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A Study of Centralized Technical Services for the Organization of Learning Resource Materials with Examples from Three Selected School Districts

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A STUDY OF CENTRALIZED TECHNICAL SERVICES FOR THE ORGANIZATION
OF LEARNING RESOURCE MATERIALS WITH EXAMPLES FROM
THREE SELECTED SCHOOL DISTRICTS

A Thesis
Presented to
the Graduate Faculty
Central Washington State College

In Partial Fulfillment
of the Requirements for the Degree
Master of Education

by
Marilyn Ann Drengson
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CHAPTER I

THE PROBLEM AND DEFINITION OF TERMS USED

I. OVERVIEW

The curriculum of the modern school, according to most educational leaders, tends toward placing more responsibility on the student for his own learning. In an article for the 1965 Association for Supervision and Curriculum Development yearbook, Ole Sand wrote: "Above all, the school must help the pupil to 'be on his own' in school and outside, to learn 'under his own steam,' and to have an abiding interest in doing so" (52:40). To accomplish this goal, the need for a variety of learning resource materials on many different learning levels and encompassing many different approaches to learning has been felt by all concerned with the education of children (58:2-6).

Hence, a single, identical resource for learning, such as a basic textbook, is not likely to be equally valuable for all learners in a particular group. There needs to be available to every classroom a variety of resources suitable to the range of interests, abilities, and previous experience of the learners (53:468).

The need for a variety of learning materials has stimulated the growth of the publishing industry in the areas of text and trade books, and production of non-print materials from many sources is increasing enormously. Commercial firms, such as the Encyclopedia Britannica

Educational Corporation, Minnesota Mining and Manufacturing (3M), the Society for Visual Education, and Bell and Howell, to name only a few, have expanded their offerings of audio-visual resource materials tremendously in the past five years, as evidenced by their catalogs. Many foundations--the Kettering Foundation, Ford Foundation, National Science Foundation, as examples--have stimulated the study of teaching methods, and from their recommendations, new methods of teaching, with corresponding new learning materials, have been offered for trial. School personnel themselves, many using government grants, especially under P. L. 89-10 (The Elementary and Secondary Education Act), have responded to the need for producing a variety of learning materials. A pertinent example in this last category would be the Central Washington Regional Supplementary Center, a development and production center for materials designed to individualize instruction for intermediate grade classrooms, serving nine counties in Central Washington, funded with P. L. 89-10 Title III funds.

These examples serve to illustrate the various categories of instructional materials producers: commercial firms, non-profit foundations and their subsidiaries, and educators themselves. In each category, many other specific names could be cited, so it is not difficult to realize that the number and variety of resource materials available must be constantly expanding.

The availability of myriad resource materials and the generally increasing availability of funds to be spent for their purchase offers the possibility of providing the variety of resources necessary to support educational programs, such as proposed by J. Lloyd Trump (59), with an emphasis on individualizing learning. Increasingly, the library is assuming responsibility for the presence of these materials in the school, and this necessitates their organization and work with staff and students to insure their profitable use. These tasks, taken together with the need to spend more time with individual students and teachers in implementing learning programs, all present a problem for the school librarian in terms of available time. Keeping abreast of developments in learning resources; consulting with staff and students; determining what will best satisfy the curricular needs; selecting the best from what is available; ordering, receiving, organizing, and preparing materials for use; and working with staff and students for the optimum use of materials in the instructional program have all been aspects of the school librarian's work.

According to surveys (14, 39) and informal discussions with librarians, even with adequate staffing and clerical assistance according to standards set by the American Association of School Librarians (5), there are rarely enough hours in the day for all these activities to take place. More discouraging, it must be noted that, nation-wide, many school districts have neither adequate professional staff nor clerical

assistance to maintain a good library service program on the individual building level (14).

Even a cursory survey of the literature reflects the feeling that librarians should have more time to work professionally within their own buildings. To accomplish this, many school districts have begun to look toward centralizing technical aspects of acquiring, organizing, and processing learning resource materials. In a number of districts throughout the country, these procedures are being carried on by a single trained staff serving the entire district, thus eliminating needless duplication of effort by staff scattered in the individual buildings. Then, the time saved may profitably be spent by the individual school library staff in doing the professional service and curriculum work necessary to the instructional program.

II. STATEMENT OF THE PROBLEM

The purpose of this study was to examine the methods used by three school districts--a small district, a medium-sized district, and a larger district--which have set up centralized technical services for the organization of learning resource materials, thereby relieving the individual librarian within the buildings of certain necessary, but time-consuming tasks. These methods will be set down herein and studied with the possibility in mind that districts which do not now provide these services

may find some suggestions to consider in deciding upon the feasibility of such services.

III. DEFINITION OF TERMS USED

Learning Resources

Learning resources will include all types of audio-visual as well as printed materials. For the purpose of this study, it will exclude materials, such as textbooks, purchased in sets for the specific use of certain grade levels or subject matters. This term replaces one in current use: instructional materials. The change in terminology reflects the shift in emphasis in education from "teacher-centered instruction" to "pupil-centered learning" (64:2).

Technical Processing Services

Technical processing services include the responsibilities for acquisitions, cataloging, physical processing, and distribution of learning resources.

Physical Processing

Physical processing includes the typing of card and pocket, pasting pockets, stamping, affixing protective coverings when necessary, and labeling of materials.

Centralized Services

Centralized services will be employed to mean that all these responsibilities will be carried on in one location and not in the individual library.

Center

Center will refer to the location where these services are performed.

Library

Library will refer to the resources center in the individual building of the school district. The use of the word includes service with all types of print and non-print materials and equipment.

IV. ORGANIZATION AND SCOPE OF THE STUDY

This study is concerned with the organization of centralized technical processes at the school district level, which provide for the acquisition, cataloging, processing, and distribution of learning resource materials to libraries in individual buildings within the district. The operation of such services has been studied in three separate school districts: (1) Walla Walla (Washington) Public Schools, (2) Springfield (Oregon) Public Schools, and (3) Highline (Washington) Public Schools. The first and third districts were suggested by Jean Badten, Washington State

Supervisor of Learning Resources Services, and the second was included because of the personal feeling of satisfaction with centralized services gained from serving as a librarian in that district. Information was secured by interview with the district library administrator in each case, by observation when possible of the actual procedures being carried out, and by examination of guides and manuals used with these procedures.

Chapter I of this report serves as an introduction, statement of purpose, and an outline of the scope of the study. Chapter II provides a background of the development of centralized services in the nation and a discussion of the available literature to the present time. Chapter III reports the specific procedures used by the three technical processing centers together with cost analysis and efficiency evaluations when possible. Chapter IV provides a comparison of procedures and an evaluation of their effectiveness based on criteria determined from the literature and interviews with district library administrators. In this chapter also are listed specific questions to be considered in the development of such centralized learning resources services in districts not now possessing them. Chapter V incorporates a summary of the entire presentation with some suggestions for further study.

CHAPTER II

REVIEW OF THE LITERATURE

I. RATIONALE FOR CENTRALIZING SERVICES

In April, 1956, Catherine Whitehorn and Bernice Wiese of Baltimore began a survey of library supervisors to try to determine the extent of centralized processing throughout the country (68). Of thirty-six replies, they found twenty-three districts operating centers. Services offered from these centers varied: some served elementary schools only, some secondary only, some both. The number of schools served varied from three to 120. One had been operating since 1917, one since 1927, but almost all had been formed after World War II.

With the help of the survey, Wiese and Whitehorn were able to identify ten problems which influenced Baltimore's decision to centralize technical processing for the district:

1. Delays in preparing books so they can be used by teachers and students.
2. Need to provide clerical service for schools economically.
3. Difficulty in having catalogs in schools where there is no librarian.
4. Need for simple classification in the elementary schools.
5. Need for school-oriented subject headings.

6. Continuity, uniformity, and consistency in cataloging.
7. Need to keep the catalog up-to-date.
8. Long delays in preparing new collections.
9. Librarians often had no cataloging experience.
10. Need for high quality catalogs in all schools (21:59).

Somewhat later, in 1964, as a result of an Allerton Park Institute Conference on the topic of The School Library Materials Center, Viola James was able to pull together and list the advantages of having a district-wide centralized technical services center:

1. Expensive cataloging tools need not be duplicated.
2. The school librarian would be freed from much time-consuming work, allowing freedom to give more time to reading guidance, reference, promotion and publicity, gathering resource material for enriching instruction, instructing in the effective use of the library, and keeping abreast of professional developments and new materials.
3. Consistent technical library services may be provided. Cataloging policies are determined once, instead of being determined by each librarian individually.
4. Time and money may be saved for participating schools. A duplication of effort in working with identical titles is expensive.
5. A union catalog may be organized more easily to make known existing resources.
6. Advice from the center may prevent unwise duplication of expensive materials. It may assist librarians by calling to their attention materials they overlooked.
7. A district may be able to obtain better discounts because of size of order (34:35).

