portland, is included in chart form in the appendix.

Continued

OLD RELIABLE BOND

Needs of a Future Program

Desirable features of a future program are discussed in Chapter III. These features are suggested by successful practices in other cities and by the responses of Corvallis teachers and others. They cover administration and organization, physical facilities, preparation and storage of materials, and promotion of the program.

Recommendations

An attempt is made in Chapter IV to suggest ways of improving the visual education program in Corvallis in a manner that will have the support of the school staff and the community it serves. The principal points of the suggested plan are summarized as follows:

1. That an expanded visual education committee promote and administer an improvement program for visual education in the Corvallis Public Schools until such time as the program may require a part-time director.
2. That the committee first be concerned with completing an inventory of available materials, developing teacher participation, and determining specific needs.
3. That ample provision be made for producing usable visual aids from material collected by teachers.
4. That a federally subsidized Works Progress Administration or National Youth Administration program for the production of visual aids be planned and submitted.
5. That the district purchase visual materials as savings in rental costs and more intensive usage justifies.
6. That the present contract arrangements be only slightly changed but that scheduling of visual aids be tried on a quarterly basis.
7. That opportunities for cooperating with other school organizations in the purchase of visual aids be investigated by the administration.
8. That a decentralized, but adequately cataloged, plan of storage of equipment and materials be used at present.
9. That additional equipment be purchased on a long term plan, provided teacher interest and demand justifies it.
10. That the school patrons be shown the advantages of visual education and that they be shown the activities of the schools by visual methods.

A SUGGESTED PLAN FOR VISUAL EDUCATION
IN THE
CORVALLIS PUBLIC SCHOOLS

by

BRUCE JACKSON HAHN

A THESIS

submitted to the
OREGON STATE COLLEGE

in partial fulfillment of
the requirements for the
degree of

MASTER OF SCIENCE

June 1941

APPROVED:

Redacted for privacy

Professor of Industrial Arts

In Charge of Major

Redacted for privacy

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Chairman of College Graduate Council

Acknowledgment

The author wishes to express his deep appreciation to the teachers and administrators of the Corvallis Public Schools for their cooperation in this study. It is sincerely hoped that from the study may come improvements which will contribute to the efficiency of their efforts in serving the community.

Special gratitude is due Mr. Amo Debernardis, Supervisor of Visual Education, Portland Public Schools, for his part in supplying valuable data and advice; and to Professor George B. Cox for his counsel.

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A SUGGESTED PLAN FOR VISUAL EDUCATION
IN THE
CORVALLIS PUBLIC SCHOOLS

CHAPTER I
INTRODUCTION

Purposes of the Study

There are four principal purposes in making this study.

1. To ascertain the extent of the physical facilities for visual instruction now provided in the Corvallis Public Schools.
2. To obtain data indicative of the extent to which visual aids are being used in the present educational program in Corvallis.
3. To determine what the teachers and administrators believe to be the principal needs in a program for improvement of visual instruction in the Corvallis schools.
4. To suggest practical means of improving the educational program in Corvallis through better visual instruction.

The Need for Visual Education

Verbalism has long been one of the weaknesses in education. Nearly a century ago a survey was made in Boston to determine the effectiveness of instruction. This survey covered only the select group of pupils attending the Boston Grammar Schools at that time (2:53-96).* Yet the committee reported that in geography pupils showed good memorization of names and places but had little understanding of the true nature of the country. For instance, less than one-third of them could tell which way the waters ran between Lake Erie and Lake Ontario. In history the same condition of rote memorization of facts without proper understanding of their significance was noted. Also in the field of literature ridiculous meanings were associated with common words.

The survey was repeated in 1919. At that time the committee reported, "The efficiency of present instruction, even at its best, although higher than in 1845, is still far from satisfactory."

Part of the study in modern education deals with concrete objects and conditions, and part of it with abstractions. It is obvious that in the study of concrete things a pupil should be permitted to see, smell, hear, and

*First number refers to corresponding item in bibliography, while others indicate page references.

feel rather than merely talk about or read about these things. If it is impractical to provide this real experience, a vicarious experience through the medium of some of our modern audio-visual aids is plainly logical. Abstractions must also be based on concrete experiences if they are to be meaningful. That the concrete must precede the abstract in education is so commonly taken for granted that it is often assumed the concrete has already been experienced.

Modern life with its numberless occupations, products, devices, and organizations has made it more imperative than ever that concrete experiences and understandings be the basis for abstractions, particularly in the socio-economic fields. At the same time it is less likely that school children will have had the opportunity to observe the processes by which men live and work.

At present there is such a vast field of printed material and so much verbal material being broadcast by radio that pupils are likely to be more than ever in need of concrete experiences in order to properly interpret this material.

The necessity for visual aids to education is recognized by the Oregon State Board of Education. In a recent listing of standards of instructional equipment for elementary schools the board states:

Visual aids, such as models, specimens, museum, sand tables, pictures, film slides and projectors, and moving picture projectors are recommended (13:6).

The Increasing Facilities for Visual Education

Fortunately there are increasing facilities to provide for the increasing need of concrete experience through visual aids to education. Books and magazines are printing more and better pictures. Many organizations and persons are producing films and slides especially designed for educational purposes. Improved technical processes and materials have made possible, at reasonable cost, the addition of natural color and sound to projected pictures. A wealth of illustrative materials are obtainable from industrial concerns and governmental agencies.

Important improvements have been made in projection equipment for school use and at the same time the cost has been reduced in many instances. Operation has been simplified and the quality of projected images improved. It is entirely practical for teachers to prepare many of their own pictorial aids with inexpensive equipment. Sound to accompany still pictures or to be used alone is now available through the use of portable recorders.

Books and magazines on the use of visual aids are appearing more rapidly. Educational societies for the study

and promotion of visual education are active. Courses in visual education are increasingly more common in teacher training institutions and many cities are emphasizing this phase of education to the point of setting up a special department for it. All this makes it easier for teachers and schools of today to improve their programs through more and wiser use of visual aids if they so desire.

CHAPTER II
PRESENT STATUS OF VISUAL EDUCATION
IN THE CORVALLIS PUBLIC SCHOOLS

The Present Organization

A visual education committee was appointed by the superintendent for the year 1939-40. This was the first attempt at a unified program of visual education in the Corvallis schools.

A new policy of the Visual Education Department of Oregon State College was a major factor in making this unification necessary. The college department, which distributes visual materials throughout the northwest, announced that it would schedule films and slides in the spring for use during the entire school year to follow. Those schools contracting for the use of materials from the college department were urged to submit their requests before the school year ended. Since the Corvallis School District obtained most of its films and slides from this source it was necessary to form a central agency to care for the scheduling and distribution of the materials. Scheduling is still the principal work of the visual education committee.

One Corvallis Teachers' Association meeting this year (1940-41) has been devoted to the promotion of visual

instruction. At the Junior High School this year, and at the Senior High School last year, some time was given in at least one faculty meeting to consideration of the use of visual aids. These efforts have not been correlated or directed toward any common objective.

