AN EVALUATION OF THE MONTANA DISTRIBUTIVE EDUCATION MATERIALS LABORATORY

by

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A professional paper submitted in partial fulfillment of the requirements for the degree of
MASTER OF SCIENCE in BUSINESS EDUCATION

Approved:

[Signatures]

Chairperson, Graduate Committee

Head, Major Department

Graduate Dean

MONTANA STATE UNIVERSITY
Bozeman, Montana
June, 1977
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The researcher would also like to thank Mr. Ron Newville, the Administrator of the Montana Distributive Education Materials Laboratory, for his openness to and support of the evaluation of the Laboratory.

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ABSTRACT

Distributive Education covers a wide area of instruction and it is difficult for any one teacher-coordinator to find, preview, select, purchase, sort and categorize the wealth of information available in this field. To help alleviate this problem the Montana D. E. Materials Laboratory was established in 1972 in order to promote a unified effort to consolidate secondary and post-secondary materials in one place and from there to disseminate information to teachers upon request. It is presently located at Bozeman Senior High School in Bozeman, Montana.

The problem associated with this study was that since the Laboratory's beginning no formal evaluation of the D. E. Materials Lab had been done and questions arose pertaining to the Lab's objectives, types of material being purchased, frequency of use of the Laboratory, dissemination of material, location of the Lab, additional services offered, the D. E. Materials Catalog, and the general feeling of D. E. teacher-coordinators toward the Lab.

In order to receive the necessary data for evaluation of the Lab, a questionnaire was sent to each of the 32 teacher-coordinators in Distributive Education who were teaching in Montana during the 1976-77 school year. This represented 18 secondary and 6 post-secondary programs. Also the past records of the Lab from September 16, 1976 to April 16, 1977 were examined and tabulated to gather data concerning which materials were being sent out from the Lab.

All of the questionnaires were returned and all but one were used in presenting the results of the study. It was found that the Lab was meeting its objectives. While there was room for improvement in some areas, the vast majority of coordinators felt it was doing a good job and appreciated the resources and help made available through the Lab.

Some of the major recommendations made were to send out monthly up-dates of new acquisitions for the Lab, to use standard criteria for evaluating materials for purchase, to send out post cards concerning delay in sending out requested material, to purchase more material in a non-print form with more emphasis on the post-secondary level, to receive more funding for the Lab, and to formally evaluate the Lab at least once every three years.
Chapter I
INTRODUCTION

Distributive Education is a program of instruction in marketing, merchandising, and management. It serves to meet the educational needs of individuals in relation to distributive careers. Within the field of marketing and distribution the U. S. Office of Education has defined the following areas of occupational instruction:

Advertising services; apparel and accessories; automotive; finance and credit; floristry; food distribution; food service; general merchandise; hardware and building materials; farm and garden supplies and equipment; home furnishings; hotel and lodging; industrial marketing; insurance; international trade; personal services; petroleum; real estate; recreation and tourism; transportation; retail trade (other); and wholesale trade (other). (Harms, 1972, p. 340)

Distributive Education covers a wide area of instruction. The topics studied within each program vary along with the emphasis and time spent on them according to the needs and interests of the individual student, community and school. For the teacher-coordinator this presents a very real problem of having enough and a variety of teaching material from different sources on hand to meet this need. It becomes very costly and time consuming for each individual teacher-coordinator to find, preview, select, purchase, sort, and categorize the wealth of information available in Distributive
Education. To help solve this problem there has been a unified effort in various states and regions around the country to consolidate teaching materials in one place and from there to disseminate information to teachers upon request.

In 1972 a Distributive Education Materials Laboratory was established in Montana intended for use by all Distributive Education Teacher-Coordinators in the state, on all levels of education. It is housed at Bozeman Senior High School in Bozeman, Montana under the direction of Mr. Ron Newville, D. E. Teacher-Coordinator at the high school.

Statement of the Problem

This study was undertaken to evaluate the Distributive Education Materials Laboratory to determine how well the objectives of the Laboratory were being met. The objectives stated in the project proposal are as follows:

1. To provide instructors with materials that they would not otherwise have available to them, because of budget problems.

2. To provide students with these same materials for better learning conditions within their classrooms, thus widening their exposure to all phases of vocational education and in some specific areas.

3. To assure that repetition (duplication) does not exist in some materials which are used but once during the school year, and that they are not stored for the remainder of the time. Some of these materials are very expensive and can be used in the classroom but once a year.
In light of these objectives, the answers to these following questions were sought:

1. Do Distributive Education Teacher-Coordinators in the state of Montana feel that the Laboratory is meeting their needs and the needs of their students?

2. How often is the Laboratory being used?

3. Would D. E. teachers like more input into what is being selected and purchased for the Laboratory?

4. Is the system of receiving and sending out materials a good one?

5. Should there be an extension of topical headings in the Laboratory?

6. Is duplicate material needed in some areas?

In addition, some other issues have arisen over the past four years concerning other aspects of the Laboratory. These issues led to the following questions:

1. Should the Laboratory be housed in another location?

2. Should there be a combined Office Education and Distributive Education Materials Laboratory?

3. Is revision of the format and contents of the catalog needed?

4. What, if any, additional services should the Distributive Education Materials Laboratory perform?

5. Should time be set aside for discussion of the D. E. Materials Lab at the Fall D. E. Teacher-Coordinators' meeting?
Need for the Study

Throughout the four years of the operation of the Distributive Education Materials Laboratory, there has been no formal evaluation of any kind done on the Laboratory. The number of students and teachers in the field of Distributive Education has increased throughout this time and current trends seem to indicate that enrollment will keep increasing. With this increase comes along an increased need for more up-to-date material and instructional aids in Distributive Education. Therefore, for future planning and organization, the D. E. Materials Laboratory needs to be evaluated. Also, the State Department of Public Instruction has appropriated a total of approximately $17,000 in state funds and an evaluation of the laboratory for future funding purposes is needed. Mr. Ross Wagner, former D. E. State Supervisor, and Mrs. Barbara Robertson, present D. E. State Supervisor, have expressed that a formal evaluation of the D. E. Materials Laboratory needs to be completed at this time.

Limitations of the Study

The research of this study was limited to obtaining responses from Montana's Distributive Education Teacher-Coordinators teaching on the secondary and post-secondary levels during the 1976-77 school year.
The overall scope of this study was limited due to the lack of research on material laboratories similar to the one in Montana.

Analyses were limited to the questionnaires that were returned by Montana Distributive Education Teacher-Coordinators.

**Definition of Terms**

To assist the reader with the terminology used in this study, the following definition of terms is presented. These definitions are commonly accepted and have been drawn from numerous sources studied by the researcher.

**Addendum**

An addendum is a supplement to a Project Proposal for a Vocational Education Program—specifically in this study the Distributive Education Program at Bozeman Senior High School.

**Audio-visual**

Audio-visual is all material presented in non-print form. It includes transparencies, filmstrips, films, cassettes, tapes, and slides.

**Distributive Education**

Distributive Education is a program of vocational instruction designed to prepare students for occupations and/or careers in the field of marketing and distribution.

**Distributive Education Materials Laboratory**

Distributive Education Materials Laboratory is a type of library housing printed and audio-visual materials in distributive education.
Distributive Education Teacher-Coordinator

Distributive Education Teacher-Coordinator is a person who conducts the daily classroom instruction and co-ordinates student work experience in a distributive education program.