These points were echoed by Milbrey Jones in an article for the National Association of Secondary School Principals Bulletin in 1966 (36) in which he emphasized the need for allowing the school librarian more time for professional work with teachers and students. Further, he felt that such division of labor would allow for more systematic training and supervision of personnel, more labor specialization, and use of machines when district size grew large enough to warrant it.

Perhaps a hypothetical case might make the individual librarian's situation more tangible. An elementary school of 350 pupils might be allotted a resource materials budget of \$3.25 per pupil. Allowing approximately \$4.00 per item (average elementary book, \$3.50 (60:121); average filmstrip, \$6.00), this school might receive from 275 to 300 items to be cataloged for the library. The time needed to catalog and classify materials, taken from the 1960 Standards for School Library Programs (5), amounts to 10 minutes professional time and 20 minutes clerical time for the simplest items, using purchased printed cards (5:52). It should be noted that most elementary schools do not supply librarians with clerical help, so usually the entire 30 minute task would fall to the librarian. This means approximately 150 hours, or more than an entire school month, when the librarian would be engaged in organizing the materials for use.

This month does not include time for the many other processes necessary for the acquisition and preparation of materials, e.g.,

verification of ordering information, selection of order source, preparing order in final form. Nor does it include the receiving and checking of materials as they arrive; nor the pasting of pockets, protective covering, and other handling of materials.

Also, it must be considered that in actual practice in a school library, the time spent working on the organization of materials is rarely an extended period of intense concentration. This important work is squeezed in between the more immediate concerns of helping children and teachers. Being constantly interrupted, naturally it consumes more time over an extended period. Considering all these things, it is possible to see that this librarian might spend two or more precious months of the school year in activities concerned only very indirectly with furthering the learning processes of children.

The above considerations concern the librarian in the individual building. If an administrator should begin to study the duplication of effort in terms of professional time, the loss of use of materials acquired but not organized for use, and the duplication of equipment and materials in each building in his district, he might find it wise to begin an investigation of the possibilities of providing these services on some other level than that of the individual building.

II. RESPONSIBILITY FOR THE CENTRALIZATION OF SERVICES

The report of the School Library Development Project of the American Library Association, Planning School Library Development (38), issued in 1962, emphasized the value of a system-wide approach by school districts or combinations of districts when planning library services.

Advantages of larger units which supplement the staff and materials of individual school libraries by providing consultant service, technical processing, and additional materials have been shown by the work of many successful school district advisory programs (38:34).

Three services, according to this report, have repeatedly demonstrated their value: school library supervisory staff, centralized technical processes, and district (or larger area) materials centers. Of these three services, the first in priority should be the supervisor, "in order to provide for coordinated development of library services throughout the district" (38:35). And, according to Richard Darling, past president of the American Association of School Librarians in his statement on the activities of a supervisor, the "provision of central services" is second in a list of twelve items for which the supervisor usually assumes responsibility (22:34).

Recommended by the AASL is the five-year plan approach using an outline such as their "Ten Steps in School Library Development,"

whereby the supervisor, directly responsible to the administrative officials of the school district, details plans for improving district-wide library services. This generally includes working toward a district materials center and some approach to centralizing technical processes (38:35).

Therefore, it must be understood that the recommendations of the professional literature emphasize the desirability of careful study and planning by the supervisor for the district to determine (1) feasibility of centralizing services, and (2) the most efficient and economical methods of providing these services once they have been found feasible.

School districts throughout the nation which have decided to provide these central services for organizing learning resources do not adhere to any one means of so doing. Methods currently in use include the following: using commercial services, establishing individual school district processing centers, or contracting with a larger unit (a combination of school districts, a county, or a public library system) for this service (38:35). In the following section discussing the development of centralized services, examples of these methods will be cited.

III. HISTORICAL DEVELOPMENT OF CENTRALIZED SERVICES

Public and university libraries have long been interested in the centralization of technical processes many years before the school

library movement began to gain ground in the 1900's (14:54-71).

During the half-century when Charles C. Jewett [first librarian of the Smithsonian Institute, 1851] proposed a central bureau for the preservation of stereotype plates and their use in updating library catalogs, to 1901 when the Library of Congress began to sell its catalog cards, there was much interest, discussion, and pressure for centralized and cooperative cataloging. Very early in American librarianship, there was a recognition of the wasteful duplication of effort among libraries cataloging the same book at the same time (67:46).

In the past, public libraries seem to have been better able to work toward serving larger areas with centralized service. Much of the literature is written explaining the services from the public library point of view (3, 13, 31, 43, 48). Historically, however, in the period from 1900 to 1940, the administration of books for school libraries was often accomplished by the public libraries, or this responsibility was shared with local boards of education. This form of cooperative administration resulted in centralized services by public libraries for school libraries, e.g., Cleveland, Ohio; Pittsburg, Pennsylvania; Oklahoma City, Oklahoma, and others (14:246, 250, 254).

An even more recent example of this form of centralized processing occurs with the Weld County, Colorado, library, which set up its Centralized Purchasing and Processing Project beginning in the summer of 1955, "in an effort to help the school librarians meet accreditation standards" (2:191).

This service was extended also to all of the smaller public libraries in the area as well as the eleven schools contracting the service in 1955. Cost to the participating libraries includes, in addition to the price of the book, the cost of all supplies, pro-rated cost of labor, plus five cents per book to cover depreciation of equipment. Reported in 1957, this sum was 65 cents. School districts paid in a single warrant yearly, thus giving the library a revolving working fund. The operation was relatively small in 1957, processing approximately 2,000 volumes, but the schools were most satisfied with the service, and there were hopes for continued growth (2:191-195).

The further development of centralized processing for public libraries was spurred on by the federal government Library Services Act of 1956, which provided funds to enable the application of planning. Demonstration centers were set up allowing for the operation of exemplary projects. One such was the Columbia River Regional Library Demonstration (48).

By 1960, over 30 processing centers were serving 500 libraries. An estimate made in 1964 reported that the number had probably tripled or quadrupled if one counted commercial processors (31).

Increasingly, however, school districts of larger size have begun to set up their own district-wide services for the processing of resource materials. A list of the districts which have done so would coincide

well with the list of those districts which have established school library supervisory positions (36).

With a few exceptions, centralized processing services on the district level is a relatively new development, beginning within the last twenty years and increasing in importance especially within the last ten years (21:58).

It is likely that the seeds of this growth were sown by an American Library Association Committee on Post-War Planning chaired by Mary Peacock Douglas. The committee report, published in 1945, School Libraries Today and Tomorrow: Functions and Standards (6), included many forward looking suggestions which are still to be implemented. The report urged that central supervision be organized so that "the school librarian(s) and clerical assistant(s) working from a headquarters central library for the city, county, or regions would provide the following services: [There followed a list of eight services. The two quoted here are most pertinent.]

2. Group procuring of books, periodicals, pamphlets, and other materials for permanent and supplementary library collections for the schools served.
3. Centralized classifications, cataloging, and processing of books to be housed either in the central library or in individual school libraries.

These recommendations focused upon areas which school districts began to realize needed attention. But evidently the recognition was somewhat slow. School Library Standards, published in 1954 by the

U. S. Department of Health, Education, and Welfare, reported from a nationwide survey of school libraries "in many cases, technical processing within the individual building was limited" (12:7) and implied that this lack of organization found in school libraries was a result of lack of trained librarians (12:12). This survey pointed out a definite discrepancy between the 1945 standards and the accomplishments of the years to 1954.

Within the next several years, the literature began to reflect interest in the subject, and reports of districts setting up centralized services became more frequent. Along with the Whitehorn and Wiese report in 1957 came other reports of districts detailing methods of operations (26; 55; 56). By 1958, the index to Library Literature began to use a subject heading that suggested centralization of technical processes.

ALA Standards for School Library Programs of 1960 gave general reinforcement for the organization of centers by setting down an estimate of the time required to process one item for a library collection, mentioned earlier in this chapter. Later in these standards came the recommendation "when school systems have three or more schools, centralized processing should be introduced" (5:112).

Surveying patterns for administering the processing of resources for school library materials center, Viola James reported in 1964 that

centers especially in large districts (25,000 or more pupils) and medium size districts (3,000 to 11,999 pupils) were becoming more numerous (34:33). However, according to the Office of Education, Department of Health, Education, and Welfare statistics for 1960-61 (reported in 1964) only 3 per cent of the nation's elementary schools were being served, and only 2 per cent of the secondary schools had the advantages of centrally processed material (44:68-74).

Growth has continued, however. A report from a nationwide questionnaire of April, 1967, by Ahlers and Morrison, in which at least one school district from each state was sampled, stated the following:

Operation of processing centers seems to have become the rule, rather than the exception, in school districts. In 60 out of 68 cases, the district center is prepared to perform this function. In 38 cases, some or all of the selection of materials is also done there. Centralized selection of materials is particularly characteristic of smaller districts (4:453).

The literature of the years since 1964 to the present reflects serious concerns regarding cost and efficiency of the centralized processing service for school districts. A summary of these considerations will be presented in the following section.