Physical Facilities

A visit to each of the school buildings plus conferences with all the administrators revealed the following projection equipment to be owned by the district and located in the buildings as indicated:

Senior High School

- One lantern for standard slides
- One projector for film strips only
- One portable beaded screen
- One 8' x 10' auditorium screen, beaded

Junior High School

- One projector for film strips or 2" x 2" slides
- Five screens, painted

Franklin School

- One combination machine for opaque projections, standard lantern slides, and film strips
- One aluminum painted screen

Roosevelt School

- One lantern for standard slides
- One portable screen

Washington and Harding schools, jointly

- One lantern for standard slides

Washington School

One unpainted cloth screen

No moving picture projectors of any kind are owned by the School District, but both the Junior and Senior High School student bodies have purchased sound projectors for their own use. These projectors are available to the grade schools at no charge except for transportation of the machine and an operator. A student operator accompanies the projector when it is taken to the grade schools and the transportation is usually arranged by taxi. These projectors, particularly the one at the Senior High School, show considerable wear.

All schools have one assembly hall or a room which can be darkened for projection of pictures. In addition to this there are additional class rooms that can be darkened in the various schools as follows:

Senior High School	4
Junior High School	4
Harding School	3
Roosevelt School	5
Franklin School	0
Washington School	0

These rooms cannot all be used simultaneously because there are not enough screens and projectors. In the Roosevelt School the darkening devices are portable and,

though any of the five rooms can be used, they can be used only one at a time. Some of the rooms appear to be poorly equipped for projection but they will serve for the brighter images or for small images projected before small groups of pupils.

Three of the six schools report adequate storage provisions for their present collection of large maps and charts and the remaining three have some storage facilities. In only one school is there a central storage room fitted especially for the storage of such articles. The rest are stored in individual class rooms or adjoining closets and many of the maps are not provided with protective cases.

Both secondary schools have a central collection of mounted flat pictures in the library. In the elementary schools the individual teachers have collected pictures for use with some of their teaching units. One teacher in the Junior High School has systematically collected, with the help of his pupils, an exceptionally fine group of large mounted pictures suitable for his subject. This collection is an example of the results obtainable through careful planning and sustained effort by the individual teacher.

The two central collections have been gathered and mounted by the librarians with the help of pupil assistants and, at the Senior High School, by a worker assigned to

that duty for a short time by the Works Progress Administration. These collections are classified by the nature of the picture content into sections similar to the subjects and units commonly taught in the schools. No listings of available pictures have been made for teachers.

A small beginning has been made on a slide library by pooling the slides now owned by the Corvallis schools. At present the collection is stored in the science department of the Junior High School. These slides have not been classified and they are not conveniently boxed for use. No 2" x 2" slides are owned at present. One school has a kit of materials for handmade lantern slides.

At the Junior High School forty film strips have just been purchased, together with a new tri-purpose projector. The subjects are principally geographical. Some are in the vocational guidance field.

No stereograph viewers or pictures exist in the schools and few museum materials are available except for specialized work such as natural science, industrial arts, home economics, and agriculture, where such aids are used traditionally. No school has a central storage room for such materials, for the common use of all teachers.

The proximity of the John B. Horner Museum at Oregon State College seems to offer possibilities in this field. Some classes have made use of the material in this museum

but several teachers expressed the opinion that, since individual students often visit the museum by themselves, group trips would not be profitable. This museum is primarily a historical museum and offers possibilities for study principally in the historical aspects of school subjects. However, some exhibits from contemporary life are included in the field of natural science. No listings of the exhibits in the museum have been prepared for distribution to schools and no exhibit materials are prepared for loan to schools of the state. A partial classification of the exhibits is given in the appendix. This list indicates the many possibilities for use of the Horner Museum in connection with the study of school subjects in Corvallis.

By arrangement in advance, teachers have the privilege of using school busses for field trips within the city limits. The charge per bus is one dollar per round trip and forty pupils can be taken.

The amount of money budgeted for the specific purpose of visual instruction was one hundred dollars for 1939-40 and one hundred fifty dollars for the current year, 1940-41. Since a single contract with the Visual Education Department of Oregon State College proved inadequate to supply the service needed in 1939-40, and since considerable difficulty was encountered in efforts to distribute sufficient materials to the whole district through one

source, two contracts were made for the current year. Each of the secondary schools has a contract which entitles it to the use of forty "class room films" (15)--principally Erpi sound films, any or all of the "service fee films" (16), plus any or all glass and film slides. These materials may be obtained for one-day use under contract plan #2 as outlined in the Department's film and slide catalogs. The Washington School has been served under the Senior High School contract and the other grade schools under the Junior High School contract. Scheduling and distribution of materials have been much easier under the two contract arrangement.

The cost of these contracts is fifty dollars per year each or a total of one hundred dollars. The remaining fifty dollars of the amount budgeted is used for equipment repairs, transportation, field trips by school bus and miscellaneous incidental expenses.

Method of Gathering Information

To secure data on the present use of visual aids, on teacher understanding of the possibilities for their use, and on what the teachers believe their needs to be for the improvement of visual instruction, a check-chart was used. This check-chart (see appendix) was used to supplement a group interview of the faculty of each of the schools.

Instructions for marking the check-chart were purposely omitted from the chart in order to provide an opportunity for the writer to talk personally with the teachers in small faculty groups. This technique proved successful in motivating interest in the survey, in reaching a common understanding with individual teachers on various aspects of the survey, and in getting responses from all teachers present at the faculty meetings. By this means sixty-one teachers and administrators were reached. Since sixty-eight are employed, the results represent the answers and opinions of ninety per cent of the public school staff. Most of those not reporting were coaches of extra-curricular activities who could not attend the meetings because of their work. Responses were secured from eighty-three per cent of the Senior High School staff, and ninety-six per cent of the elementary school personnel. All administrators were interviewed and all gave ratings and comments on the part of the check-chart which was applicable to their work.

At the faculty meetings, after some preliminary remarks concerning the reasons for the survey and any necessary clarification of the terms, teachers were asked to check in column A of the check-chart those aids they had used three or more times during the present school year. In column B they were asked to check those aids they would

use frequently if materials and equipment were available. In column C they were asked to check those considered not to be worthwhile in their classes. Any item checked in both column A and column B indicates that although the teacher is making use of the aid at present she desires to make greater use of it.

After an explanation that the effectiveness of a visual aid should be a function of its degree of reality to the student, the teachers were asked to rate the aids according to their degree of reality. This rating was made in column D of the check-chart by assigning numerals, giving the type of aid which they considered most real a rating of 1 and the least real a rating of 7.

Teachers were encouraged to write comments in the space provided. Finally they were asked to rate the four items at the bottom of the check-chart as they believed them to rank in importance in a program for the improvement of visual instruction in Corvallis.