Dissemination

Dissemination is the act of spreading information. It deals with the sending, receiving, and returning of instructional material.

Evaluation

Evaluation is examining and determining the value of a particular item or establishment.

Media

Media is all printed and audio-visual material.

Post-Secondary

Post-secondary is post high school education. It includes instruction received at vocational technical centers and at community colleges.

Printed Material

Printed material is all material presented in print form. It includes texts, curriculum guidelines, workbooks, manuals, instructional units, and pamphlets.

Project Proposal

Project proposal is an explanation of a vocational program including general information, objectives of a program, course information, student information, instructional personnel information, and description of the coop part of the program. A budgetary request is also outlined. The proposal is submitted to the State of Montana Office of Superintendent of Public Instruction for approval.

Secondary

Secondary is the high school level of education.
Chapter II

REVIEW OF LITERATURE

Introduction

A review of literature was conducted to further the understanding of materials laboratories and to examine evaluation instruments of material laboratories in other states. After researching materials in the Montana State University Library and other sources, sixteen letters were written to distributive education material labs and curriculum labs similar to Montana's D. E. Materials Laboratory from around the country. The letter explained the research involved and asked about evaluations completed on the labs and requested any additional information that might be helpful in this project. A copy of the letter is included in Appendix A. Of those who answered the letter, the only state where a formal evaluation was completed of a curriculum lab was Kentucky in 1972. However, no forms or information about the evaluation was available.

Mr. Robert Luter, Instructional Materials Coordinator at the University of Texas at Austin explained that their center "is under constant evaluation--both internally and externally. An evaluation instrument of the type you want has never been used for this center. To my knowledge, there
Background Information of the D. E. Materials Lab

In an interview with Ron Newville, Director of the Lab, he explained how the D. E. Materials Laboratory was first started. Before he came to teach at Bozeman Senior High School, he taught in small schools where money for teaching materials was very limited. When Ron Newville started teaching at Bozeman, he was aware of the needs of teachers in smaller districts and realized that it would be to their benefit as well as for the benefit of teachers from larger districts to have a central borrowing place where instructional materials would be available free of charge. He had already started a small collection of material which he had accumulated over the years and felt it would be advantageous to pool resources so that teachers and students of Distributive Education would be able to share a wide range of materials. He submitted an addendum to the Project Proposal for Vocational Education for the Distributive Education program at Bozeman for the school year of 1972-73 and received state funding of $2500. Some material was donated; some was purchased and the Distributive Education Materials Laboratory slowly but steadily was established. From 1973 to the present funding was received through the State Superintendent's Office of Public Instruction and it is funded as a separate
program rather than as an addendum to the D. E. program at Bozeman Senior High School. The approximate figures for funding are as follows:

<table>
<thead>
<tr>
<th>Year</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>1972-73</td>
<td>$2,500</td>
</tr>
<tr>
<td>1973-74</td>
<td>3,000</td>
</tr>
<tr>
<td>1974-75</td>
<td>3,500</td>
</tr>
<tr>
<td>1975-76</td>
<td>4,000</td>
</tr>
<tr>
<td>1976-77</td>
<td>4,400</td>
</tr>
<tr>
<td>Total</td>
<td>$17,400</td>
</tr>
</tbody>
</table>

During the first two years as acting director of the lab, Ron Newville did not receive a salary. From 1974 to the present his salary allotment as director is \( \frac{1}{9} \) of his total contract not including extra-curricular pay for DECA. Besides payment of Ron Newville's salary as director, funds are also used to update material in the laboratory, to obtain new material, to pay for printing and mailing of the catalog, and for postage of material being sent to and from the laboratory.

Ron Newville did make the additional comment that while the laboratory has been successful over the years, it still can be used more effectively and that there is a lack of use of printed material which can be a valuable resource. However, because the coordinators seem to want more audio-visual material, he is directing new purchases in that area to meet the needs of the users of the laboratory.
The Distributive Education Materials Laboratory exists as a help to teachers in preparing lessons to be taught and also as a source of visual media that can be presented in the classroom. The Laboratory has been set up to respond to the ever-increasing role that media plays in education today.

As the nature of human communication has changed so, too, has the function of education. When information was stored and transmitted almost exclusively through written word, a student who possessed print literacy—the ability to read and write—could properly be said to have mastered the tools of communication. But the new media, which store and transmit information in a wide variety of forms, have changed the very concept of what it means to be "educated". In the contemporary world, a well-educated person must have "media literacy"—the ability to make use of most or all of the various forms of communication and information storage and dissemination that exist. Obviously, this means that the job of the school is to familiarize students not only with the printed word, but with the whole range of communications media.

(Counsins, 1976, p. 4)

There has been discussion in the past that multimedia is just a passing phenomena, but the researcher's study tends to contradict this.

Much of the lively discussion about the concept of multimedia being a fad is just pure nonsense. Neither is the idea of multi-media futuristic in scope. The usage of multi-media is very much present in our society. The totality of the realm in our everyday lives, which multi-media encompasses, is very broadening and far-reaching. In essence, multi-media is here to stay.

(Swarm, 1974, p. 3)
Media enables students to see "real-life" situations and gives them an opportunity to project themselves into different roles. It also gives concrete examples that a student can actually see or hear. For instance, the concepts of display can be made clearer if slides of different types of actual display are shown. A specialist in Distributive Education explains:

The rationale for using media in teaching rests primarily on a research base; most learning tends to be vicarious in nature and media has been found to be a "realistic bridge" between vicarious and "real life" experiences. It can generally be concluded that the more human senses involved in the learning process, the greater the retention of that which is to be learned.

(Lynch, 1974, p. 3)

It is not enough that media just exist; the next step is to actually use media in the classroom. Swarm further explains this in her comment "Learning via the multi-media concept can be a fascinating and rewarding experience when all the varied types of available media are employed and utilized." (Swarm, 1974, p. 6)

Functions of a Media Program

The Distributive Education Materials Laboratory, while not solely a media program, is involved in many of the functions of a media program. There are four basic functions involved: design, consultation, information, and administration. (Pennsylvania State Department of Education, 1975, p. 2)
The design function is mainly production oriented. Production is not something the Montana D. E. Materials Lab concentrates on now, but it can be a consideration for the future. The Lab, working together with coordinators or Distributive Education college students, could foreseeably produce material to be placed in the Laboratory. At present there is very little Montana-produced materials available in the Lab and some regional-type material could give a better picture of marketing and distribution in the northwestern section of the United States. The D. E. Labs in Texas and in Ohio do produce a major portion of their own material. In his interview, Ron Newville indicated he would welcome Montana-made productions but it should be a composite picture of all programs in the state so that different programs in the state would not feel slighted.

Activities involved in the consultation function include planning and providing instruction in the use of the media center and its resources. In the introduction to the Catalog of Materials in Montana's D. E. Lab, Ron Newville does explain how to obtain materials from the Lab. This procedure will be explained later. There are also instruction sheets or booklets which accompany some of the individual materials. For example, the teaching unit on consumer defense mechanisms
published by J. C. Penny Co., Inc. includes instructions to the teacher on how to effectively use the unit. Another activity under the consultation function is to develop user understanding of the strengths and weaknesses of various presentation forms. At coordinator meetings and conferences teachers many times discuss different materials available through the library. Ron Newville explained further that he will and does answer questions teachers may have about certain material through phone conversations too.