IV. CENTRALIZED TECHNICAL SERVICES: SOME CONSIDERATIONS

Regardless of need or desire and enthusiasm for services and programs, school budget planning always produces fierce competition

for a fixed and often limited number of dollars. Any new program of service must be planned so as to accomplish the improvement of existing conditions as economically and efficiently as possible.

A 1964 study of centralized processing in New York state by the New York Library Association, questioned the efficiency of such services as were offered. The chairman of the committee, Vincent Aceto, titled his article "Panacea or Pandora's Box?" (1), and suggested that there were disadvantages to be seen in the operation of many centers. Examining replies from twenty systems, he reported that few had engaged in any preliminary comparison of unit costs for different methods and patterns of organization for processing. He listed as problems lack of staff, lack of facilities, and most important, lack of understanding on the part of superintendent and/or principals, boards of education, business managers, and even librarians (those who insisted on special, individualized service). These lacks, he said, were likely due to poor pre-planning, and were laid neatly at the librarians' door.

It is indeed surprising that school administrators have been willing to establish and maintain central processing centers with only the subjective opinions of librarians as evidence of success. It is even more surprising that librarians have been so quick to adopt the organizational change without first doing their homework (1:324).

By definition in Aceto's report, cooperative centers had been excluded. In a reply to the report (16), Mary Connor described three

central processing centers operated by boards of cooperative education services. These centers, one serving forty libraries in eight school districts, were reported operating economically and efficiently. Her study had shown that to be feasible, a center must have a minimum processing load of 10,000 items, and for economical operation, 20,000 items.

By more recent estimates, these figures are considered too low (21). A volume of 40,000 items may be necessary for the operation of a successful center (67). For this reason, a re-examination should be made of the 1960 standards recommendation stating that centralized processing should be introduced when there are three schools in a district.

An unfortunate recommendation in the AASL 1960 Standards for School Library Programs may have encouraged many school systems to initiate centralized processing unwisely It is probable that the revised standards, scheduled for publication in 1968, will recommend that initiation of centralized cataloging be based on the number of volumes to be handled, and that smaller school systems band together to develop regional co-operating district centers. Independent centers in small school systems can be neither economical nor effective (21:64).

Recent correspondence with W. C. Meierhenry, current president of the Department of Audio-Visual Instruction of the National Education Association, discussing the forthcoming standards revision states,

In the earlier editions there was a more definite statement regarding when centralized processing should be done. This particular

document only urges that it be done on at least the system level if not at regional or other levels. It also urges the utilization of commercial cataloging where it is not possible to do it centrally (46).

Two paragraphs from the latest (as of July 9, 1968) pre-publication revision of the new Joint Standards for Media Programs seem appropriate here.

Arrangements for centralized processing are practical and recommended for any system or cluster of cooperating schools. For many schools, centralized processing at the system level offers the most efficient and economical service. Regional centers, involving several school systems in some form of cooperative arrangement, are now being developed or have already been established throughout the country and provide this service. Centralized processing on a state-wide basis is being done in at least one state [Hawaii] and is being studied in others [New York].

Commercial cataloging, now available from several companies, is especially useful for schools not having access to a system or regional processing center. Services from these companies range from supplying only catalog cards to the complete processing and cataloging of materials (46).

More detailed discussion of some of the above considerations will be presented in Chapter IV of this report.

CHAPTER III

REPORTS OF THE PROCESSING CENTERS IN THREE DISTRICTS

The operation of district (or larger area) learning resources centers in the United States is becoming more frequent (4). These centers, professionally supervised by library oriented personnel, audio-visual personnel, or combinations of the two, often provide technical processing services for their district or region.

It is the purpose of this chapter to report in detail on the operation of three such centers of varying size. All information was gathered by visiting the centers when possible, discussing questions with the supervisors of the centers, and examining manuals and other materials used by the center. Opinions expressed here are those of the supervisors being interviewed as they were understood by the author. It is hoped that the observations set down here may form a basis for comparison with school centers already established, and also give some methods of operating as an introduction to the setting up of processing centers in other districts when feasible.

In each case, a statement of the background of the center will be given. A discussion of the acquisitions procedures, classification and cataloging techniques, and physical processing procedures will follow. A last statement in each section will be recommendations on

the establishment of new centers, given by the particular supervisor interviewed.

I. WALLA WALLA (WASHINGTON) PUBLIC SCHOOLS

Background

Organization. In the Walla Walla Public Schools, School District No. 140, Walla Walla, Washington, the center is doing the processing for nine buildings serving grades K-6. The supervisor directly responsible to the administrators of the district is the Coordinator of Instructional Materials. Working closely with him and directly under his supervision is the Library Supervisor, whose main responsibility is the operation of the center and the operation and supervision of the libraries in the elementary schools.

Planning for operation. The center was conceived and planned as one of the district's ESEA Title I (P.L. 89-10) projects. It was given top priority by the district superintendent and other administrative personnel, and subsequently funded for operation in 1965. The Coordinator of Instructional Materials was responsible for determining the feasibility of establishing such a center and for planning efficient methods of procedure.

In the planning stages, various methods of operation were explored, and the usefulness of machines was evaluated. Existing facilities were remodeled keeping in mind the efficient flow of materials and labor. Since a move to newer quarters was anticipated in the future (to be accomplished during the 1968-69 school year), all facilities and furniture were designed to be portable and purchased with the move in mind.

Procedures are continuously evaluated, and changes in operation initiated when necessary. There has been no cost analysis performed, however, since the planning stages of the project.

Before 1965, there was a limited program of library service in the elementary schools. Some of the buildings lacked central libraries; some of the collections were uncataloged. This Title I project was designed to initiate good library services in the elementary schools of the district. Since the origination of centralized processing was simultaneous with the addition of librarians in the elementary schools, there was no problem of all librarians concerned agreeing on cataloging procedures. At the outset of the center, the Coordinator of Instructional Materials and the Librarian set up the classification and cataloging procedures under which the center operates. As subsequent librarians have joined the system, they have accepted the established procedures.

Plans for the future include the extension of centralized processing to the two junior high schools and the senior high school. This expansion can take place when funds are allotted to increase the processing staff at the center. Establishing classification and cataloging procedures will not be difficult, as the entire district is now following uniform procedures.

Personnel. In addition to the two professional supervisors, the center employs two sub-professional cataloging clerks. The personnel department of the school district has job descriptions on file for all personnel of the center. These two clerks attend to all non-professional duties, including card reproduction, stamping, pasting, filing, alphabetizing, etc.

Volume. During the 1967-68 school year, the center processed approximately 4,500 materials, print and non-print. Text materials are not handled, but all other learning resource materials destined for the libraries in the individual elementary buildings are processed.

Building collections of audio-visual materials are beginning to grow. The last several orders to be budgeted were designated to be spent for approximately 50 per cent print and 50 per cent non-print materials.

Additional services. The central office, in addition to the technical processing center, also houses a professional library, for

which the Library Supervisor is responsible, and a district instructional materials center, for which the Coordinator is responsible. The professional materials are cataloged and a card catalog for the collection is maintained at the office, with book lists sent to the buildings periodically. The district supplementary instructional materials (16 mm. films, kits, art pieces, etc.) are cataloged by the Coordinator and a book catalog with yearly supplements is in the hands of every teacher.

Mending and maintenance. Mending and repair of books is done in the individual buildings. Once yearly books are selected for rebinding and sent in a group to College Place Bindery. When these books are returned to the district, the processing center again completes the necessary physical processing before they are replaced on the school library shelves.

Since non-book materials are still so new in the libraries, questions of repair have not come up. Audio-visual equipment, however, is repaired by a district technician under the supervision of the Coordinator of Instructional Materials.

Processing Procedures

It will be helpful to think in terms of following an imaginary item (a book, record, filmstrip, tape, picture set, etc.) from the time it

is ordered in the individual building until the time it is received in that building ready for use.

Ordering. Orders for learning resource materials are originated by the professional staff, teachers, librarians, principals, etc., within the buildings. There are no chosen selection lists as such; the regular selection aids are recommended as sources for most materials.

Order dates are set two or three times yearly, and orders from the buildings are sent from the librarian to the central office on Bro-Dart 2"x3" order cards. These orders are reviewed by both the Coordinator of Instructional Materials and the Library Supervisor, and order suggestions are made if necessary. The clerks check the bibliographic information where necessary, and then type the combined order lists on ditto masters. These dittoed order lists are used by the business office, the jobber concerned, and several copies are kept in the office for reference. The original order cards are sent back to the librarians as a record of their orders.

After the business office has received the order lists from the central office, a purchase order is made for the materials and sent with the order to the jobber or producer. All district budget funded orders not filled are cancelled at the end of the fiscal school year. Special ESEA Title II orders are processed in the same manner except that the

order list is stamped "Title II" and encumbered on a separate specified budget number. Monies encumbered for Title II are designated to be spent within a certain period, and these orders are cancelled if not filled within the specified time.

Receiving. Materials from the jobbers arrive in the Administration Building central stock room. There the stock room clerk checks the materials against the purchase order from the business office. If the materials are in correct order, they are sent on to the library processing center. There the processing clerk re-checks them. They are then slipped with a color-coded slip, stamped with the school stamp, and placed on holding shelves alphabetically arranged by school to await processing.