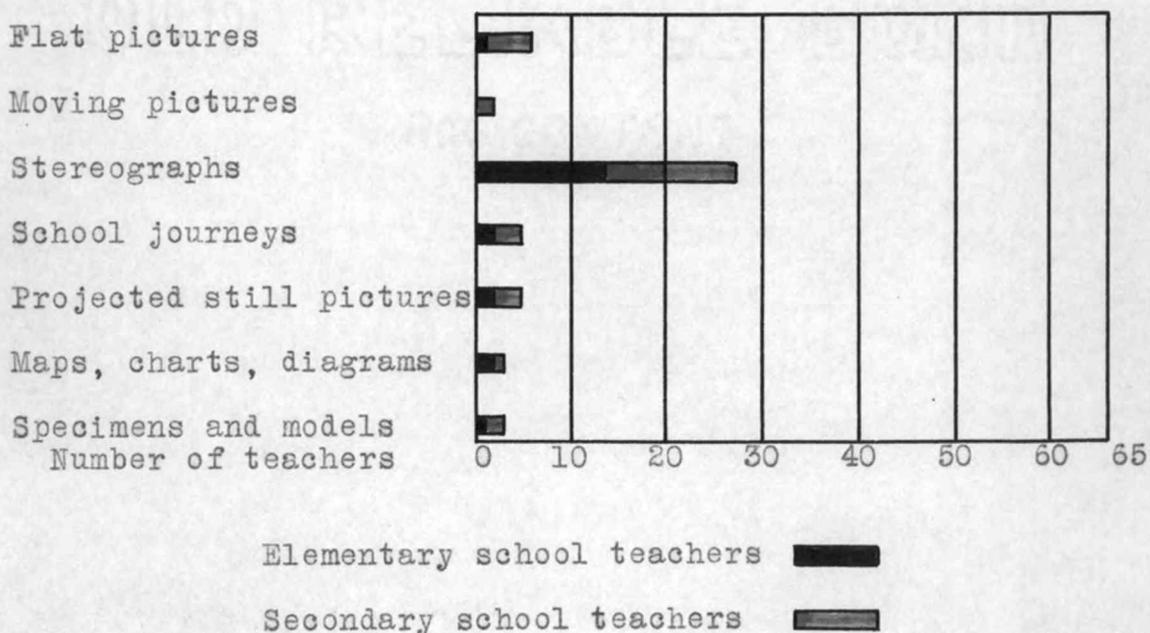
Present Use of Visual Aids

Seven (eleven per cent) of the teachers reported they had not used any single type of visual aid as many as three times during the present school year, but all of these checked one or more types they would use if materials and equipment were available.

Only one teacher failed to indicate a desire to use more visual aids than he is now using but this teacher is already making extensive use of nearly all the aids listed.

Twenty-six (forty per cent) of the teachers did not check any of the aids as being "not worthwhile" in their classes and only a few listed more than two in this category.

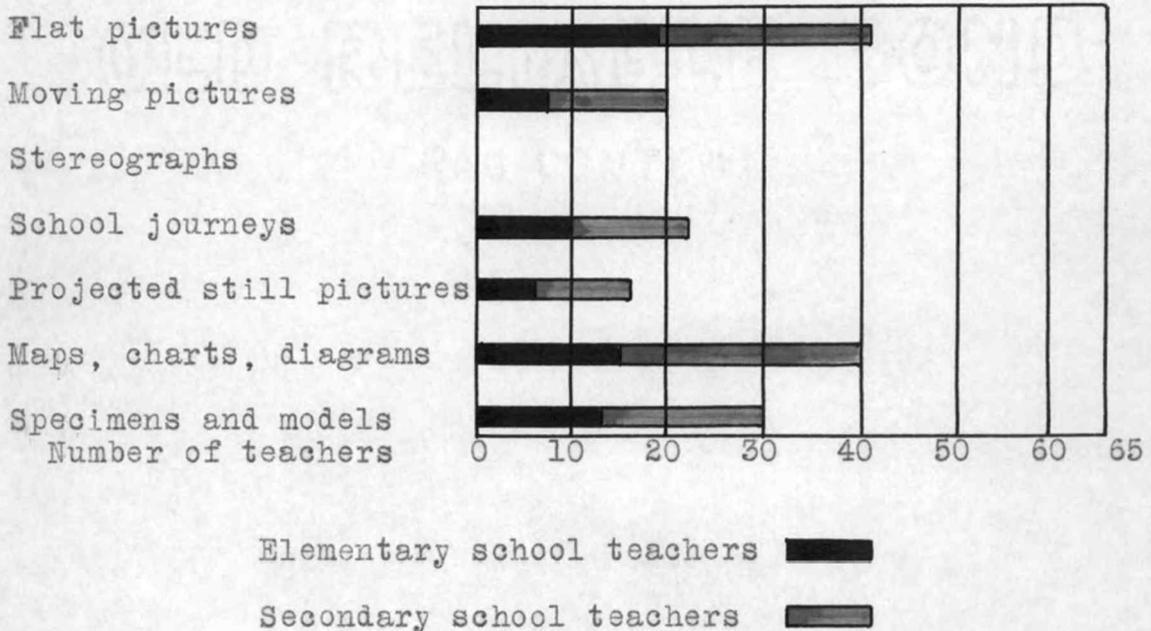
CHART I
TYPES OF VISUAL AIDS RATED "NOT WORTHWHILE"
BY CLASS ROOM TEACHERS



From a study of the responses to the check-chart as compiled in Chart II several generalizations can be drawn:

There is no significant difference in the percentage

CHART II
 PERCENTAGE OF TEACHERS NOW USING VARIOUS TYPES
 OF VISUAL AIDS



of teachers in the elementary schools and in the secondary schools with respect to their present utilization of visual aids. Though the numbers of teachers reporting the use of each aid is slightly greater in the secondary group, except in the one item of flat pictures, it must be kept in mind that there are thirty-eight secondary school class room teachers and twenty-seven elementary teachers. The percentage of each group is, therefore, nearly equal.

More teachers (sixty-three per cent of the total) are using flat pictures to a greater extent than any other type of visual aid.

Nearly as many (sixty-two per cent) are using maps, charts, and diagrams.

Half the teachers use specimens and models in their work.

Fewer than one-third of the teachers use school journeys, moving pictures, or projected still pictures.

No teacher reports using stereographs.

The fact that teachers reported the use of a given type of visual aid does not indicate that the maximum use is being made of it. Teachers were asked to check the item if it had been used three or more times during the current year. The checked items do indicate that the teacher is cognizant of the value of the visual aid and will use it when circumstances permit.

In only two of the classifications do more than fifty per cent of the teachers make any appreciable use of the aid, and the other classifications range from a maximum of forty-six per cent to zero.

Additional information concerning present usage of projected pictures was obtained by examination of the schedules prepared by the visual education committee for the current year. A tabulation of these schedules is given in Table I.

TABLE I
PROJECTED AIDS SCHEDULED FOR USE

Type of Aid	Junior High	Senior High	Total
Silent films	25	17	42
Sound films	56	52	108
Glass slides	11	17	28
Film slides	7	38	45
Total	99	124	223

Note: The above figures include items scheduled for use by the grade schools, most of which were scheduled under the Junior High School contract.

Very few projected aids, other than those scheduled, have been used. A few have been obtained from other sources for assembly programs. One grade school has made some use of the opaque projector which it owns.

A check of the records at the office of the school clerk shows that seventeen dollars were spent for bus transportation for school journeys during the first three quarters of the current school year. The total number of trips was nine. Four trips were either outside the city limits or more than one bus was used. Twenty-two teachers reported that they have used school journeys three or more times. It is evident that most of the journeys were made within walking distance of the school or that transportation was arranged by some means other than by school bus.

Examination of the figures in Table I reveals that nearly half of the total items scheduled were sound films and that this type of audio-visual aid was most desired by both groups. A closer examination of the film titles and the names of teachers who made the requests, shows that at least two-thirds of the sound films were scheduled for six teachers. This uneven distribution is probably not as pronounced as it seems, since it is known that in some cases the films were shown to additional classes than those for which they were scheduled.

Forty-two of one hundred fifty films--less than one-third of the total--were silent films.

The ratio of still picture sets to moving picture films was seventy-three to one hundred fifty, or nearly one to two.

An estimate of the cost of renting the materials scheduled, if the present contracts were not in force, is \$208.25. This estimate is based on the rental prices given in the catalogs and the numbers given in Table I. The cost would be distributed as follows:

Sound films	\$162.00
Silent films	21.00
Glass slides	14.00
Film slides	<u>11.25</u>
Total	\$208.25

The actual cost of this material under the present contracts was \$100.00

Administrative Attitude

The attitude of the administrators of the Corvallis schools is favorable toward a program of improvement in the use of visual aids. All recognize weaknesses and inadequacies in the present facilities, materials, and usage. The interest appears to be passive, however, and few instances were noted where the administrator was actively working to improve instruction through promotion of the use of either present or potential visual aids.