The third function, information, involves identifying users' needs for information, promoting knowledge of the variety of resources available, and collecting, organizing and supplying information and materials. Identifying users' needs for the D. E. Lab is done by an informal basis and usually by word-of-mouth. Up-date sheets to the catalog are sent out to every D. E. teacher-coordinator in the state and the D. E. Materials Lab is responsible for collecting, organizing materials and supplying information about the contents of the Lab.

The administrative function is concerned with the ways and means by which program goals and priorities are achieved. It involves these activities:
a) supervising media personnel—Ron Newville makes a point to try and utilize the students in his D. E. program in helping with the Laboratory and in disseminating materials. Also the Advisory Board, which selects materials for purchase, reports their findings to Ron Newville before any purchases are made. The Advisory Board consists of the teacher-educator for Distributive Education and approximately three to five Distributive Education students at Montana State University.

b) establishing access and delivery systems—The library is open for use during school days and delivery is generally accomplished through the mail.

c) developing budgets to support the program of services—Ron Newville does develop the budget and submits it to the Office of Superintendent of Public Instruction for approval.

Criteria for Selection of Instructional Materials

Selection of materials is a very important aspect of a materials laboratory for print as well as non-print materials. Some general criteria for the selection of instructional materials in all subjects are:
1. The scope and sequence of the material should be consistent with the valid findings of recent research and the curricular objectives of districts and state.

2. Vocabulary...and concept levels should be suitable for the age group which will use the material.

3. The content of each instructional material should be accurate, valid, and up-to-date.

4. Each program should either contain appropriate suggestions for teachers or be accompanied by a separate teacher's manual.

5. Suggestion for study included in the program should not only promote an understanding of the materials presented but also should stimulate original thinking.

6. Textbooks and other instructional material used in the schools should present accurate accounts of the contributions of various ethnic groups and accurate portrayals of the role of women.

7. Instructional materials should offer...reinforcement of the concept of career education.

8. Publishers and manufacturers should submit with each program...a statement outlining the publisher's or manufacturer's policies concerning use of illustrations and other...materials.

(Florida State Dept. of Education, 1975, pp. 4-5)

Another aspect to consider is time and cost. "Are the time and cost requirements for establishing and operating the instructional system acceptable to those involved and reasonable in terms of expected outcomes for learners." (Niedermeyer, 1974, p. 7)
In another study some specific guidelines were given for different types of material. Some of these recommendations are as follows:

Considerations in making choices for books:
1. The collection provides for subject, interest, and reference coverage, multiple reading and maturity levels in each subject areas, and representation of varying points of view.

2. Titles are selected on the basis of such established elements of evaluation as appeal and value for users, accuracy, currency, style, quality of format and instructional design.

Considerations in making choices of pamphlets:
1. The collection includes state, national, and international government documents, which represent important sources of information.

2. Items in the collection are useful, current, and varied in points of view.

3. Persons or organizations responsible for the publication are clearly identified on items included in the collection.

Considerations in making choices of filmstrips, sound and silent:
1. Filmstrips meet accepted criteria for accuracy and scope of content, organization, and technical qualities. In addition, they have user appeal and are appropriate in treatment for the intended use, i.e., self-directed use or teacher presentation.

2. Sound filmstrips selected for the collection have appropriate relationships between visual and auditory content.

3. Packaging of the filmstrip and related material is convenient for effective use and storage.
Considerations in making choices of slides and transparencies:
1. Slides and transparencies are evaluated carefully for accuracy and technical qualities including color, mounting, and (in the case of art slides) fidelity to the original. Legibility for the viewer is essential.

2. High selectivity is exercised in the purchase of sets of transparency masters.

3. Locally produced slides and transparencies are added to the collection when they meet criteria for quality and need.

4. Appropriate storage for single slides and sets of slides is provided.

Considerations in making choices of films:
1. Materials selected meet appropriate standards in projected image quality in relation to size of intended audience.

2. Selection has taken into consideration content areas.

3. 8mm films produced by students and staff are incorporated in the collection on the basis of quality and need.
(Pennsylvania State Dept. of Education, 1975, pp. 45-51)

New materials for the Distributive Education Materials Laboratory are selected by an Advisory Board of under-graduate and graduate students of Distributive Education and the teacher-educator for D. E. at Montana State University. Practically, however, this does not always happen. It is difficult to arrange a meeting time for an advisory board to come together and preview films and other materials particularly
because of the many long hours involved in the process. For the 1975-76 school year, the researcher was chosen to be in charge of previewing materials and suggesting purchases. Many times the researcher would preview by herself because of lack of interest or lack of time of other students. However, no formal guideline was followed at that time. It would have been helpful to have a thorough set of guidelines to follow in evaluating materials. After previewing materials the researcher did report to Dr. Norm Millikin, Teacher-Educator of D. E. at MSU and to Ron Newville who made the final purchase decision. For the 1976-77 school year a D. E. graduate student, Mr. James McCabe, was responsible for making recommendations for purchase and he faced the same difficulties. A standard evaluation form may be helpful in this type of situation. Portland (Oregon) Public Schools Instructional Media Department developed the form on the following page in order to standardize appraisals of instructional materials being considered for purchase. (Brown, 1972, pp. 172-73)

Some material for the D. E. Materials Lab is purchased directly through recommendation by teacher-coordinators in the field and their suggestions and ideas are encouraged. However, teacher involvement is limited as one author explained: "Teacher-coordinators of distributive education
<table>
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<th>A.</th>
<th>Principal Uses</th>
<th>Lesser Uses</th>
<th>Leave Blank if Not Applicable</th>
<th>Numerals May Be Used More Than Once</th>
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<tbody>
<tr>
<td>1.</td>
<td>Provides factual information</td>
<td>Skill-building</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>Introduces topic or problem</td>
<td>Develops desirable attitudes and appreciation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>Culminating activity</td>
<td>Other</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>Useful for individual study</td>
<td></td>
<td></td>
<td></td>
</tr>
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B. Suggest, if possible, specific areas or units for which this material could be useful.

C. Circle grade-levels at which this material is appropriate: K 1 2 3 4 5 6 7 8 9 10 11 12 Col. Teacher Ed

D. Will this material become dated in near future? Yes No

E. Rank material according to indicated scale: Please circle the number which best describes, in your judgment, the appropriate rating for this material.

1. Correlation to Curriculum

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<th>Directly related</th>
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2. Content organization

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<th>Poor</th>
<th>Excellent</th>
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3. Content scope

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<th>Well selected</th>
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<td>1 2 3 4 5 6</td>
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</tr>
</tbody>
</table>

4. Potential for pupil interest and involvement

<table>
<thead>
<tr>
<th>Low</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
</tbody>
</table>

5. Pupil comprehension

<table>
<thead>
<tr>
<th>Low</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6</td>
<td></td>
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</tbody>
</table>

F. Technical quality:

<table>
<thead>
<tr>
<th>Sound</th>
<th>Photography</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
</tbody>
</table>

G. Overall rating:

<table>
<thead>
<tr>
<th>Poor</th>
<th>Fair</th>
<th>Good</th>
<th>Very Good</th>
<th>Excellent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

H. Utilization:

1. If you were teaching the subject at the grade-level indicated, would you use this? Yes No

2. Do you think other teachers would use this material? Yes No

3. Do you recommend purchase? Yes No Urgent

I. Comments:

Name of Evaluator

Date of Evaluation

Audiovisual Section—Educational Media Dept.