Materials arrive continuously throughout the year, even though orders are placed only two to three times yearly. Processing generally flows smoothly with no large backlog, except sometimes upon the arrival of Title II materials. Several times during the year, the holding shelves are emptied, prior to the arrival of additional materials. At these times work is done on previously uncataloged materials held by the buildings before centralized processing was begun.

Generally it is possible to begin processing materials upon arrival; at times perhaps a one-month lag from arrival of materials to dispersal will occur.

As materials are received, librarians may have the opportunity to select first priority items from among those on their building shelves. These are simply pulled and placed on a first choice shelf.

Classification and cataloging. The Library Supervisor serves as the professional cataloger for the elementary schools. She assigns the Dewey Decimal Classification number, using the abridged Dewey, and the subject headings from Sears' List of Subject Headings. The clerks type the cards and/or stencils. Duplicate copies of Sears subject headings are kept, one volume for each building, so that subject headings may be kept individually and cross references may be made at the center for each building catalog. Building librarians are free to use their assigned copies at any time.

Non-book materials are not classed by Dewey Decimal Classification numbers; rather they are classed according to type of resource (kit, tape, record, or other) and shelved according to accession number for ease of adding to the collection. In all other respects, they are treated in the same manner as books. Color banded cards are not used.

The cataloger selects a group of fifteen to twenty materials for each school in rotation. Each group of materials is cataloged, processed, and sent out to the buildings. It is reported that a school receives a box of materials about once every week and a half.

Cards are produced at the center using the Minigraph machine available from Gaylord Bros., Inc. (1967-68 School Library Supply Catalog, \$275). Masters cut for one item are filed and saved for duplicating cards for later purchases. Supplies for an average set of cards (usually five cards: author, subject, title, building shelf list, and master shelf list) were reported to cost 6 cents, and while the cost of the time involved in preparing a set was not accurately measured, the figure suggested as total cost was 16 cents. A chart from the ALA Library Technology Project study, Catalog Card Reproduction, 1965, suggests the cost per set for 4,500 sets of cards produced in this manner to be 24 cents. This figure bases cost on a four-card set with staff time estimated at \$2.00 per hour (7:8).

No use is made at present of commercial cataloging services, except in the cases where publishers or producers supply cards with their material free of charge. When prices of commercial services become lower or the volume of materials to be processed becomes too large for the center, the commercial processing possibilities will be investigated.

Physical processing. By the time materials are delivered to the schools, they are ready to be put on the shelves. They have been stamped with a school accession number (although no accession record is kept),

the borrower's card and pocket with date due spaces have been placed in the book and pasted, and the spine has been marked with a stylus if a prebind or publisher's library binding or covered with a plastic cover and labeled with a pressure sensitive label if a trade edition. (The school property stamping was done upon arrival before shelving.) ESEA Title II materials are identified with a special stamp as are the school shelf list cards.

A Pot-Devin paster is used for all pasting, and a laminator for plastic covering book jackets has been ordered for the 1968-69 school year. Approximately 50 per cent of the volumes processed receive plastic covers. Non-book materials are labeled with gummed labels and supplied with cards and pockets as appropriate.

When a box of materials arrives in the building, the included catalog cards are ready for filing, and the materials are ready for immediate use.

Accounting. All accounting and financial record keeping is done officially by the district bookkeeper. Through the Coordinator's office, monthly statements are sent to the buildings, so librarians have a running account of the money budgeted and spent. Unofficial records are kept by the librarians in their individual buildings.

Supervisor's Recommendations

1. The school librarian should spend at least 90 per cent of her time working with students and teachers. Even if there is only one building to be considered, the school librarian should not be a cataloger. The implication here is to consider the use of commercial cataloging services where it is not feasible to process centrally.
2. In setting up a proposal for centralized technical processing, it is imperative that trained library personnel plan the program.
3. When a proposal has finally reached the written stage, it is wise to ask for recommendations and reactions from professional sources. Submit the proposal to the Supervisor for Learning Resources Services in the State Superintendent's Office or to library school personnel for advice and suggestions.

II. SPRINGFIELD (OREGON) PUBLIC SCHOOLS

Background

Planning. In the Springfield Public Schools, School District 19, Springfield, Oregon, centralized processing was begun in the Fall of 1964 and served fifteen elementary buildings at that time. By January of 1967, the service had been extended to include four junior high schools and two senior high schools for a total of twenty-one libraries. The Library

Consultant is responsible to the administrative officials of the district for all phases of library service within the district.

Leadership in securing an improved program of library services for the district, especially in the area of elementary education, was provided by the elementary school principals and the secondary librarians. The district's program for gifted children in the elementary school also made it apparent that library resources were necessary.

These pressures, plus the results of completing the questionnaire for the 1960 federal government school library survey (44) resulted in the appointment of a district Library Consultant, who, in 1961, formulated and presented to the administration a five-year plan for the improvement of library services in the district, which was accepted.

The processing center came about as a third-year step in the accomplishment of the proposed five-year plan. Facilities were made available with the move of the district administration building to a remodeled large older elementary school building. Approximately one-third of the entire lower floor was reserved for the center. Also housed on the lower floor is a curriculum and professional library for which the Library Consultant is also responsible.

A large district Instructional Materials Center (16mm. films, kits, materials production, etc.) adjacent to the processing center, is under the direction of the Instructional Materials Consultant, who is

also directly responsible to the district administrative officials. Lines of authority between the Library Consultant and the Instructional Materials Consultant are firmly drawn and rigidly adhered to.

The operations of the processing center are continuously evaluated and changed whenever necessary. When centralized services were begun in 1964, studies showed the cost of processing an item to be between 90¢ and \$1.00, considering only the direct costs of salaries and supplies. (The center processed ESEA Title II materials for one parochial school whose books were purchased through District 19, and the cost of 90¢ per item was charged.)

No recent cost analysis has been done. Although costs of supplies and salaries have risen, the increased volume of materials provided by the inclusion of the secondary libraries in the operation may have had a tendency to offset the rising cost somewhat. Estimates are now about \$1.00 plus.

Also included in the Consultant's five-year plan was the placement of librarians in the elementary buildings. During the first and second years, a total of eight elementary librarians was secured, and they were responsible for their own processing of materials. At all times, however, they were aware of the third-year step of centralizing processing, so procedures were agreed upon beforehand and were uniform throughout the elementary buildings. In this planning, much use was made of the

Oregon State Library Consultant, and heavy reliance was placed on her advice.

Planning for agreement in processing procedures began at the secondary level a year before operations were started. Amicable agreement was reached on every aspect of classification and cataloging except in the area of biographies, and one small problem still exists here. It can be seen from this statement that complete uniformity does not exist between elementary and secondary processing.

Since the participation of the secondary librarians is somewhat recent, their reactions to the service may be of interest. Four of the six librarians are wholeheartedly pleased with the service; one is critical of the lack of customized service; one is simply critical.

Special ESEA project. Upon encouragement from the State Library Consultant and District 19 administrators, a proposal for an ESEA Title III project, the demonstration of an exemplary elementary school library program, was submitted in 1967. The proposal was funded for a year's planning in 1967-1968 and subsequently funded for operation. Included in the planning grant was salary for one professional coordinator for the program and one half-time clerk. The coordinator of this program works closely with the district Library Consultant in the effort to develop plans for the operation of the demonstration project which begins with the 1968-69 school year.

Also connected with this Title III project is the opportunity to participate in the beginning stages of data processing for libraries in Oregon. A separate Title III grant project, Oregon Total Information Service (OTIS) is exploring the possibilities for data processing in education in the state of Oregon. Beginning in the fall of 1968, the District 19 union file will be placed in data processing, as the beginning of a service to the school libraries of the state. Possibilities for ordering, cataloging, and processing, which are as yet unexplored, may be very broad in scope.

This project is mentioned here because of the implications it holds for the operation of the center.

Personnel. In addition to the Library Consultant (Supervisor), the center employs one professional cataloger (holding teacher's certification also), one sub-professional full-time acquisitions clerk, and three and one-half clerical personnel. Two full-time summer work-study university students have been paid from a government work-study grant, and the one-half time clerk paid for by ESEA Title III funds for the exemplary project also works for the Library Consultant.

Volume. The center processed approximately 23,800 items ordered during the 1967-68 school year. This does not include a sizable number of additional unprocessed materials already in the buildings. The

completion of the cataloging of formerly unprocessed materials was accomplished during the year.

Additional services. The professional and curriculum library is also the responsibility of the Library Consultant. Materials are cataloged in the center and organized in a separate room near the center. A half-time clerk services the collection. Also, a small collection of books used in connection with the program for gifted students in the elementary schools is maintained here.

Mending and repair. The repair of books is taken care of by the individual librarian. Rebinding is done once yearly. The librarians, however, have found it more economical, with many books, to purchase new copies rather than rebind. Most of the books selected for rebinding are out-of-print or special interest items. The elementary books are sent to College Place Bindery; the secondary books are sent to Hertzberg's Bindery.