Two of the four grade school principals specifically mentioned the need for a moving picture projector. Two mentioned the need for better room darkening arrangements, and three mentioned the need for more material for projection. This needed material should be better suited to the requirements of the lesson than are the present materials.

On the check-chart three of the seven administrators ranked the need for instruction of teachers in the use of visual aids as being first in importance. Three also ranked assistance in securing and preparing visual materials as of first importance, while two gave physical facilities first rating. Four rated facilities the least in importance and two rated instruction last.

In general, the responses and comments obtained from the administrative group indicates that the weight of the

group opinion places the need for teacher instruction first in importance with assistance in securing and preparing materials of nearly equal importance. The need for materials is considered less essential, and the need for physical facilities as least essential, although individual comment shows certain specific needs in this area.

Teacher Attitude and Understanding

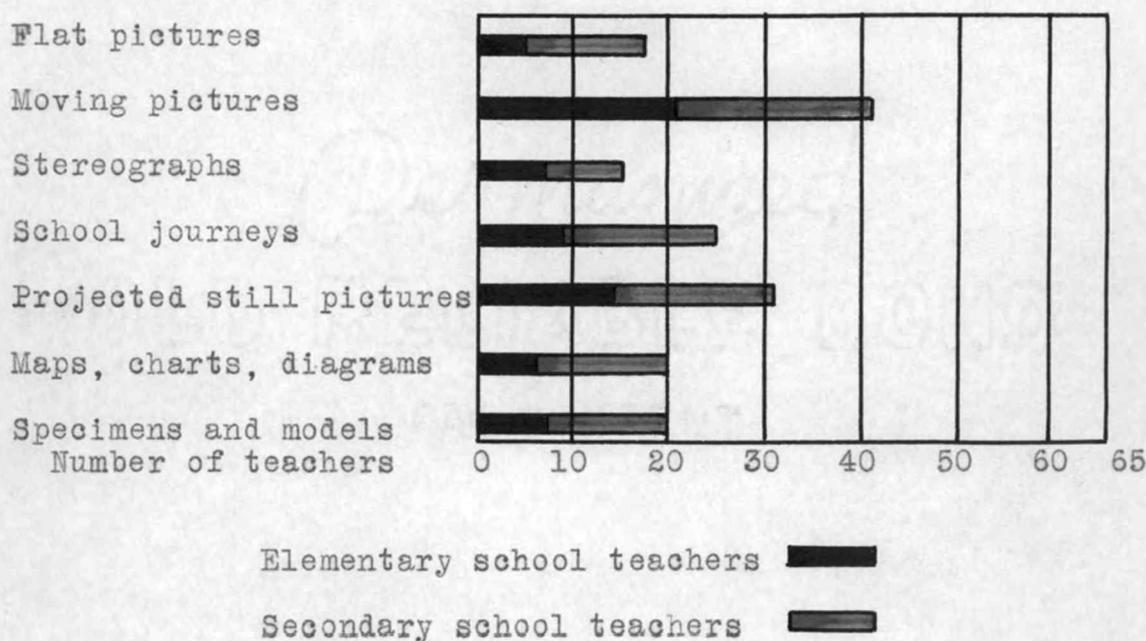
The attitude of the entire group of teachers is definitely in favor of more extensive use of visual aids. Only one teacher failed to express a desire to use more visual aids of some kind. Chart III shows that from twenty-three to sixty-two per cent of the teachers would use more of each of the visual aids listed if they were available.

There is no significant difference between the expressed needs of the elementary group and the secondary group in any item listed.

The greatest demand for additional aids is expressed in moving pictures, and projected still pictures is second.

Chart I shows that with the single exception of stereographs, not more than six teachers (ten per cent) checked any type of visual aid as being "not worthwhile" in their work. Twenty-seven teachers (forty-two per cent)

CHART III
VISUAL AIDS DESIRED BY TEACHERS



considered stereographs to be "not worthwhile."

The voluntary comment, a complete list of which is included in the appendix, indicates that three outstanding problems exist. Eleven of the comments expressed dissatisfaction with the present need for scheduling the use of visual aids so far in advance. Many expressed themselves verbally to this effect, but did not write the comment. This is the principal criticism of the present program. The impossibility of proper correlation between the aids and the units studied was mentioned repeatedly. The near impossibility of previewing the pictures under the one-day contract was also deplored by several.

The inadequacy or unsuitability of the available material is another important problem. This was specifically mentioned by nine in their voluntary written comments. The criticisms, oral and written, of the present material deals with the factors of age of the pictures, suitability for particular grade levels, restricted choices, and entire absence of materials for certain subjects or units of study.

A related need is the one expressed for better projection facilities. Six teachers wrote comments pointing out this need and others mentioned it in the oral discussion.

The tabulation of the part of the check-chart concerning the principal needs for improvement of the visual education program is given in Table II.

TABLE II

TEACHER RATINGS OF MEANS OF IMPROVING THE PROGRAM

Instruction in the use of visual aids	12	<u>10</u>	10	8	
Projection facilities	15	<u>21</u>	10	11	
Help in securing and preparing aids	9	14	<u>25</u>	6	
Visual materials	21	<u>12</u>	12	12	
	Teacher ratings	1	2	3	4

Note: Underscore indicates column in which falls the median of the ratings assigned. Column one indicates first importance, etc.

This table should be read: Twelve teachers rated instruction in the use of visual aids first in importance. The results do not indicate any common agreement. For instance, about equal numbers of teachers rated instruction as first, second, and third in importance. Equal numbers of teachers rated materials as second, third, and fourth in importance. It is, therefore, difficult to select one item as being much more important to the teacher group than another. The results do show that each of the items is deemed of considerable importance by a substantial portion of the teachers.

More teachers rated materials as first in importance than any of the other three items. More rated projection facilities second than any other item, and more assigned third place to help in securing and preparing aids. The median of the ratings places help in securing and preparing aids as of somewhat less importance than the other items. The median falls nearest the first column in reference to the visual materials themselves.

Column D on the check-chart was included to check the general understanding of one basic factor to be considered in visual instruction. In this column, teachers were asked to rate the visual aids from one to seven as to their degree of reality or concreteness to the pupil. This factor of concreteness is one of the most important psychological criteria for the probable effectiveness of

visual aids.

In other words, visual aids are effective in instruction to the degree that they approach reality of experience. Conversely, the more they are removed from reality of experience, the more ineffective they are (10:22).

Table III shows a tabulation of the ratings assigned by the teachers. It should be read: Two teachers rated maps, charts, and diagrams as being the most concrete of the aids listed.

TABLE III
TABULATION OF TEACHER-RATINGS ON THE
CONCRETENESS OF VISUAL AIDS

Maps, charts, and diagrams	2	5	8	7	*14	11	9
Flat pictures		3	7	9	*17	14	7
Projected still pictures		6	12	*16	9	9	1
Stereographs			2	8	3	13	*28
Moving pictures	15	*21	13	3	3	2	
Specimens and models	10	11	*9	10	9	1	9
School journeys	*29	11	6	3	1	2	3
Rating	1	2	3	4	5	6	7
	Concrete-----			-----Abstract			

Figures indicate the number of teachers assigning ratings or rank shown at the foot of the column.