School

Position

Portland Public Schools—Portland, Oregon
have predetermined schedules for teaching and coordinating. Finding enough time to examine existing publications and materials that would be helpful to their program is usually impossible." (Bennett, 1975, p. 22) Some purchases are also made to replace worn or irreparable material. This leads to the next section discussing the evaluation, maintenance, and storing of material.

**Evaluation, Maintenance, and Storing of Material**

Evaluation is done not just for material that is to be purchased but also for existing material. Material can become outdated quickly. Also, student interest in particular subjects can change from year to year. The Guidelines for Media Service Programs, prepared by the Pennsylvania State Department of Education, explain that "The process of examining and evaluating materials...is continuous and systematic. Materials and equipment within existing collections are monitored and examined continuously in order to replace worn items and to withdraw out-of-date and inappropriate items." (1975, p. 40) To support this further, guidelines set forth by the American Library Association state that:

The conservation of materials, as well as the elimination of those which are obsolete, should be developed as part of ongoing procedures. The materials in the collection should be examined regularly to eliminate obsolete items, unnecessary duplicates, and worn-out
materials. Prompt attention must be given to damaged materials so that repairs and replacement (including rebinding of printed materials or replacement of portions of projected or recorded materials) are handled systematically, along with prompt action to replace important items, including those discovered to be missing.

(1972, p. 11)

In the Distributive Education Materials Laboratory there is no formal evaluation done of existing materials but an inventory is taken three times a year. At the end of the school year necessary repairs and replacements are made. Teacher-coordinators sometimes send a comment along when they are returning material if it needs to be repaired. Splicing of film and taping of printed material is done by Ron Newville, but it is difficult to keep on top of all the repairs that need to be done, especially if those using the items do not send along comments about them.

The curriculum laboratory at Rutgers State University in New Jersey, as a part of their on-going evaluation, uses the form on the following page which is included along with any material that is sent out from the laboratory. (Law, 1975, p. 14b)

How material in a laboratory is stored contributes to the maintenance of the material itself. The system that is used should be orderly, understandable, and convenient for use. Labeling and numbering processes are recommended for organizational
Dear ____________________________

Enclosed are materials that have been carefully prepared by the Curriculum Laboratory Staff in compliance with your request.

Your evaluation of the service and materials provided are vitally important to the improvement of our laboratory.

PLEASE COMPLETE AND RETURN THIS FORM IN THE ENCLOSED SELF-ADDRESSED ENVELOPE.

Consider the entire set of materials received in response to the following items:

1. The amount of material received was adequate__ inadequate__ too extensive__
2. The material arrived on time__ too late__
3. The materials received indicate that my specific need for information was understood__ misunderstood__

Consider individual materials received:

<table>
<thead>
<tr>
<th>No.</th>
<th>Title</th>
<th>Relevant</th>
<th>Not Relevant</th>
<th>Up To Date</th>
<th>Outdated</th>
<th>Useful As Is</th>
<th>Needs Some Modification</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

Please use the reverse side of this evaluation for further commentary. Your cooperation is appreciated.
purposes. In an interview with Paul Marsh, media specialist at Montana State University, he suggested that printed material be stored separately from non-print material. The book, *Administering Educational Media*, recommends that books be stored in open shelves, films in open racks, and single film strips in drawers, and filmstrips with accompanying tapes in fiber cases, and slides in standard cartridges. (Brown, 1972, pp. 187-89) Mr. Marsh also suggested that when purchasing materials, the D. E. Materials Lab should specify that it would like to purchase the right to copy the original or "right of re-recording." It usually costs between $3 and $4. In this way cassettes, VTR tapes, and reel-to-reel tapes could be re-taped and the Lab could send out the copy and keep the original in the Laboratory. It is just too easy to erase tapes and if by accident the original is erased, the Laboratory would lose it unless it was purchased all over again. On the purchase order the Lab would specify that it would like the right to copy, but it must explain the reasons why and state the fact that only 1 copy would be in circulation so not to violate copyright laws.

The materials for the D. E. Materials Laboratory are all housed together on open shelves. It is supposed that the contents of the Laboratory are still small enough to warrant
this. They are arranged in subject categories with labels and numbers assigned. Ron Newville, being the principal person in charge of handling the material of the lab seems satisfied with this arrangement.

**Cataloging**

Cataloging is a time-consuming and tedious job, but, nevertheless, it is an important component of an efficient instructional material system.

The basic purpose of cataloging is to facilitate matching media with expressed needs and purposes of users. To accomplish this, it is essential to (1) anticipate the most likely needs and purposes of persons who consult catalogs, (2) develop catalog card sets indicating assigned subject, title, author or other appropriate headings as well as essential technical data about each item, and (3) provide, if feasible, further data on item content and its possible contributions to the achievement of specific instructional objectives.

(Brown, 1972, p. 181)

The association for Educational Communications and Technology suggests that the following data be supplied when cataloging audiovisual material: title, medium, edition, producer-sponsor-releasing agent, date of release, physical descriptions, series, educational level and/or special audience, notes (including summary and contents and classification numbers.) (Brown, 1972, p. 184)
There are generally two types of catalogs—bound catalogs (book-bound or looseleaf) and card catalogs. Regardless of the type, any suitable catalog of instructional materials to be distributed to off-the-premises users should be:

1. reasonably economical to produce and to revise,

2. readily accessible to users,

3. sufficiently informative as to the availability, content, characteristics, and applications of media described.

(Brown, 1972, p. 185)

A catalog of the D. E. Materials Lab is available free of charge which gives a listing of material contained in the Laboratory along with a short description of each listing, the original source of the material, and a reference number which facilitates ordering and categorizing. An example of an entry of the catalog is as follows:

18.020 - The Employment Interview
This set of 36 full-color slides with cassette sound serves as an educational tool to teach the basic principles of applying for a job and participating in an employment interview.
SOURCE: Milady Publishing Corp.
3839 White Plains Rd.
Bronx, N. Y. 10467

(Newville, 1975, p. 34)
The catalog is organized into the following 30 areas of instruction:

Advertising  Mathematics
Business Organization  Personal Development
Buying  Pricing
Communications  Projects
Consumer Education  Public Relations
Curriculum Guidelines  Salesmanship
Distribution  Sales Promotion
Ecology  Service Stations
Economics  Transportation
Franchising  Warehousing
Introduction to DE  Wholesaling
Investments  Credit and Collections
Job Activities  Equipment
Management  Fashions
Marketing  Resource Materials

The catalog is soft cover and bound by a flexible plastic binding to facilitate mailing. As new materials are added to the inventory, up-to-date sheets are sent to all teacher-coordinators in D. E. at the beginning of each school year. The sheets are not pre-punched but can be placed inside the catalog cover. A new catalog is expected to be printed during 1977. Expected printing cost is between $400 and $500.

**Dissemination**

Policies and procedures for dissemination are necessary for the benefit of the users of materials from the Laboratory and also as a means of control over loss and scheduling purposes.
Control of materials requires established procedures for checking them in and out of the media center and for providing information about their whereabouts while they are in use. Length of time for loans is determined by the size of the collection in relation to the number of users and the nature of their demands. Ideally, there should be as few restrictions as possible on usage. Practically, however, some restrictions must be made to ensure more equal access to materials for all users. Whatever restrictions are indicated in rules and regulations should be explained to the media center's clientele to encourage their understanding and cooperation.