It is hoped that non-print materials will be repaired by the Instructional Materials Center, as they have done the supplementary IMC materials housed there in the past. Repair of audio-visual equipment is handled by an IMC technician.

Processing Procedures

Ordering. Orders for learning resource materials are originated by staff members in the individual buildings. Oregon state law requires that 75 per cent of district monies budgeted for library materials be spent on orders from selection sources approved by professional associations. The remaining 25 per cent may be spent using personal judgment. This is the only restriction placed on ordering.

In the past years, order dates have been set four times yearly: a major district order and a minor district order, and a major ESEA Title II order and a minor Title II order. Emergency orders are sent when necessary. Orders are placed on duplicate order forms--white for elementary and yellow for secondary. One copy is sent to the central office; the carbon is retained by the school. The form presently used has been considered inadequate for several years. (See Appendix for sample form.)

A multiple form with four or five copies could be used to good advantage, but the forthcoming venture into data processing may have a bearing on the form devised. Next year, it is possible that ordering will be done by machine. So the decision was made to delay the revision until more specific needs are determined.

The acquisitions clerk compiles the orders by author and decides from whom to purchase specific items. Clerical help checks bibliographic information when necessary and then types separate order lists with

several carbons, to be used for each jobber and publisher. One copy of these lists is sent to the purchasing office where the purchase order for each is made and the lists and orders are sent to the firms involved.

Any district funded order must be filled by April or it is cancelled. For the last Title II order, the deadline was June.

At the same time the orders are sent to jobbers, available H. W. Wilson cards, Library of Congress cards, and Library Journal cards are ordered.

Receiving. In the past, materials and bills were sent to the Purchasing Office on arrival. Delivery is made now directly to the processing center. A clerk unpacks the materials and checks them from the typed order lists. The actual price paid is determined by the acquisitions clerk and a record of this amount is kept for each school. When the library office has recorded this budget information, the bills are sent to the Purchasing Office for their records.

The materials are placed on holding shelves with a separate section for each school. Librarians may choose first priority materials from among those on their shelves simply by turning the book down.

Processing of newly arrived material may begin as soon as one day after arrival or as long as several months. In general, the time lag is approximately one month. However, the holding shelves were emptied

several times during the past year. Then the cataloger and several clerks were able to spend time in the buildings working on cross references in the catalogs.

Classification and cataloging. A professional cataloger is employed at the center during the school year. He served an additional two weeks during the summer of 1968, and plans for the future include a more extended contract.

In the elementary schools, the abridged Dewey is used with Sears subject headings. The secondary school materials are classified by the unabridged Dewey. For the professional library, the cataloger uses the Dewey classification, but with the same subject headings as the Education Digest. In all cases, after he has verified cards or assigned numbers and subject headings, clerks type cards and/or stencils.

Duplicate copies of Sears are kept, one for each building, so that subject headings may be individually suited, and cross references made at the center. Building librarians may use their assigned copies freely.

Non-book materials are treated as much like book materials as possible. A new cataloging manual for non-print materials is currently being published by the district, funded by another ESEA Title III grant.

This manual is a cooperative project of the Library Consultant, the Instructional Materials Consultant, and the Lane County Instructional Materials Center. In it, Dewey numbers and Sears headings will be used. In the buildings, non-book materials of a similar nature will be shelved together, but they will be arranged in classified order. It was felt that teachers and students would be able to use the materials more efficiently if they were grouped by subject. The type of material should not dictate its organization for the user. Color banded cards are not used.

The cataloger works on a group of fifteen to twenty items for each school in rotation. Exceptions are made in the case of schools with extra allocations. Several schools received additional budget to build their collections to meet standards. These buildings receive two groups of fifteen to twenty items as their turn arrives. Each school receives a box of materials approximately every week and a half to two weeks.

Items to be cataloged are placed on trucks by clerks and moved to the cataloger's desk. If cards were available for purchase, they are placed with the materials by the clerk. If not available, then the cataloger supplies the form.

If four or more sets of cards for the same title are needed, the Cardmaster machine (Cardmaster Co., \$45.00) is used. Currently, it is mostly used with the cataloging of audio-visual materials. The Cardmaster has not been entirely satisfactory in this operation. Investigations

of other machines have been initiated, but decisions postponed until the possibilities of OTIS become more apparent. It is hoped that data processing may have some solutions here, too.

Generally, four to six cards are prepared for each title. A district union file of resources is kept in the center, and a separate file for materials purchased with Title II funds is required. No cost estimate was available for card sets, except that it was felt that the hand made cards with cataloger's work are much more expensive than Wilson cards at 12¢ per set. The Library Technology Report, Card Catalog Reproduction, ALA 1965, shows the cost of typed cards to be an average of twice as expensive as purchased cards in every volume category (7:8).

Cards are purchased from H. W. Wilson Company, Library of Congress, and Library Journal when available. No other use of commercial services is made nor foreseen.

Physical processing. After cataloging has been completed, clerks finish the processing. Items are stamped with a school accession number (although no accession record is kept), card and pocket typed, and pocket and date due slip pasted. For books, the spine is lettered with a stylus or is labeled and plastic covered if unattractive or a trade edition. The school property stamp is applied, and if funded by Title II, so stamped. The need is felt at the center for a pasting machine, but no order has as yet been placed.

When building librarians receive materials, they are ready to be shelved and the included cards are ready to be filed. Librarians acknowledge the receipt of a package by returning a verification slip to the center by return interschool mail.

Accounting. The acquisitions clerk keeps a record of individual building expenditures. She has records available on the amounts of money spent and the number of items received both for district funds and for Title II funds.

Supervisor's Recommendations

1. If setting up a center, be sure that personnel is adequate for the size of the district. Central processing for twenty-one libraries requires the services of a supervisor, a full-time cataloger, and one full-time acquisitions clerk/bookkeeper, plus additional clerical help for typing, filing, and physical processing.
2. If possible, some center personnel should have an extended contract so that processing can continue during the summer months.
3. Be sure to visit other centers and consider their operations; there is no point in repeating the mistakes of others.

4. Volunteer help, or sporadic student help, where the turnover is large, is usually not worth the continuous training time necessary to insure efficiency.
5. It would be wise to coordinate procedures with those of the business office, so that duplication of work in checking materials is eliminated.

III. HIGHLINE (SEATTLE, WASHINGTON) PUBLIC SCHOOLS

Background

Organization. In the Highline Public Schools, School District 401, Seattle, Washington, the center does the processing for forty-seven elementary and secondary school libraries. In addition, it serves an occupational skills center, a conservation education center, and a school for the mentally retarded, thus preparing resource materials for fifty resource centers. The processing center is under the supervision of the Library Services Coordinator. His immediate superior, the Director of Instructional Materials and Libraries, is in charge of the entire district library, audio-visual, and TV instruction operation and is responsible to the administrative officials of the district.

Planning. The center was organized as a result of a citizens' committee recommendation. Before 1960, the district administrators

invited citizens to serve on a committee to investigate some of the district's problems and to give suggestions as to the future direction of the system. A comprehensive survey of the entire district was made with the help of George Strayer, Jr. at the University of Washington. The citizens made recommendations in many areas, including the establishment of centralized processing for the district library services program.

The district administrators approved the establishment of a center, and the district librarians formed their own committees to plan a center which would operate smoothly and efficiently. The few librarians reluctant to accept the centralization of processing have by now moved on to other positions. Most working procedures were formulated within a year, and the center began operations during school year 1959-60. After operations had continued for the period of a year, it was felt that most of the major problems had been resolved. Evaluation of the operation is continuous, and minor revisions are made whenever necessary.

Although growth rate has leveled off somewhat in this district, several preceding years were ones of heavy population increase. As schools were added, the processing center needed larger quarters. One year ago, the center was moved into a remodeled archery lanes, now leased by the district with the option to buy. This building, The Instructional Resources Center, houses, in addition to central processing

facilities, the other audio-visual services of the district, supplementary text materials, and consultants' offices.

When the archery lane building was remodeled, the supervisors employed all their knowledge of management and planning. Flow of work and materials was analyzed. As one views the result of this planning, it is easy to see that the materials complete a large sweep of the room from the time they arrive until dispersal to the buildings. During the planning of this new space, consultation was held with an architect, who, according to report, was less helpful than hoped. A lack of understanding of the problems of operating such a facility was likely an underlying factor.

Cost analysis one year ago showed the unit cost of materials to be \$1.04. This figure was arrived at by adding salaries, supplies, delivery costs, and all other direct costs, then dividing by the number of items processed. At that time, there was a time-lag of approximately one month. The 1967-68 school year saw an increase in the volume of materials processed, so the estimated cost per item fell to about 75¢. Now, however, the time lag is greater, sometimes as much as three months. The center now operates all year, so most of the unfinished processing can be completed during the summer.