Heavy enclosure indicates the ratings as given by experts (10:23).

Asterisk (*) indicates the column in which the median of the teacher-ratings falls for each aid.

It should be noted that the teachers were given little opportunity to consider their ratings before making them. As soon as the instructions were clear to the teachers they marked the check-chart. The written comments show that some questioned the accuracy of their ratings, believing that the ratings might be different in other subjects and at other age levels. It is significant that the median ratings on most items nevertheless fall close to the relative ratings given by nationally known authorities (10:23). The only notable exceptions were that stereographs were rated as very abstract by the teachers whereas the experts considered them to be considerably more concrete, and that the teachers did not rate maps, charts, and diagrams as near the abstract end of the table as did the experts.

While the ratings were scattered, indicating that many teachers have not given adequate study to this phase of the use of visual aids, the general understanding of this factor is fair.

CHAPTER III

FUTURE NEEDS AND A DESIRED PROGRAM

The ultimate objective of the school system should be a program which will make available, with the greatest convenience, all the visual aids that are desirable for all classes. Perhaps this objective can never be fully attained. Certainly it cannot even be approximated without sustained effort. Since funds are limited, it is necessary to seek minor objectives that are within reach, to plan ahead as progress is made, and thus to attain the highest level of perfection of which the organization is capable.

Administration and Supervision

Visual education is most likely to achieve outstanding and uniform success throughout the school system if some person or some organization has the responsibility for the welfare of it. Literature on the subject makes it clear that in large school systems where a centralized library of visual aids is maintained the director is expected to be more than a caretaker of materials and equipment.

The director of audio-visual instruction, like any other department head, is not merely an administrator who organizes and develops the program, obtains, distributes, and cares for materials, and promotes community appreciation, but he is also a supervisor who provides for the

training of teachers and supervisors, oversees and coordinates instructional phases of the program, and evaluates results (11:343).

The Corvallis school system is probably too small to justify the employment of a full-time director at present. An alternative might be to have a teacher give part of the day to this work. In that event the qualifications of the part-time director should be as nearly equal to those usually expected of a full-time director as it is possible to obtain. The desirable qualifications of a director as listed by McKown and Roberts (11:326-327) are as follows:

1. Administrative ability
2. Thorough acquaintance with the methods of using visual aids in the class room
3. Wide acquaintance with the subject matter of all grades
4. Clear understanding of the educational objectives
5. Thorough knowledge of the problems involved in an audio-visual program
6. Mechanical inclination
7. Personality to make cooperation easy

Such a director serving half-time is probably as much as could soon be expected for administration and supervision in a district the size of Corvallis. Until such time as some such provision can be made some of the duties of a director must be delegated to various members of the staff.

Whatever expedient plan may be adopted for direction and supervision, it should provide for definite help to individual teachers. It is apparent that little promotion of the use of visual aids in general is needed in Corvallis. The fairly general use of many visual aids at present, and the uniformly expressed desire for additional usage in every classification leave no doubt that teachers are interested in this method of teaching. The acute needs of the teachers are: 1. Help in planning their visual program; 2. Visual aids suited to the units they are teaching. This includes the need for making the aids available at the proper time.

Availability of Visual Aids

The necessity for availability of the aids suggests that as many as possible be kept close at hand. Convenience is a point stressed by the teachers, the administrators, and by authorities in this field. A plan is needed for the collection of material, for properly storing it in the most accessible locations, and for distributing it as necessary.

There are advantages to both a decentralized and a centralized system of storage of visual materials and equipment, some of which are listed below.

Advantages of a centralized system:

1. Each teacher knows exactly where to obtain materials
2. Servicing and storing are easier
3. Closer supervision of materials can be maintained
4. Unnecessary duplication of materials can be avoided
5. Adequate records are more easily kept
6. Materials are out of the way except when needed
7. A given amount of materials will serve more schools

Advantages of a decentralized system:

1. Most materials can be kept in the school or even in the class room where they will be used
2. No special room or rooms need be used for storage
3. Materials require less transportation
4. Aids for special classes are in the care of teachers particularly interested in them

Common practice in large cities favors a central point for storage, distribution, purchasing, servicing, etc. However, the plan requires a director to be in charge. Since this is not possible in Corvallis, a decentralized system will probably be necessary. To make maximum use of decentralized materials will require ample inventories, classifications of materials, forms for record keeping, and transportation arrangements.

The present transportation arrangement of bicycle messenger for materials and taxi for projectors and operators can be expanded to keep pace with a broadened visual education program. An alternative would be to provide reimbursement to some teacher, or other person, on a mileage basis for periodic deliveries by automobile.

Equipment Needed

Additional projection equipment will decrease the need for transportation of present equipment. If each school could have projection equipment for any kind of projected pictures they might wish to use, only materials would need to be transported. A further advantage would be that teachers would be familiar with the particular make and model of each projector.

A total of four sound projectors for moving pictures, three film slide projectors, and two standard lanterns would make it possible for all schools to project silent films, sound films, film slides, and standard $3\frac{1}{4}$ x 4 inch lantern slides without inter-school transit of equipment. If the film slide projectors were the dual or tri-purpose type, all but one school would be equipped to use 2 x 2 inch slides as well. If the two standard lanterns were combination machines half the schools could project opaque pictures. The cost of this additional equipment would be

approximately sixteen hundred dollars.

Two additional needs in major equipment should be planned for. A recording machine, or some arrangement for the use of one, is especially desirable for the classes in music, English, foreign languages, and speech. Some silent moving picture projectors will save handling and wearing out the less convenient and more expensive sound machines. Probably one or more of these silent projectors should be the first addition to present movie equipment since the present machines are old and transportation is a problem. Also since funds are limited more use of moving pictures can be made with the money available by using a larger proportion of silent films.

Teacher and Pupil Preparation of Visual Aids

Many aids can be gathered or made by the teachers and pupils. In fact those made because of a definite need are most likely to be of greatest value. To avoid unnecessary cost and duplication of effort the work should be planned comprehensively. If, as at present, teachers are left largely to their own devices to secure visual aids for a unit, several may do nearly the same work. Proper planning would permit them to distribute their efforts and thus provide better visual materials or more of them. This is particularly true of specimens, models, flat pictures,

maps, charts, and diagrams. In the case of teacher-made materials, charts or lantern slides for example, more care would probably be taken in making them if a policy of exchange was in effect, thus making the aid available to other teachers.

Provision for making photographic prints and slides or film slides of material gathered by teachers is needed. Since a full-time director cannot be had, it will probably be necessary to make some arrangement with a local photographer to do this work. Pupils and teachers who are amateur photographers might do some of the work but the results should be of high quality lest its value as a visual aid be lessened. Many sources of excellent pictures exist. Illustrated magazines, advertising agencies, and federal government publications are suggestive of the range. These, together with pictures that can be taken by teachers, offer possibilities for making up many useful slides at little cost and which would be tailored to fit the lesson. Because of the dangers of copyright infringement, of waste of public funds, of poor selection of material, and of passive interest on the part of some teachers, such a service should be supervised by some competent person or group. Properly safeguarded, probably no more efficient use of money could be made than through projected aids secured in this way.

The use of the camera by teacher and pupil compliments or fills a cardinal need in the class room (10:182).

Programs in Other Cities

A comparison of certain phases of the present visual education program in Corvallis with other school systems should indicate some of the future needs of the program. A comprehensive survey covering sixty-two cities throughout the United States was made recently by the visual education department of the Portland, Oregon, public schools. While a direct comparison of figures with Corvallis would be misleading due to the much greater size of the cities surveyed, a study of the chart shows some significant facts.