(Brown, 1972, p. 192)

The New Jersey Curriculum Management Center (NJCMC) at Rutger's University operates as a dissemination center for curriculum and career information in the northeastern states and in New Jersey. Because of the volume of material that goes through this center, a system was set up for mailing of materials to assure the continuing quality of service and to allow for accurate reporting of CMC dissemination services. Individual request for materials may come by mail, phone, or through personal contacts. These are logged on the CMC's service request forms and dated. The person in charge of dissemination then obtains the material requested and may also write an individual letter to accompany the materials. Also as mentioned in another section, a service assessment form is included in the mailing.
From the service request forms it is the responsibility of the curriculum specialist in charge of mailing to develop reports on document dissemination. An example of the service request form used is on the following page. (Law, 1975, p. 14a)

To obtain use of materials from the D. E. Materials Lab in Montana, the teacher-coordinator contacts Ron Newville at Bozeman Senior High School either by phone or mail. Self-addressed cards have been given to each teacher-coordinator to facilitate requests by mail. An example of this order form is as follows:

D. E. MATERIALS LAB. - ORDER FORM

<table>
<thead>
<tr>
<th>Catalog Item Number</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Title of Unit</td>
<td></td>
</tr>
<tr>
<td>Date Requested</td>
<td></td>
</tr>
<tr>
<td>Date Shipped</td>
<td></td>
</tr>
<tr>
<td>Date Returned</td>
<td></td>
</tr>
</tbody>
</table>
CURRICULUM LABORATORY
DEPARTMENT OF VOCATIONAL-TECHNICAL EDUCATION
RUTGERS - THE STATE UNIVERSITY

Date Received

Name ____________________________ Phone ____________________________
Address ____________________________ School ____________________________
Position ______________________________________________________
Service Requested _________________________________________________

Service Provided:

<table>
<thead>
<tr>
<th>Documents</th>
<th>Code</th>
<th>MF</th>
<th>HC</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Other (Specify):

________________________________________
________________________________________
________________________________________

Date Filled

Staff Assigned


The material requested if available is then sent out free of charge. Since 1975 the D. E. Materials Lab also pays return postage in order to encourage more use of the Laboratory. Currently the cost is $.09 for the first pound and $.04 for each pound thereafter. Ron Newville stated during his interview that mailing expense for individual shipments usually does not exceed $.50 per mailing. Address cards are placed inside the mailing container and the coordinator need only change the card on the front of the container before depositing it in the mail. Coordinators are requested to return materials as soon as possible. Also the process of dissemination is stated at the beginning of the catalog. If a coordinator does not receive requested materials within two or three days, it usually means that they are somewhere in the state and being used, and upon receiving them back in the inventory of the Laboratory, the materials are sent out immediately. If time can be saved in having a coordinator send them directly to another school, the coordinator may be asked to do so since the requesting school may need them right away.
Teacher Selection of Material and Proper Use of Material

It is the responsibility of the teacher-coordinator to choose wisely which materials to use when teaching.

Using common sense alone you would not plan to purchase the materials for a house without having some plans or a blueprint to go by, or without knowing where the house was to be built (on sand? on a hill?) or without knowing the needs of the people whose house it would be. Selecting student instructional materials starts with that same kind of common sense.

(Ohio State University, 1973, p. 9)

To effectively use the wealth of information available through the D. E. Materials Lab it would be helpful for the teacher-coordinator to:

1. have a lesson plan in mind
2. know students interests, abilities, and needs
3. work within a time framework—for example, if the class period is 50 minutes, then a 60 minute film may not be appropriate for that time slot.

It is recommended that more of a system approach be used when deciding what materials to use.

The systems approach views the entire educational program as a system of closely interrelated parts. It is an orchestrated learning pattern with all parts harmoniously integrated into the whole: the school, the teacher, the student, the media, and the materials. Such an approach integrates the older, more familiar methods and tools of instruction with the new ones—the computer, TV, programmed instruction, and simulations, to name a few.

(Smith, 1972, p. 86)
In discussing systems another author explains: "A predetermined systematic approach in designing instructional systems is necessary, for chance alone will not consistently produce the desired behavior change of those exposed to the learning experiences we provide." (Koeninger, 1973, p. 26)

A checklist of 15 questions which a teacher should use for obtaining instructional materials is as follows:

1. Does the content of the instructional materials match the lesson objectives?
2. Do the materials fit the instructional method to be used for the lesson?
3. Is the content of the materials up-to-date?
4. Is the content logically sequenced?
5. Is the content based on real world situations?
6. Is the material appropriate for the grade level of the students involved?
7. Can the student handle the vocabulary or reading level used in the materials?
8. Can this material successfully motivate the students?
9. Is this material geared to the abilities, needs, and interests of all of my students? part of my students?
10. Will this material fit into my time constraints?
11. Do I have the equipment (projector, tape deck, etc.) necessary to use this material? Is it in good operating condition?
12. Do I have the facilities necessary to use this material?

13. Do I have the funds necessary to purchase or rent this material?

14. Is the material well produced technically?

15. Does the material have validity? Does the author indicate that it has been proven that it will do what it is intended to do?

(Ohio State University, 1973, pp. 12-13)

One other guideline not included in those just mentioned is for the teacher to preview all material before it is presented to the students. Even if the material is obtained from the D. E. Materials Lab, the teacher should first become familiar with it in order to use it effectively.

While there is a wealth of material available often it is not being used.

In a recent observation study of instructional methods used by distributive education teacher-coordinators, it was found that the lecture-discussion method accounted for approximately 90 percent of the instructional time. It was also noticed that teacher-coordinators have their pet methods and techniques and incorporate them into their instructional program as often as possible with little regard to their appropriateness.

(Koeninger, 1973, p. 26)

One reason that this may be happening is because teachers are not familiar with the use of materials or with the correct selection procedure of materials. "Many times,
varied aspects of multi-media utilization have gone begging because of ignorance as to availability and the techniques needed to employ it for usage." (Swarm, 1974, p. 6)

Ron Newville, in his interview, expressed concern for improper use of films in the laboratory. He explained that many times he will receive requests for 5 big films or 5 unrelated visual materials and the teacher plans to use them for fillers or for use by a substitute teacher. This is not the intent for use of the materials of the Laboratory as he sees it.

A possible solution to these problems is teacher seminars and workshops.

Since distributive education strives to be current with all developments in society and business, as do all areas of business education, it is imperative that action be taken by individual teacher-coordinators as well as by local education groups. The action should be in the form of planned programs and workshops to expose all those in education to methods of implementing mediated instruction. Teachers should have the opportunity to see audiovisuals developed by other teacher-coordinators, review methods of preparing instructional materials, and make materials for presentation to their own teaching situation.

(Leventhal, 1973, p. 32)

Along with proper selection of media for classroom use, selection of media for the other roles of a D. E. coordinator is also necessary.
But what about media usage by distributive education teacher-coordinators in their other roles? What about the usage of media to fulfill all of those other responsibilities connected with coordination? Connected with public relations? Connected with guidance? Have we, as teacher-coordinators, effectively utilized media to assist in these other equally important aspects of our total job?

(Lynch, 1974, p. 31)

To summarize this section on correct selection and usage of media, the researcher would like to illustrate by way of cartoon a situation that all teachers should avoid:

(Smith, 1972, p. 22)

"Turn it off in 45 minutes and dismiss the class."