Personnel. Lines of authority between the audio-visual section, including TV, and the Library Services department are not rigid. Personnel

in charge assist each other flexibly and contribute to a highly respected instructional resources center. This report, however, is concerned mainly with the personnel under the supervision of the Library Services Coordinator. In addition to the Coordinator, there are two professional catalogers, one for print and one for non-print materials, and one half-time acquisitions librarian. (The non-print cataloger saves one day per week to catalog materials for the professional library.)

There are twelve clerks, one of whom serves in a sub-professional capacity as full-time bookkeeper for all libraries in the district.

Volume. During the 1967-68 school year, the center processed approximately 47,000 materials, print and non-print. Texts are not handled, but all other learning resource materials destined for the libraries of the individual buildings are processed. More non-print materials are being ordered as building collections of A-V materials are being encouraged. Some buildings have reached the minimum standards set by the new WSASL-WDAVI standards (35).

Additional services. The responsibilities of the Library Services Coordinator also include the professional library which is housed, not in the center, but in the Administration Building. The materials are cataloged; cards are filed with the collection. A weekly bulletin to the schools

advertises new materials. Also maintained at the center is a collection of more expensive art print books and objects of art for loan to the buildings.

Mending and maintenance. Book repair is accomplished by the individual librarian in the buildings, and rebinding is completed once yearly. Non-print materials hopefully may be repaired in the buildings by the building audio-visual coordinator. If the repairs are of a serious nature, they may be sent to the audio-visual department at the center. Equipment repair is handled by an electronics technician employed at the center, or by a commercial firm if necessary.

Processing Procedures

Ordering. Orders originate with the staff in the buildings. There are no restrictions on ordering, and all standard aids are used. Monthly, each librarian receives a copy of the Library Journal buying guide to which the center subscribes. Encouragement is given to make current selections during the month in which they appear in the guide. Another order policy is the scheduled review of sections of the building collections for replacements. Each month a specific classification section is considered in every library in the district, and replacements for materials in that section are ordered during that month whenever possible. These arrangements have been found to increase the number

of duplicate orders by about 10 per cent. However, it is possible to order any materials at any time necessary.

Librarians in the buildings keep a scratch record of materials On Order and To Order. Orders are placed by the buildings monthly. A colored card with all order information is sent to the center: green for professional library orders, blue for elementary, and pink for secondary. (See Appendix for sample of card.)

Cards are received by the acquisitions librarian, the bibliographic information is checked by clerical staff when necessary, and then the orders are typed on a multiple-copy form designed for this district by Coast Business Company. The five copies are designated by color in the following manner: white copy to the intended vendor, yellow copy to H. W. Wilson for cards, turquoise to the center's bookkeeper, light blue to the purchasing office for encumbering, and the final cream tagboard card is retained as the master title file card.

Orders are sorted by vendor and sent to approximately 100 suppliers, jobbers, and publishers. Orders for Wilson cards are sent simultaneously.

ESEA Title II orders follow the same procedure, except Title II is typed on the order and these are kept separately from district funded orders. Regular orders cancel after nine months or May 1 if not filled. Title II materials have six months before cancellation.

This district has reached the size where data processing seems to be the next feasible step to increase the efficiency of the center. The 1968-69 school year will see a beginning investigation to determine whether or not to pursue this subject.

Receiving. Materials arrive at the delivery doors of the center. Boxes are dated upon arrival and stored in an open storage area near the door. When the receiving clerk opens the materials, they are checked with the purchase order. If all is correct, the purchase order is signed as a signal to the purchasing office that funds may be released.

Materials then move on to the next table. Books are stamped with a district accession number as librarians consider it an aid in carding, and for the purpose of keeping a running total for the district. A blank card and pocket are inserted, and the school property stamp applied. If applicable, the Title II stamp is affixed. In this way, processing begins immediately with the unpacking of the material.

Classification and cataloging. Next, the previously ordered Wilson cards are placed with all materials for which they were available, and then, together with those materials having no cards, everything is placed on holding shelves to await the cataloger's attention. Print and non-print materials have separate holding shelves. All materials are shelved by title.

Librarians are not encouraged to choose first priority materials. It may be done in special cases, but if done to any extent, it would affect the efficiency of the operation.

There may be a delay of two months or more from the time materials are received at the center until they are sent to the buildings, but since ordering proceeds on a monthly basis, service is definitely faster than it would be with only two or three orders per year. Multiple copies of items are cataloged first, but careful note is made to see that single items are not consistently overlooked.

The classification is assigned from the abridged Dewey, and modified Sears subject headings are used. The same procedures are used for the entire district with no distinction between elementary and secondary. Cross references are not done at the center, but are maintained in the individual buildings. The Coordinator does not think this advisable, but has not yet solved this problem of management.

Non-print materials are classified according to type of material and arranged by accession number for ease of storage. Color-banded cards are typed for cataloging; eight different colors are now in use.

When Wilson cards are not available, the cataloger assigns classification and subject headings; then the cataloging typist makes the card sets. If five or more sets are to be made, the clerk uses the automatic typewriter, the Flexowriter (Friden, Inc., approximately

\$4,000). Four or five cards are usually made per set. Figures on cost per set were not available separately from the total processing figures of \$1.04.

No commercial cataloging service is used except H. W. Wilson cards. However, centralized processing is designed for accommodating a smooth flow of materials. Therefore, it is more difficult to handle large additional numbers of materials such as collections for new libraries without adding staff (29). It is possible that commercial cataloging services may be considered when planning collections for new buildings. However, no definite plans for this service have been made.

Previously uncataloged material from buildings is called for whenever it can be accommodated, usually in the summer.

Physical processing. When materials reach the schools, they have been completely processed. Clerks complete the typing on card and pocket. Pocket with date due space is secured with a Pot-Devin paster. Spines are marked with heat process Se-Lin labels typed with a Se-Lin labeler. Approximately 50 per cent of the books are covered with plastic jackets. Non-print materials are labeled with a Dymo plastic-strip labeler and are equipped with cards and pockets whenever appropriate.

As groups of duplicate titles and individual titles are processed, they are sorted to building bins. When fifteen or twenty materials have

accumulated, they are boxed and sent out with a packing slip to the building libraries. Catalog cards are not always sent out directly with the materials. They may sometimes arrive as much as a week later. The school librarian uses her order slip as a temporary shelf list until the cards arrive for filing.

Accounting. All financial records are maintained by the center's bookkeeper. She keeps a running account for each school and notifies the buildings of their balance periodically.

Supervisor's Recommendations

1. Factors of necessary staff and supplies must be considered when setting up a center. Besides a supervisor and/or cataloger, adequate clerical staff must be provided.
2. If a district cannot afford a full time library supervisor to see to the processing center, perhaps a person with both library and audio-visual training could be placed in supervision to oversee a combined program of services.
3. The administrators of the district might invite citizens to participate in the feasibility investigation. When recommendations come from a base of informed citizens, they are more likely to find financial support for the project.

CHAPTER IV

COMPARISONS, ALTERNATIVES, AND GUIDELINES

The first section of this chapter will present a comparison of the operations of the district centers reported upon, with references to professional standards and pertinent literature. The second section will discuss alternatives to district centralized processing. A third section suggests guidelines in the form of questions to be answered by districts considering the establishment of centralized services.

I. COMPARISON OF OPERATIONS

Organization of Centers

The district's philosophy in regard to instructional materials and personnel as reflected in policy statements by district administrative officials is one definite determinant of the successful operation of centers (1). Statements expressed by all three supervisors gave evidence of firm administrative support.

Planning for Operations

From the standpoint of curriculum excellence, the major reason for establishing centers is to free the specialist in learning resource materials (librarian) for working with students and teachers in the individual buildings. If the community is aware of the role of a good program

of library services in the education of their children, support for such a program would likely be forthcoming.

Hence a major responsibility of the professional educators of a school system is to work with the citizens so that all concerned about the schooling of children develop a better understanding of the characteristics and nature of a good program of education An enlightened citizenry, with as extensive a base among the people as can be obtained and a competent, forward looking school staff working together cooperatively provide the best conditions for educational planning in a community (53:95).

For this to come about, the administrative officials of the district must be prepared to stimulate interest and concern by their example. Without administrative support, no such improvement programs can approach their potential. (Librarians must be fully conversant with standards and pertinent literature and take every opportunity to further this awareness in the administrative board.)

Impetus for the establishment of these three centers was supplied in three different ways: In the Walla Walla (Washington) Public Schools (hereafter referred to as District 1), plans by the district Instructional Materials Coordinator, including organization of elementary libraries and securing of elementary school librarians, were accepted by the administration and set up with federal funds.

In the Springfield (Oregon) Public Schools (hereafter referred to as District 2), needs expressed by principals and special education (gifted) personnel (together with a change of administration) resulted

in the appointment of a library consultant and the drafting and acceptance of a five-year plan.

In the Highline (Seattle, Washington) Public Schools (hereafter referred to as District 3), recommendations were made by a citizens' committee investigating solutions to problem areas of district operations.