Glass lantern slides, $3\frac{1}{4}$ x 4 inch, outnumber all the other forms of projected aids. It appears that this aid has proven very satisfactory. Slides even outnumber flat pictures in all but three cities reporting numbers.

Several systems have collections of mounted pictures and photographs numbering many thousands.

Silent films outnumber sound films by long odds. Probably this is due to the earlier availability of silent pictures on the market as well as to the lower cost per film.

Large numbers of film strips are in use but few 2 x 2 inch slides. Projectors for these small slides are among

the most recently announced machines for visual education. Notwithstanding the scarcity of these small slides in schools at present they promise to become one of the most practical means of projecting colored still pictures.

About one-third of the cities report having exhibit materials for distribution.

The most common practice is to have the materials selected by the director in cooperation with committees.

Visual materials are used to supplement nearly all subject matter fields in the cities reporting, but their use by the teachers is universally optional.

The frequency of deliveries of visual materials shows no uniform practice. Thirteen cities report daily deliveries, fifteen report weekly deliveries, ten report semi-weekly deliveries, and six report deliveries by request only.

Though many of the large cities own their own conveyances for deliveries, twelve deliver by messenger, four by city parcel service, and twenty do not deliver except at the store room.

Current literature describes many examples of outstanding development of certain phases of visual education which might well be emulated. In some places school journeys have been developed to excursions and even to tours of a thousand miles or more (14:5). These are, in

places, included as a feature of the summer recreation program under the auspices of the public schools.

The possible use of public museum material is illustrated by the Field Museum of Natural History in Chicago (6). There a fine educational program is carried on within the great museum, efforts are made to cooperate with the school organizations, and museum materials are especially prepared and mounted for periodic loan to schools. This plan of portable exhibit cases can be adapted to a school museum as well as to a public one.

One possible means for the smaller communities to provide films for their use is through the establishment of cooperative film libraries (7:131-151). This can be an inter-city, an inter-district, or even an inter-county cooperative.

A very successful plan of building up visual aids through the help of federally subsidized workers has been started in one California county. The scope of this project, organized under the Works Progress Administration, is suggested by the description of the catalog printed for the teachers.

This (catalog) reveals a supply of foreign realia and dioramas, factory exhibits showing processes used in manufacturing of products, pressed leaves, seeds, pods, and wild flowers, minerals, birds, still films, science specimens, flags of more than fifty countries, coins, bound National Geographic articles, models of the history of transportation, costumed dolls, elec-

tric and relief maps, charts, posters, and thousands of mounted pictures (8:33).

Costs of certain visual aids produced under this program are given as follows:

Diorama	\$10.00
Large relief maps	3.00 to \$5.00
Binding National Geographic articles	.08
Flat picture mounts	.005 to 015

This organization has adopted the plan of putting up the mounted pictures in sets of not more than twenty pictures, each set in an envelope.

Some writers advocate that visual education be handled on a state wide basis.

When smaller districts designate an individual as visual director, it usually is a gesture more than a fact since other and prior duties leave the person little time for organization or direction of a program (12:36).

This writer proposes a state organization for California encompassing three principal points:

1. The formation of a Division of Visual Education in the State Department of Education

Evidence points strongly to the inadvisability of individual districts purchasing motion picture films

2. County or regional visual libraries
3. Training courses in the use of visual aids in the teacher training institutions.

Practices in other cities, together with the expressed needs of the Corvallis school staff, indicate certain

changes in the visual education program of Corvallis to be desirable. These indicative factors have been considered in making the recommendations included in the following chapter.

CHAPTER IV

A SUGGESTED PLAN FOR IMPROVEMENT

Any plan for visual education must have the active support and approval of the teachers if it is to be successful. The aids must be used as supplements to the rest of the teaching. Provision should therefore be made for all progress and improvement to be conditioned by teacher opinion. It is believed that the suggestions made herewith will be accepted by the teacher group.

In order that all efforts to obtain additional equipment or materials will be directed toward serving definite and specific needs it is necessary to ascertain and list these needs. Considerable thought, discussion, and experimentation may need to precede or accompany the task.

Recommended Organization

It is recommended that the present visual education committee be expanded to include a representative from each school. The selection of these committee members should be made on the basis of interest in or use of visual aids. The chairman of the committee should be a person having the qualifications of a director of visual education and he should have some free time during work hours to carry on

the work of his office. As the program expands the need for supervision and administration will probably make necessary at least a half-time director.

The work of the visual education committee should be concerned first with three phases of the program:

1. An inventory of available materials and opportunities
2. Development of teacher interest and understanding
3. Determination of specific needs

Completion of Inventory

The inventory of facilities for projected pictures is complete in this study. No attempt has been made to itemize materials such as slides, flat pictures, and museum materials. Only the general quantity of such materials has been indicated. Complete classified lists should be made available to the entire teaching staff.

One person, or a small committee, in cooperation with the curator should make a classified list of the exhibits in the John B. Horner Museum. The list should be distributed to teachers. To the list should be added museum materials now in the various school departments. The museum curator is willing to cooperate by permitting the photographing of the museum exhibits. Some of this material should be used in the form of slides, film slides, or

flat pictures.

Promotion of Visual Education

Development of teacher interest should be encouraged in many ways. Books on the subject of visual education and periodicals such as the Educational Screen should be circulated among the teachers. Specific references for the benefit of certain teachers should be recommended. Demonstrations of the use of the various aids should be arranged for faculty meetings. Arrangements should be made to instruct teachers in the use of equipment. The practice of using student operators for projectors should be discouraged except where teachers wish to train students in their particular classes. It should rarely be necessary to take a student out of one class to serve in another. As teachers come to feel capable of using equipment they will take more interest in using it.

Determination of Specific Needs

Forms should be prepared for periodic distribution to teachers on which they can list the units being taught, with some breakdown of content. A suggestive list of the various kinds of visual aids should be included. The teachers should be asked to indicate specifically what aids they would like to have for use the next time they teach

the unit. It will be desirable to have the forms filled in during curriculum planning meetings or faculty meetings where discussion will stimulate interest. From these responses a list of needed aids should be compiled and materials should be provided to meet these needs, as rapidly as possible.

Provision for Making and Collecting Visual Aids

An arrangement should be made with some local photo finisher to make lantern slides, film slides, and prints from negatives or prints secured by the teachers. This material should be submitted to the visual education committee or the chairman thereof for approval before being sent to the photographer. A credit line should be included where possible to show who compiled the material and all other possible means should be used to encourage teachers to use their cameras and gather illustrative material.

Periodic announcements of new materials secured or in preparation will help maintain interest and stimulate production. Pupil assistance should be used in gathering, preparing, and caring for specimens and models. Only select materials of this nature should be kept from year to year. Models, whenever possible, should be working models that pupils can operate.

After the wants of the teachers are determined a plan

for the production and preparation of visual aids through the Works Progress Administration or the National Youth Administration should be formulated and submitted for approval. This project should include the making of museum material and the mounting of flat pictures, together with the necessary clerical work of classifying, labeling, etc. Pictures should be mounted on backings not larger than 9 x 12 inches in order that they may be filed in standard filing cabinets. It might be possible to include the making of needed photographic and handmade slides as a part of the project.

Corvallis schools are better equipped to use $3\frac{1}{4}$ x 4 inch lantern slides than any other aid. Teachers should be encouraged to use this aid both in the form of commercially prepared slide sets and handmade slides.