Summary

The purpose of this chapter was to give an overview of the status and functions of media in education and to
take a closer look at Montana's Distributive Education Materials Laboratory in light of these functions. Background information about the Lab was given and special emphasis was placed on the responsibilities involved in selecting media for purchase, maintaining, storing, cataloging and disseminating instructional materials. Then attention was given to teacher selection of material and proper use of instructional materials.
Chapter III
PROCEDURES

Introduction

The purpose of this study was to evaluate Montana's Distributive Education Materials Laboratory. The study was conducted with major input from the teacher-coordinators of distributive education on the secondary and post-secondary levels in Montana. The coordinators of each program (32 coordinators total) were sent a questionnaire to complete and return. Thirty-two of the teacher-coordinators responded for a 100 percent response. The data was compiled and recommendations were submitted.

To explain the procedures of this study, it is necessary to examine the following areas: (1) the sources of data gathered, (2) the construction of the survey instrument used to gather the data, (3) procedures used in the administration of the survey instrument and (4) the compilation and analysis of the data.

Sources of Data

The data for this study were obtained from the distributive education teacher-coordinators in the state of Montana. The study was limited to Montana because generally only
D. E. teacher-coordinators in Montana have use of the Laboratory. The list of names of the Distributive Education teacher-coordinators was obtained from the Office of the Superintendent of Public Instruction in Helena, Montana. There was a total of 32 teacher-coordinators representing 18 secondary programs and 6 post-secondary programs during the 1976-77 school term. There was a 100 percent return and all but one questionnaire was used in the analysis.

In order to ascertain which items in the Laboratory were most frequently used, the past records of materials sent out from the Lab were examined. Since complete records were kept only for the 1976-77 school term, these were used in compiling the information. Also the time framework coincides with the 1976-77 school year in which the questionnaire itself was sent out.

Data for the review of related literature was obtained at the Montana State University Library, from the private libraries of Dr. Daniel Hertz and Dr. Norm Millikin, from the U. S. Office of Education, and from the Office of the Superintendent of Public Instruction in Montana. In addition letters requesting information about material laboratories were sent to Distributive Education material labs and curriculum labs around the country. Their responses
proved to be helpful to this study. Personal interviews were conducted with Mr. Ron Newville, Director of Montana's D. E. Materials Laboratory and Mr. Paul Marsh, Media Specialist at Montana State University. Conversations about the Lab were held with Mr. Ross Wagner, Distributive Education State Supervisor in Montana from July, 1973 to January, 1977, and with Mrs. Barbara Robertson, Distributive Education State Supervisor in Montana from January, 1977 to June, 1977.

Construction of the Survey Instrument

The survey instrument (Appendix C) used for this study was developed by the writer in March, 1977 with the help of several fellow graduate students, Dr. Norm Millikin, Dr. Daniel Hertz, and Mr. Floyd Frost. The master's candidates were helpful in critiquing the questionnaire in its rough form. The help of Mr. Frost, Dr. Millikin, and Dr. Hertz was that of advising. The questionnaire was also tested with graduate and undergraduate Distributive Education students at Montana State University who were familiar with the D. E. Materials Lab and who had used material from the Lab. After a series of revisions, the questionnaire was considered to be appropriate for the study.
The survey instrument was confidential in nature and a code number was assigned to each questionnaire for follow-up purposes only. The majority of questions were multiple choice requiring a check mark to be placed alongside the desired choice. Because of the nature of the information sought, five questions were open-end type.

The first three questions of the survey instrument were primarily for demographic information including the number of years the teacher-coordinator taught in Montana, and whether the program was secondary, or post-secondary in nature. The next question dealt with the sources of media used by the teacher-coordinators. If Montana D. E. Materials Laboratory was not checked, the respondent was asked to comment why he did not use it and was then instructed not to complete the questionnaire further and to please return it in the enclosed envelope.

The remaining part of the questionnaire was to be filled out only by those teacher-coordinators who had used the D. E. Materials Lab. Questions 5 through 9 dealt specifically with the objectives of the Lab referred to in Chapter I. The administrative, counseling and dissemination functions of the Lab were evaluated in questions 10 through 15. Questions 16 through 21 were concerned
with the Montana D. E. Materials Laboratory Catalog. The issues of location of the Lab, the establishment of a combined Distributive Education and Office Education Laboratory, purchase of materials, and discussion of the Lab at the Fall D. E. teacher-coordinators meeting were examined in questions 22 through 27. Question 28 was an open-end question which asked if any additional services should be performed by the Lab. Then the teacher-coordinators were asked to give an overall performance rating of the Laboratory. The last two questions of the survey instrument were open-end questions and asked for the major compliment and major complaint, if any, of the Lab.

**Administration of the Survey Instrument**

The questionnaire was mailed to the teacher-coordinators of Distributive Education at the secondary and post-secondary levels in Montana on April 1, 1977. Along with the questionnaire, a cover letter (Appendix B) and a self-addressed, stamped envelope were included.

On April 13, 91 percent of the teacher-coordinators' questionnaires had been returned. At this time it was decided a follow-up would be conducted. Through use of the telephone, the researcher personally spoke to those coordinators
who had not responded to the first mailing. They were asked if they intended to return the questionnaire so that the results could be compiled. A deadline of April 18, 1977, was established for the return of the remaining questionnaires. It was assumed that those not received before that date would not be returned. The follow-up brought a 9 percent response bringing the total response to 100 percent.

Compilation and Analysis of the Data

Once the survey had been terminated, responses for each question were tallied. In addition data for the 1976-77 school year obtained from the D. E. Materials Laboratory's past records were tallied and presented in table form. For the purpose of this research, no statistical tool was used for interpreting the results of the survey instrument. Charts and tables were used to give a clear picture of the results of the survey and written descriptions and explanations were presented where necessary.

After the compiled data was presented, analysis of the results of the study was given. From the analysis and results of the study, conclusions and recommendations were then made.
Chapter IV
RESULTS OF THE STUDY

Introduction

Of the 32 questionnaires mailed to the distributive education teacher-coordinators in the state of Montana on the secondary and post-secondary level, all were returned. One was not usable. This chapter will present the results of the survey.

Sources of Media

The most common source of media including printed and non-printed material used by the teacher-coordinators was personal materials. Responses showed that 28 (90%) of the teachers used this source. Montana D. E. Materials Lab was chosen by 26 (84%) of the respondents. The next most popular response for a source of media was businesses which was chosen by 25 (81%) of the coordinators. Publishing companies were checked by 24 (77%) of the respondents. The remaining responses in order of popularity were: government, organizations in the community, local school, personal acquaintances, other teachers, and other. The specifications of other which were written in by respondents included Ohio Materials Lab, Mountain Bell, Montana Credit Union League, and regular mailings. Figure 1 presents the sources of data which were given in the survey and respective percentages of their use.
Figure 1

SOURCES OF MEDIA USED BY DISTRIBUTIVE EDUCATION TEACHERS

Sources of Media

- personal materials
  - 90%
- Montana D. E. Materials Lab
  - 84%
- businesses
  - 81%
- publishing companies
  - 77%
- government
  - 65%
- organizations in community
  - 58%
- local school
  - 55%
- personal acquaintances
  - 48%
- other teachers
  - 42%
- other
  - 23%

Percent of D. E. Teachers' Response
Five (16%) of the teacher-coordinators responded that they did not use the Montana D. E. Materials Laboratory. One taught on the post-secondary level and the others taught in secondary schools. The reasons given by those coordinators for not using the Lab were that most material related to secondary education, that the teacher was too lazy to find out if the Lab had any acceptable material, that the teacher was not adequately familiar with the Lab, and another teacher said he should have used the Lab, but didn't.