Personnel

A definite need for any district considering centralized processing is the supervision of a professional staff member with a view of the entire district program (5, 22). This staff member usually has many other responsibilities in addition to the operation of the center. Different patterns of supervision are apparent even in the three districts sampled. Two districts include the department of library services as one section of the entire district learning resources operation; one district employs a Library Consultant and an Instructional Materials Consultant of equal status, both directly responsible to the administration.

Naturally, the size of the district served determines the needs for additional staff. But all supervisors interviewed agreed upon the needs for staff to perform the following duties: professional supervision of the center, acquisitions, classification and cataloging; sub-professional bookkeeping; and clerical checking, filing, catalog card reproduction, and physical processing. Smaller districts use personnel with combined duties; larger districts can use more specialized personnel.

Volume

For economy, the volume of materials processed must be considered in relation to cost of operating the center. A study of technical processing costs done in California in 1960 for all types of libraries reported that school librarians did not usually record statistics necessary to determine costs (43). However, a complete and careful cost analysis study done at the University of Denver Graduate School of Librarianship in 1965 for the University Library Technical Services Division set the cost of acquiring and processing one non-fiction title for circulation at \$4.33 (69). This study considered every possible expense: direct costs such as staff time spent in all phases of processing, and indirect costs such as building heating and maintenance, staff time spent in meetings, professional reading, etc. These costs, broken down, were as follows:

Total Time and Cost for Handling One Title (69:17)

	Hours	Min.	Sec.	Cost
Acquisitions		37	54	\$1.02
Cataloging		72	40	2.74
Mechanical Preparation		6	48	.15
Supplies (Machines, depreciation, etc.)				<u>.42</u>
Totals	1	57	22	\$4.33

The remainder of the report explained and justified the above figures.

It is not possible to compare different types of library operations, but this report does give a working model of one method of assessing operating expenses.

Since salaries compose the largest expense in any consideration of operating costs, it may be interesting to compare approximated salary costs with volume of materials processed for each of the three centers examined. Actual salaries will not be used; rather, average figures for school personnel in supervisory and clerical positions will be used. These figures were determined from several years of statistical reports by the U. S. Department of Health, Education, and Welfare (60, 61). Estimates are purposely somewhat on the conservative side. For purposes of this comparison, the following figures will be used: Supervisory salary, \$9,000; professional cataloger (should be similar to teacher with same years of experience), \$6,500; clerical help, \$4,000. For centers 1 and 3, only the salary of the supervisor of library services is considered, not the head of the combined library audio-visual operation.

The figures shown in Table I include only the approximate cost of salaries. They do not include cost of supplies or facilities, nor the cost of holding materials on the shelves awaiting processing. It must be remembered, however, in each case, the professional supervisor in each center holds responsibility for many activities in addition to the center. Obviously, to approach a higher degree of accuracy in these figures,

TABLE I

COMPARISON OF SALARY COSTS WITH VOLUME OF MATERIALS PROCESSED

Approximate Salary	No. of Items Processed	Cost Per Item
<u>Center 1</u>		
1 supervisor/cataloger		
\$ 9,000		
2 clerical		
<u>8,000</u>		
Total	4,500	\$3.77+
<u>Center 2</u>		
1 supervisor		
\$ 9,000		
1 cataloger		
6,500		
4 clerical		
16,000		
1 sub-prof. bookkeeper		
<u>5,000</u>		
Total	23,800	\$1.11+
<u>Center 3</u>		
1 supervisor		
\$ 9,000		
2-1/2 catalogers		
16,250		
12 clerical		
<u>48,000</u>		
Total	47,000	\$1.55+

the salary of the supervisor would have to be prorated to include only the amount of time spent conducting the business of the center. But for purposes of salaries to be considered in budgeting district funds, all of these positions would be considered in setting up centralized processing services for the first time. To complicate finances further, a district setting up a program of library services following a library supervisor's five-year plan (as recommended by AASL) would be also considering the budgeting of funds for librarians in previously unserved buildings.

From the roughly figured ratios above, the justification can be seen for the recommendations concerning volume of materials to be processed. For a center to be feasible, volume must run to 10,000 items; for economy, 20,000 (16). Darling's more recent higher estimate requires 20,000 for feasibility to 40,000 for economy (21).

Districts with smaller numbers of materials to be processed need to employ staff to cover all phases of the operation, which may come to be too expensive for district budgets. These districts, then, would need to explore the alternatives to a district center.

Procedures

Ordering. Districts 1 and 2 used typed order lists, while district 3 used multiple form orders. District 2 reported inadequacies in the list and order forms used, but decided not to revise until their venture into data processing begins. District 1 was reported to be still "at the

Utopian size" where orders could easily be handled by list. District 3 plans to investigate automation within the next several years.

Receiving. District 1 materials are checked by central stock-room personnel and rechecked by a library clerk. District 2 has made arrangements to do their own receiving and checking, informing the business office only if items are not correct. District 3 handles their own receiving, checking, and bookkeeping entirely. District 1 property stamps materials before placing on holding shelf; District 2 places them immediately on holding shelves; District 3 accessions and property stamps, inserts card and pocket plus Wilson cards when available, then places them on holding shelves to await cataloging.

Districts 1 and 2 allow librarians to choose first priority materials from among those on their assigned shelves. District 3 avoids this special treatment if possible.

Classification and cataloging. Districts 1 and 2 select a group of fifteen to twenty materials for each school in rotation. District 3 catalogs and processes multiple copies of titles for many schools first, then single copies. By this method, adherence to a rotation system could not be followed.

Districts 1 and 3 classify non-print materials by type and shelve them by accession number. District 2 classifies non-print by type and

shelves by Dewey number. A report on centralized technical processing presented to the 1965 NDEA Institute at the University of Oregon (19) stated that the Dewey system is now gaining favor, even though storage problems may arise. The accession number method, commonly used in the past, is discouraged by some as inadequate because of the lack of relationships indicated and no provision for duplicates.

Physical processing. All three districts provide complete processing for the buildings served. Librarians in the buildings need do nothing to the materials except check them against their own order records, open books properly, and file cards in the building catalog and shelf list.

Bookkeeping. District 1 relies upon the district bookkeeper to maintain financial records. Districts 2 and 3 provide a bookkeeping person in the center itself to keep financial records.

II. ALTERNATIVES TO DISTRICT-WIDE PROCESSING CENTERS

Districts wishing to release building librarians from the technical processing of materials may do well to initiate a feasibility study of centralizing services. Should it be determined that the district does not supply sufficient volume to justify setting up its own center, several alternatives offer themselves:

1. Maintain the status quo.
2. Use commercial services.
3. Contract with a larger unit for the service (38:35).

The first, and probably most undesirable possibility would be to continue present practices of allowing building librarians to process materials. If this decision were to be made, the individual librarian might begin a time-cost study for her own situation (36) in order to present factual information to administrators. As stated by Helen Welch:

Technical services sometimes seem to be the most difficult of areas to justify to those who must produce funds for library operations, whether the chief administrative officers of educational institutions or public library boards. Acquiring, cataloging, and preparing are really the most actual and factual of library operations and should be the easiest to justify and explain. . . . If we are to better our situations, we must know the facts ourselves and be able to justify them to others (65:442).

The term "commercial processing services" covers a range of services from the simplest provision of prepared catalog cards, through kits with catalog cards, borrower's cards and pockets, and labels, to custom cataloging with any degree of specificity desired by the individual library.

Library of Congress cards have been available since 1901; H. W. Wilson cards have been available since 1938 (67). The modern development and rapid increase in the number of firms offering these services began only around 1958. In an article written in 1964, Barbara Westby gave a directory of a dozen or so publishers and dealers offering

such services (66). Three years later she wrote that there were now about thirty companies in the United States and Canada advertising some form of cataloging and processing.

The factors involved in the rapid increase of processing companies are the same as those factors which are pressing libraries of all types to look for ways of relieving the backlog of unprocessed materials:

1. Increase in book and non-print materials and production.
2. More library funds provided by state and federal legislation.
3. Expanded budgets to meet expanded population.
4. New branch libraries and elementary and secondary school libraries.
5. Critical shortage of librarians, especially catalogers (67).

The cost of commercial services varies greatly, depending on what services are ordered. Beginning with packets of Wilson cards for 12¢ and Library Journal book processing kits at 29¢ per kit, the range continues through the possibilities from 60¢ to \$1.90 for standard cataloging. Cost of custom work is naturally higher and depends upon the specifications from the library (67).

There is also variation in the quality of work done. Not all users report satisfaction. Some new companies just starting business have not realized the complications of the task as yet. A reference chart of processing firms appearing in the November 1967 Instructor magazine lists some of the more well known and reliable companies.

Reputable firms are beginning to offer more services to libraries interested in improving their programs. Cataloging of non-print materials is being offered by more companies, and in the future management surveys and automation analysis services will probably be offered (67).

The variety of price ranges available with commercial services could provide for the needs of almost any district without its own processing center. Purchases can be made in several different ways to suit the desires of district business offices or legal obligations:

1. Simple placement of a minimum order of 25 to 50 books.
2. A bid to fill yearly budget needs.
3. An estimated price per volume bid.
4. A contract to provide x number of books at x cost.