The cost of having glass slides and film slides made should be ascertained and made known to the teachers. They should be encouraged to submit prints or negatives to the visual education committee, together with brief plans for their use. After editing and approving the material the pictures should be made into slides or film slides at the expense of the school district but a policy should be in effect whereby a teacher could obtain a duplicate of any material from the district at cost, at any later date.

Teachers should also be encouraged to outline picture

series for production in the form of color slides. The district should provide funds for film and binding materials. A good amateur photographer can probably be found among the teachers who will take the pictures. If interest is shown in this work by the teachers, an exposure meter and a camera using #828 film should be purchased by the district for this purpose.

Purchase and Rental of Prepared Materials

Those commercially prepared materials suitable for the classes should be purchased if the rental charges will approximate the purchase price before the material becomes obsolete. The added convenience and the availability of district owned materials will justify additional expenditure for materials. Purchases should be made by the visual education committee on the basis of teacher demand and record of use.

Among the projected still pictures, film slides are the least expensive to purchase. The ratio of rental charge to purchase price is also greatest for this aid under present rental plans. It is therefore recommended that a general policy of purchase, rather than of rental, be followed for film slides.

Contract Arrangements

Since present contract and scheduling arrangements are unsatisfactory to most teachers it is recommended that some changes be made. If any contract is made with the Visual Education Department of Oregon State College it should provide for two days use instead of one as at present. This will give opportunity for preview and lesson planning and will make it possible to use the aid in both sections of a class where they meet on alternate days.

Individual service fees for silent films, glass slides, and film slides this year would have totaled less than the lowest annual fee plan in each case. This situation cannot be capitalized upon as long as sound films are included in the contract. Any sound film contract includes the use of these other materials. Since the use of similar materials from any other agency would cost considerably more, due to the added transportation charges, it is probably best to continue using the materials from Oregon State College. Because the demand is greatest for sound films, and since any of the contracts for sound films include the use of all other material--except that not covered in any annual fee plan--it is best to continue somewhat as at present, unless service charges are found to be lower or materials better at other agencies.

It is recommended that the present two-contract plan

be continued but that both contracts be made for two-day use. This will cost thirty dollars more per year than at present. It is anticipated that, if other suggestions of this study be put into practice, more use will be made of visual aids under the contracts and that the unit cost of each item will not increase.

Yearly scheduling of films and slides is recommended and encouraged by the Visual Education Department of Oregon State College but it is not required. If contracting schools are willing to take chances on getting materials when they want them, they may request materials as needed. In view of the fact that the sentiment of the teachers is decidedly against yearly scheduling, it is suggested that a plan of scheduling by quarters be tried. Materials for the first quarter of the school year can be scheduled as at present. For each of the other three quarters alternate dates should be submitted with the requests. Where materials are not available substitutions could be made. This will enable teachers to correlate the visual aids with their class work to much better advantage than at present. It will also give the visual education committee an opportunity to encourage a more equitable distribution of the sound moving pictures supplied under the contracts.

If the arrangement should prove unsatisfactory a study should be made of the materials available from other distributing agencies and the cost of obtaining them.

Cooperative Film and Slide Library

It is suggested that the administration investigate the possibility of cooperating with other districts or counties to establish a library of visual aids. This would be primarily to provide an available supply of the more costly aids such as moving picture films and glass slides. A suggested arrangement is that the schools participating place their materials in a common depository and each be allowed use of materials in proportion to its contribution.

Inquiry should also be made regarding the possibility of state supervision of visual education.

Storage of Materials

Until such time as a centralized system becomes possible and advisable, it is recommended that the visual aids be kept in the various schools and departments where they are needed most. A complete and up-to-date inventory should be available to every teacher and forms should be provided to make borrowing and exchange easy. Card file inventories of all materials will be easy to revise and to use. Each entry should give a description of the aid, complete enough to enable teachers to make proper selections, and should give the name of the school where the item is usually kept.

Better files, shelves, and racks should be provided

in most places. Standard files for flat pictures, convenient carrying cases for slide sets, special shelves for the carrying cases, cases for maps, etc. are not only a convenience and an invitation to make the best use of the materials, but they also give longer life to the articles stored. The quick check method of marking slides by various colors and widths of lines running across the top edges of the slides in the carrying case, is especially recommended (1:41).

Additional Equipment

As listed in chapter three, complete equipment for all common types of projected aids would not be prohibitive in cost, if the cost could be spread over a period of several years. After the previous recommendations of this study have been followed, if the interest of the teachers justifies it, projectors of the various kinds should be purchased as rapidly as possible.

It is suggested that principals include these projectors in their budgets and that the administration weigh the value of such equipment against other expenditures in terms of educational efficiency.

Minor items of needed equipment include:

Large mirrors mounted in adjustable and portable frames for work in speech, dramatics, and music.

Good portable screens for picture projections.

Projection tunnels for daylight projection.

Projector stands and extension cords.

Foreign language record sets.

Flash meter attachments for standard lanterns for measuring reading ability.

Stereograph viewers.

Some of these items can be made in the shops or by others in the schools. Others can be made by local craftsmen. The cost is not great as compared to the major items of equipment listed previously.

Promotion of Visual Education Among Lay Organizations

The schools are agencies of the public. It behooves the public to know what methods are being used in schools and the schools need the active support of the public in order to be an efficient organization. Visual aids provide an excellent way of showing lay organizations the school at work, modern methods of teaching, and modern materials for education. It is believed that the lay organizations interested in school activities will be cooperative in assisting a good visual education program.

It is suggested that the teacher organizations be prepared to demonstrate the use of visual aids to parent organizations, that they prepare slides or moving pictures of the work of the schools and that they show these to

interested community groups.

Experiment and Research

Audio-visual education, in its present form, is a new and rapidly expanding field. Experiment and research are needed in many phases. It is desirable that the Corvallis teachers make known to each other the results of any significant experiment or study by any of the group. This may be done through demonstration or reports at teachers' meetings or by mimeographed bulletin.

It is further recommended that the Corvallis teachers lend their support to evaluation and improvement studies such as the film evaluation supplement now being compiled by the publishers of "1001 Teaching Films."*

A composite teacher rating on available films and slides is very desirable. After the program is well established only new materials need be evaluated. The form used by the Portland schools for this purpose is suggestive. A copy will be found in the appendix.

Summary of Recommendations

In brief the principal suggestions resulting from this study are:

* Published by "Educational Screen," 64 East Lake Street, Chicago, Illinois.

1. That an expanded visual education committee promote and administer an improvement program for visual education in the Corvallis Public Schools until such time as the program may require a part-time director.

2. That the committee first be concerned with completing an inventory of available materials, developing teacher participation, and determining specific needs.

3. That ample provision be made for producing usable visual aids from material collected by teachers.

4. That a federally subsidized Works Progress Administration or National Youth Administration program for the production of visual aids be planned and submitted.

5. That the district purchase visual materials as savings in rental costs and more intensive usage justifies.

6. That the present contract arrangements be only slightly changed but that scheduling of visual aids be tried on a quarterly basis.

7. That opportunities for cooperating with other school organizations in the purchase of visual aids be investigated by the administration.

8. That a decentralized, but adequately cataloged, plan of storage of equipment and materials be used at present.

9. That additional equipment be purchased on a long term plan, provided teacher interest and demand justifies it.

10. That the school patrons be shown the advantages of visual education and that they be shown the activities of the schools by visual methods.