**Frequency of Use of the Montana D. E. Material Laboratory**

Fifty percent of the teachers use the Lab approximately 3-4 times during a school year. This was the most popular response. Thirty-two percent of the coordinators use the Laboratory 2 or less times a school year. This figure includes those respondents who did not use the Laboratory. Two teachers use it between 6 and 8 times a year and two teachers use it between 11 and 12 times a year. Two teachers gave no response to this question.

A list of those teachers who were acquainted with the D. E. Materials Laboratory through the teacher-education program at Montana State University was obtained from Dr. Norm Millikin. This was used to see if these teachers used the Lab more frequently than those who were not involved in
the teacher-education program. It was found that in the 0-2 range those teachers who did not receive teacher-education training at MSU checked this answer more frequently. The 8 percent of teachers who checked the 11-12 range were all acquainted with the Lab through the teacher-education program. On the whole, however, there was no substantial difference between the two groups as can be seen in the table labeled Figure 2.

Another comparison was made to see if secondary or post-secondary teachers used the Lab more frequently. As a percent of the total respondents to the survey, 25 percent were post-secondary teachers and 75 percent were secondary teachers. In the 0-2 range 40 percent of the responses in that range were from post-secondary teachers. The rest of the post-secondary teachers checked the 3-5 range which accounted for 27 percent of responses in that category. No post-secondary teachers used the Lab more than five times during a school year. As a total picture, post-secondary teachers tended to use the Lab fewer number of times than did secondary teachers.

A final comparison was made to ascertain if teachers who had taught more years in Montana used the Lab more frequently than those with less experience in the Montana school system. It was found as expressed in Figure 3 that those
**Figure 2**

FREQUENCY OF USE OF THE D. E. MATERIALS LABORATORY DURING A SCHOOL YEAR

<table>
<thead>
<tr>
<th>No. of times</th>
<th>% of Teachers Who Rec'd Teacher-Ed Training at MSU</th>
<th>% of Teachers Who Did Not Receive It at MSU</th>
<th>Total Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-2*</td>
<td>3%</td>
<td>29%</td>
<td>32%</td>
</tr>
<tr>
<td>3-5</td>
<td>23%</td>
<td>27%</td>
<td>50%</td>
</tr>
<tr>
<td>6-8</td>
<td>3%</td>
<td>3%</td>
<td>6%</td>
</tr>
<tr>
<td>8-10</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>11-12</td>
<td>6%</td>
<td>0</td>
<td>6%</td>
</tr>
<tr>
<td>13+</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td>94%</td>
</tr>
<tr>
<td>No Response</td>
<td></td>
<td></td>
<td>6%</td>
</tr>
</tbody>
</table>

*This range in both tables includes those respondents who indicated they did not use the D. E. Materials Lab at all.*
who taught 4 or less years in Montana used the Lab more than those who taught for a longer period of time. In fact, the more years teaching experience in Montana, the less number of times the D. E. Materials Laboratory was used. So this proved to be an indirect relationship.

**Purpose of Using Material From the Laboratory**

Of those teachers who use the D. E. Materials Lab, 24 or 92% of them use the material to complement lesson plans. Twenty-five percent of the teachers use the materials to prepare lesson plans. Twelve percent or 3 coordinators use materials for other reasons not listed on the questionnaire including recruitment and to reinforce materials on hand. One (4%) coordinator uses material to aid a substitute teacher; one coordinator uses material for coordination; and one uses material from the Lab for community meetings. No coordinator responded that they use material from the Lab to fill-in time.

**How Well the Needs of Teachers and Students Are Met By The Lab**

It was found in the survey (refer to Figure 4) that most coordinators felt that the D. E. Materials Laboratory met their needs as teachers satisfactorily. This represented 19 (73%) of the coordinators. Six (23%) of the coordinators felt their needs were met very well. Only 1 (4%) coordina-
Figure 4

HOW WELL THE NEEDS OF TEACHERS AND STUDENTS ARE MET BY THE D. E. MATERIALS LAB

<table>
<thead>
<tr>
<th>No. of respondents</th>
<th>30</th>
<th>25</th>
<th>20</th>
<th>15</th>
<th>10</th>
<th>5</th>
<th>0</th>
</tr>
</thead>
<tbody>
<tr>
<td>very well</td>
<td>6</td>
<td>23%</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>satisfactorily</td>
<td>19</td>
<td>73%</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>unsatisfactorily</td>
<td>1</td>
<td>4%</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
tor felt his needs as a teacher were unsatisfactorily met but added that the reason was because he was a post-secondary teacher.

It was also found that the same responses and respective percentages were given in respect to how well the D. E. Materials Lab met the needs of the students.

**Budget Problems**

The coordinators were asked if the Lab provides materials that would otherwise be unavailable because of budget problems. This question corresponded to the objectives of the D. E. Materials Lab set forth in Chapter I of this professional paper. Of the coordinators who use the Lab, 24 (92%) of them felt that the statement was true. Two (7%) of the teachers felt the Lab did not provide them with materials that otherwise would not be available because of budget problems.

**Adequate Knowledge of Resources**

Coordinators were asked if they felt they had adequate knowledge of the resources contained in the D. E. Materials Laboratory. This question was included in the survey instrument to see if additional information about the Lab was needed in the field. It was found that 20 (77%) of the teacher-coordinators felt they had adequate knowledge of the Lab;
while 6 (23%) felt they did not have adequate knowledge of the resources contained in the Laboratory.

Help in Selection of Materials

One of the functions of a media center as expressed in Chapter II is the counseling function which includes giving help in selection of materials. Fifteen (58%) of the coordinators felt that when asking for help in selecting materials, they did receive advice or suggestions from the D. E. Materials Lab. Seven (27%) of the respondents felt they did not receive help while four (15%) did not give a response but added the comment that they did not ask for help.

Duplicate Copies of Material Needed in the Lab

The teacher-coordinators were asked if they thought that more than one copy of any item was needed in the Lab. Fifteen (58%) of the teachers felt that more copies were needed and most of them specified a request for the CLIO film. Others commented that those materials that are most often used should be duplicated. Seven (27%) of the coordinators responded that no duplicate copies of material were needed and 4 (15%) respondents gave no answer to this question.

Evaluation of Services Involved in Transmitting Materials

The teacher-coordinators were asked to evaluate the
Figure 5

EVALUATION OF SERVICES INVOLVED IN TRANSMITTING MATERIALS
(Expressed in % of Respondents)

<table>
<thead>
<tr>
<th>Service</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>excellent</td>
</tr>
<tr>
<td>ordering</td>
<td>50%</td>
</tr>
<tr>
<td>receiving</td>
<td>35%</td>
</tr>
<tr>
<td>returning</td>
<td>54%</td>
</tr>
</tbody>
</table>
services involved in transmitting material to and from the D. E. Materials Laboratory. The three services evaluated were ordering, receiving, and returning of materials. The respondents were asked to give each service an excellent, good, fair, or poor rating. The outcome of this evaluation is presented in Figure 5. Of those who used the Lab, the high majority of respondents rated all three services of ordering, receiving, and returning as excellent or good. Receiving materials received the lowest rating of poor but only by one (3%) of the coordinators. A fair rating was given to the service of ordering by 3 (12%) of the coordinators, to the service of receiving by 7 (27%) of the coordinators and to the service of returning by 1 (3%) of the respondents.