Because of the number of options in price range available, Jean Badten, the Washington State Supervisor of Learning Resources Services, writes:

. . . for the moment, smaller districts are tending more and more to use commercial processing services and kits for materials when it is not economically feasible to set up a center. Frankly, I believe that as commercial services can be expanded that even many of the larger districts would find it much more economical to use commercial services. This is especially true as the companies add processing of nonbook materials to their list of services (9).

The third alternative open to districts without centers would be to investigate the possibilities of combining with others for regional service. "Regional school library processing centers appear to represent

a new trend in many areas. . . . Independent centers in small school systems can be neither economical nor effective" (21:64).

According to the Connor article in 1964, there were at that time three centralized processing centers operated by boards of cooperative educational services in New York State (16:1284). Such a service is now being set up in Washington State under an ESEA Title II Special Purpose grant. The White River, Carbonado, and Dieringer districts in Pierce County have set up a center under a cooperative arrangement to begin operations as soon as possible (9).

Arrangements between school and public libraries have been of some historical interest, and several examples of this arrangement can be found operating processing centers for public and school libraries with some success: Weld County (2) and Library Service Center of Eastern Ohio (3). Somewhat outdated but interesting examples of sample contracts for certain reciprocal arrangements are to be found in the appendices of Cecil and Heaps survey. One specific contract refers especially to the provision by the public library of the services of a cataloger for the junior high schools of Oklahoma City (14:323).

III. GUIDELINES

The foregoing information suggests questions that a district must consider when exploring the improvement of district library services.

Hopefully, a professional staff member will be delegated the responsibility to explore the possibilities and to make plans to be considered by district administrative officials.

Establishment of Feasibility

1. Do the librarians in our schools spend their time in activities designed to give the educational services we hope to provide for the students in our district? If not, how can more time be provided?
2. Is it possible to provide technical services in some other way than on the individual building level, so as to free the librarian for more curriculum work while still maintaining a well-organized collection of learning resources?
 - a. What is the volume of materials to be processed? Do we process anywhere in the feasible to economical range of from 20,000 to 40,000 items?
 - b. Or, could we find a commercial service offering the cataloging and processing we desire for a price we can pay?
 - c. Or, could we contract with an existing regional processing center?
 - d. Or, could we combine district library and audio-visual services using the same personnel and facilities, thereby effectively prorating the cost of service to each?
 - e. Or, could we establish a center, increasing our volume by cooperating with other districts and/or public libraries?

If this last option is chosen, and other districts and/or public libraries wish to share in cooperative services, legal arrangements would

likely be made. After these arrangements, the following questions would need to be answered as in the case of one district setting up its own service.

Planning for Implementation

1. What specific services will the center provide? Centralized ordering, classification and cataloging, and complete physical processing are often provided. Will audio-visuals be cataloged? Will there be an examination center for materials? A professional library? The answers here will help determine the answer to the following question.
2. What staff would be needed to operate the center efficiently? The center must be managed properly (administrator or supervisor), records must be kept (acquisitions clerk/bookkeeper), and materials ordered and processed (clerical help and cataloger). Staff functions may be combined in various ways.
3. What facilities and equipment are necessary? Are they available at a cost we can afford? Expert advice on the quality and performance abilities of equipment is available from the Library Technology Project, 50 East Huron Street, Chicago, Illinois.

Upon determination of the facilities and equipment judged necessary to carry on the services desired, the initial costs of the center can be determined.

4. What is the estimated cost of establishing the center? How can the funds be found? If not found, why not? Is a campaign of re-education concerning library services necessary?

Upon determining the number of staff members, the amount of salaries to be paid, and the cost of necessary supplies and operating expenses

in general, it is possible to calculate the cost of processing one item.

5. What is the unit cost? How does this compare with the cost of similar processing (plus delivery costs) done by a reputable commercial firm? More? Less? If less, then eventually, the initial investment in establishing the center would be worthwhile. However, it should be remembered that centralized service will generally not cost less than it does with present methods, "but there is expected to be more and better service for the same expenditure" (48:172).

Planning for Operation

If the administration and school board decide to accept the proposal for centralizing services, most of the pre-planning is already done and can become functional. If the previous questions have been answered fully, only procedural questions are left to be resolved.

1. Who shall be responsible for final decisions on procedural matters?
2. What is our selection policy? How often do we order? How are orders placed? Do we need multiple-form orders?
3. What cataloging policies shall be adopted for the center?
Can all concerned reach agreement on uniform procedures so as to insure efficiency?
4. How can we insure the most efficient flow of work and materials in the center?
5. Can efficient arrangements be made for delivery of processed materials?
6. Have we provided for continuous evaluation of building needs and center operations?

CHAPTER V

SUMMARY

School library service personnel have been feeling threefold pressures: (1) the growing need and desire to assist students, teachers, and staff in the use of learning resources; (2) the need for increasing evaluation in selecting the best materials to meet curriculum needs from the ever-growing quantity available; and (3) the continuing need to maintain a well-organized collection of resource materials. In an effort to allow the librarian more time for easing the first two of these pressures, many school districts have tried to find new methods of organizing collections of school library materials.

It has been the purpose of this study to explore the centralizing of district technical processing services for learning resource materials. In the course of investigation, several areas came to light in which further study would be interesting and helpful. A short list of possible studies follows:

1. A follow-up study showing whether or not there has been an extension of service and help in curriculum planning by building librarians after centralized services have been put into operation.

2. More sophisticated cost analysis of individual school district processing centers, designed with the help of professional consultants, or patterned after the Wynar study (69) or the Welch recommendations (65).
3. Analysis of work flow in individual centers and comparison of different methods of handling the same operation; for example, processing for each school in rotation vs. processing multiple copies.
4. A study of the range of possibilities which could be effected on centralized services by the use of electronic data processing.
5. A study of the efficiency and desirability of establishing more regional centers, perhaps even considering the effect the proposed state library network might have on the development of larger area technical processing centers.

A pursuit of any of the above studies could provide supplementary information to that given in this report.

In this study of centralized processing, various points have been examined. The advantages of centralized service have been presented, and a brief historical sketch has traced some of the patterns of development which can be seen in current methods of operation. Also stated were some conditions requisite to the success of such a venture. Further, the discussion included information on planning and organization of three

processing centers and a description of specific procedures used.

The reports of the three district centers were intended to be illustrative. Certainly every district reflects its own individuality, but the similarities found in the examination of these centers serve to point out basic considerations that all districts would no doubt take into account. A brief comparison of the reports showed various ways of meeting some individual requirements, and references to the literature pointed out specific areas of consideration in planning a new center.

Finally, a series of questions was posed. These questions were aimed at providing evaluation of the possibilities open to a school district wishing to provide central services for school libraries. It is hoped that the answers found for these questions will allow a district to make a reasoned decision in which direction to proceed.

Because of the need for librarians to give service to staff and students, methods of allowing for specialized assistance in the technical processing of materials must be found. Whether the decision is made to organize a center at the district level, the regional level, or to buy the service from a commercial firm, the school librarian must be freed for the work which today's curriculum demands. Unquestionable emphasis is offered in this statement by Richard Darling:

. . . I want you to remember that we know of no cost accountant who is able to put a dollar value on the increased academic services which a librarian can provide to students, teachers, and staff members when he has the available time (17:9).

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APPENDICES

APPENDIX A

SPRINGFIELD (OREGON) PUBLIC SCHOOLS

SAMPLE ORDER FORM

Class.no. ^{ESEA} 398.24			Author Anne J. White ^{no}		
			Title Aesop's Fables		
Br	CC	Cen	Publ. Random	Yr. 1964	Price 3.24
DG	Go ✓	Lea	Grd. level (3-5)	Review source & date WCC 65	
Lee	Ma	Mof	Date request.	Teacher requesting	
Moh	MtV	Pa	Firm	Cor. price 2.39	W. card
Th	Wa	Yo	Aesop.		

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APPENDIX B

HIGHLINE (SEATTLE, WASHINGTON) PUBLIC SCHOOLS

SAMPLE ORDER FORM

COPIES _____ CARDS _____ LC _____ DATE _____

AUTHOR _____

TITLE _____

PUBLISHER _____ PUB. DATE _____

SPECIAL ED. _____ SOURCE _____

LIST PRICE _____

AL	CP	LB	MAY	PKS	SUN
BEV	CV	LV	MID	RH	V.V
BP	DM	MCM	MV	SC	WAS
BL	GH	MAD	NP	SHW	WCH
BH	HV	MH	NH	SH	WCP
CED	HT	MAR	NS	ST	WDS

PREBOUND

Elementary

COPIES _____ CARDS _____ LC _____ DATE _____

AUTHOR _____

TITLE _____

PUBLISHER _____ PUB. DATE _____

SPECIAL ED. _____ SOURCE _____

LIST PRICE _____

CAS	SEA	EV
CHIN	SET	GLA
OLY	SYL	HH
PAC	GLN	MTR
PS		TYEE
RUTH	CTR	

PREBOUND

Secondary