Conclusion

The Corvallis teachers recognize the worth of visual aids in their work. Through concerted and sustained effort much improvement is possible. With a moderate expenditure over a period of a few years, the facilities can be made equal to those in cities having outstanding visual education programs.

It is believed that the suggestions contained herein, if followed, will result in a more efficient educational organization, in professional pride among the teachers, and in a greatly enriched curriculum for the pupils.

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A P P E N D I X

Grade _____

Subject _____

CHECK-CHART

	A	B	C	D
FLAT PICTURES Mounted or unmounted prints				
MOVING PICTURES Either silent or sound				
STEREOGRAPHS				
SCHOOL JOURNEYS Trips away from the class room				
PROJECTED STILL PICTURES Glass slides, film slides, or opaque projections				
MAPS, CHARTS, and DIAGRAMS Not in books--display size or specially prepared individual ones				
SPECIMENS AND MODELS				

Comment:

Please rank the following items by numbering them in order as you believe their importance would be in a program to improve our instruction through more and wiser use of visual aids.

_____ Instruction in the use of visual aids.

_____ Projection facilities (Projectors, screens, darkening devices).

_____ Help in securing and preparing visual aids.

_____ Visual materials (Pictures, slides, films, models, maps).

_____ Other (explain).

SIGNIFICANT COMMENTS MADE BY
TEACHERS AND ADMINISTRATORS

Grade Schools

I would use the materials if there was a projector in the building.

A projector should be obtained and the teachers taught to run it.

Field trips add little to the experience of children in this community.

I would have used many eight millimeter movies if the auditorium could have been darkened satisfactorily.

Materials available for projection are too old to be of value.

The arrangement for obtaining visual aid materials (films) is not satisfactory.

All stereographs that I have seen have included too many details for first grade use.

Films are not useful because we cannot have them at the time needed.

I dislike to order films six months in advance.

Could films be graded as to school age level?

I never use films any more because they never can be obtained when we wish them.

Would like to preview film before signing up for it.

School journeys are not as valuable to me as pointed out by so-called progressive educators.

The films come at the wrong time and some are very poor.

Secondary Schools

The ratings (on the check-chart) may differ in other subjects.

We should use more of all the aids if facilities were available.

My ratings indicate small difference in value in my classes.

Material for music is scarce and expensive.

This year I could not use several film strips and films because of changes in my class schedule.

We need Mr. Burt's cooperation.

We need an N. Y. A. project on materials.

The O. S. C. materials are too old.

We need our own library.

We need cooperation on field trip arrangements.

We need pictures, models, and specimens.

We need more bus trip allowance so all sections of a grade can be taken.

We have no good art model collection.

Visual aids should be used as supplements only.

It is hard to get up-to-date pictures or pictures pertinent to literature classics.

We give credit for reports by individuals on trips taken by themselves.

Class rooms are not suitable for projection.

Inadequate darkening devices.

It is difficult to coordinate visual aids with the unit.

Teachers need instruction in the use of aids. Could do more if the possibilities were known.

When models, charts, etc. are made or collected by students they seem to have more meaning.

Our field trips are not made from class room periods but out of school hours only for those who are interested enough to spare their own time.

Blackboard illustrations in colored chalk are used extensively.

Impossible to get pictures at the time needed to correlate with the unit being studied.

Passive participation an element to be evaluated as a part of the total learning experience.

Moving pictures do not fit into unit.

GENERAL CLASSIFICATION OF THE MATERIALS IN THE
JOHN B. HORNER MUSEUM

Oriental embroidery

Pieces of fine arts in metals, glass, textiles, etc.

Indian dress and implements (very complete)

Basketry

Animals, birds, and birds' eggs

Coins and paper money

Insects

Minerals, stones, and fossils

Pioneer and emigrant implements and arms

Mexican riding gear and costumes

Handcraft in ivory, horn, bone, and wood

War arms and equipment (from the World War)

Manufacturing processes and products

Feeds, seeds, and industrial raw materials and chemicals

Soil specimens

Skeletons, shells, teeth, and tusks

East African exhibit

Chinese exhibit

Old furniture

Pictures of the pioneers

Old books and printing

Dishes

Musical instruments

VISUAL EDUCATION DEPARTMENT--OREGON STATE COLLEGE

ANNUAL FEES

(Applicable only to cities under 50,000 population)

Requests and shipments for annual fee material must be from and to one person for each district or organization under all the annual fee plans.

Item	Number of Day's Use and Cost in Dollars			
	1	2	3	4
<u>FILM SLIDES:</u>				
Use of all service fee film slide sets, one calendar year (at least 475 sets)	15	25	35	45
<u>GLASS SLIDES:</u>				
Use of all service fee glass slide sets, one calendar year	20	30	40	50
<u>GLASS AND FILM SLIDES:</u>				
Use of both service fee film and glass slides, one calendar year	25	35	45	55
<u>SILENT 16MM FILMS:</u>				
Use of all service fee silent 16 MM motion picture films, one calendar year	30	45	55	65
<u>SILENT #/2 MM FILMS:</u>				
Use of all service fee silent 35 MM motion picture films, one calendar year	30	40	50	60
<u>NO. 1 ANNUAL FEE:</u>				
Use of all silent service fee material, slides and silent 16 and 35 MM films, one calendar year	40	55	65	75
<u>NO. 2 ANNUAL FEE:</u>				
Use of any 40 rental class room films, plus all service fee materials, slides, silent and sound 16 and 35 MM films, one calendar year	50	65	75	85
<u>NO. 3 ANNUAL FEE:</u>				
Use of any 50 rental class room films, plus all service fee materials, slides, silent and sound 16 and 35 MM films, one calendar year	65	80	90	100

ANNUAL FEES Continued

Item	Number of Day's Use and Cost in Dollars			
	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>
<hr/>				
<u>NO. 4 ANNUAL FEE:</u>				
Use of any <u>75</u> rental class room films, plus all service fee mate- rials, slides, silent and sound 16 and 35 MM films, one calendar year				
	100	120	140	160
<u>NO. 5 ANNUAL FEE:</u>				
Use of any <u>100</u> rental class room films, plus all service fee mate- rials, slides, silent and sound 16 or 35 MM films, one calendar year				
	130	150	170	190
 <u>SERVICE FEE</u> material includes all subjects not listed as rental.				
<hr/>				

PORTLAND PUBLIC SCHOOLS
Department of Visual Education
Amo De Bernardis, Supervisor

Date _____

EVALUATION of VISUAL AIDS

1. Title _____
2. Type of Visual Aid _____
3. Subject areas to which adapted _____
4. Maturity levels: Primary ___ Intermediate ___ Secondary ___
5. Is the material up-to-date? Yes ___ No ___
6. Educational Qualities:
 - a. Will it create interest? Yes ___ No ___
 - b. Will it stimulate thinking? Yes ___ No ___
 - c. Does it present vital facts? Yes ___ No ___
 - d. Does it correlate with the curriculum? Yes ___ No ___
7. Production Qualities:
 - a. Authentic Yes ___ No ___
 - b. Photography Good ___ Fair ___ Poor ___
 - c. Continuity Good ___ Fair ___ Poor ___
 - d. Titles Good ___ Fair ___ Poor ___
 - e. Sound Good ___ Fair ___ Poor ___
 - f. Vocabulary Good ___ Fair ___ Poor ___
8. Is the film too long? ___ just right? ___ too short? ___
9. Comments: _____
10. Rating: Good ___ Fair ___ Poor ___
11. Would you recommend purchase or use. Yes ___ No ___

Rated by _____
Name School and Title