Receiving Materials When Requested

Some special emphasis was given to the service of receiving materials from the D. E. Materials Laboratory through an additional question in the survey instrument. The teacher-coordinators were asked if they received materials when they wanted them. The results are presented in Figure 6. Of those who used the Lab, 14 (54%) of the teachers received materials most of the time when they wanted them; seven (27%) received materials some of the time; five (19%) received materials
Figure 6

HOW OFTEN MATERIALS ARE RECEIVED WHEN TEACHERS REQUEST THEM

No. of respondents

<table>
<thead>
<tr>
<th></th>
<th>All of the time</th>
<th>Most of the time</th>
<th>Some of the time</th>
<th>None of the time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number</td>
<td>5</td>
<td>14</td>
<td>7</td>
<td>0</td>
</tr>
<tr>
<td>Percentage</td>
<td>19%</td>
<td>54%</td>
<td>27%</td>
<td>0</td>
</tr>
</tbody>
</table>

Figure 7

HOW WELL THE CATALOG INFORMS TEACHERS ABOUT THE CONTENTS OF THE LAB

No. of respondents

<table>
<thead>
<tr>
<th></th>
<th>Very well</th>
<th>Satisfactorily</th>
<th>Unsatisfactorily</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number</td>
<td>9</td>
<td>17</td>
<td>0</td>
</tr>
<tr>
<td>Percentage</td>
<td>35%</td>
<td>65%</td>
<td>0</td>
</tr>
</tbody>
</table>
all of the time when they wanted them. No teacher-coordinator felt he received materials none of the time when he wanted them.

Use of Assessment Form

As explained in Chapter II, an on-going evaluation of materials is an important aspect of maintenance of a laboratory. The teacher-coordinators were asked if a short assessment form for each of the materials being sent out from D. E. Materials Lab be included in the mailing of materials. Of the respondents who use the Lab, 17 (65%) of them felt that a short assessment form should be used and nine (35%) felt it should not be used.

Montana D. E. Materials Catalog

A section of the questionnaire dealt mainly with the catalog used in conjunction with the D. E. Materials Laboratory. It was found that all of the teachers who used the Lab also used the catalog as well. The following topics were explored through the questionnaire in connection with the catalog:

a) how well the catalog informs teacher-coordinators about the contents of the D. E. Materials Lab—As shown in Figure 7, seventeen (65%) of the respondents felt the catalog satisfactorily informed them about the contents of the Lab and nine (35%) of the coordinators felt the catalog informed them very
well. No teacher-coordinators felt the catalog informed them unsatisfactorily about the contents of the Lab.

b) cross-referencing -- The teachers were asked if more cross-referencing was needed in the catalog. Ten (38%) of the coordinators felt it was needed, while sixteen (62%) of the respondents felt it was not needed.

c) sequencing of material -- The teacher-coordinators were asked if sequencing of material in the catalog in relation to the D. E. State Curriculum Guidelines would be helpful, make no difference, or confusing. It was found that nine (35%) felt it would be helpful. Fourteen (54%) felt it would make no difference and two (7%) indicated that it would be confusing. One coordinator (4%) did not answer the question.

d) division of sections -- The question of dividing the catalog into a section for printed material such as books and a section for audiovisual materials such as films was presented. Seventeen (65%) of the respondents wanted to see a division of the two sections and eight (31%) of the teachers did not want the division. One teacher-coordinator (4%) did not respond to this question.

e) hole-punching the catalog -- The last question concerning the catalog asked if the pages should be hole-punched so that the catalog could be placed in a three-ring binder and
pages could be added to or taken away from it. Twenty-one (81%) of the coordinators wanted this change to take place and five (19%) wanted the catalog to be kept in its present form.

**Location of the D. E. Materials Lab**

The teacher-coordinators were asked where they felt the Lab should be located. The results are shown in Figure 8. Most of the respondents (44%) wanted the D. E. Materials Lab to be located at its present location in Bozeman Sr. High School. Thirty percent wanted it moved to Montana State University. Eleven percent wanted the Lab to be located at the Office of Superintendent of Public Instruction in Helena. Fifteen percent chose other for this question. Half of these respondents commented that it should be located wherever it would be best handled and the remaining half who chose other indicated that it didn't make any difference where the Lab was located.

**Combined D. E. and O. E. Materials Lab**

Because of limited funding and some common subject matter, the question of establishing a combined Distributive Education and Office Education Materials Laboratory was asked of the teacher-coordinators. Five (19%) of the respondents wanted to see a combined D. E. and O. E. Materi-
Figure 8

LOCATION OF THE D. E. MATERIALS LAB

No. of respondents

<table>
<thead>
<tr>
<th>Location</th>
<th>Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bozeman Sr. High School</td>
<td>12 (44%)</td>
</tr>
<tr>
<td>Montana State U</td>
<td>8 (30%)</td>
</tr>
<tr>
<td>OSPI Helena</td>
<td>3 (11%)</td>
</tr>
<tr>
<td>Other</td>
<td>4 (15%)</td>
</tr>
</tbody>
</table>

Figure 9

ADDITIONAL MATERIAL NEEDED FOR PURCHASE FOR THE LAB

<table>
<thead>
<tr>
<th>Topical Heading</th>
<th>% of Respondents</th>
<th>Topical Heading</th>
<th>% of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advertising</td>
<td>31%</td>
<td>Mathematics</td>
<td>12%</td>
</tr>
<tr>
<td>Bus. Organization</td>
<td>23%</td>
<td>Personal Dev.</td>
<td>4%</td>
</tr>
<tr>
<td>Buying</td>
<td>31%</td>
<td>Pricing</td>
<td>19%</td>
</tr>
<tr>
<td>Communication</td>
<td>12%</td>
<td>Projects</td>
<td>15%</td>
</tr>
<tr>
<td>Consumer Ed.</td>
<td>15%</td>
<td>Public Relations</td>
<td>19%</td>
</tr>
<tr>
<td>Credit</td>
<td>8%</td>
<td>Salesmanship</td>
<td>31%</td>
</tr>
<tr>
<td>Curriculum Guide</td>
<td>4%</td>
<td>Sales Promotion</td>
<td>23%</td>
</tr>
<tr>
<td>Distribution</td>
<td>4%</td>
<td>Service Stations</td>
<td>0</td>
</tr>
<tr>
<td>Ecology</td>
<td>15%</td>
<td>Transportation</td>
<td>12%</td>
</tr>
<tr>
<td>Economics</td>
<td>23%</td>
<td>Warehousing</td>
<td>12%</td>
</tr>
<tr>
<td>Franchising</td>
<td>35%</td>
<td>Wholesaling</td>
<td>23%</td>
</tr>
<tr>
<td>Intro to D. E.</td>
<td>12%</td>
<td>Equipment</td>
<td>0</td>
</tr>
<tr>
<td>Investments</td>
<td>19%</td>
<td>Fashions</td>
<td>19%</td>
</tr>
<tr>
<td>Job Activities</td>
<td>0</td>
<td>Resource Material</td>
<td>4%</td>
</tr>
<tr>
<td>Management</td>
<td>23%</td>
<td>Other</td>
<td>12%</td>
</tr>
<tr>
<td>Marketing</td>
<td>19%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
als Lab for the state of Montana. Twenty (77%) did not want such a Lab established. One coordinator (4%) did not respond to the question.

Purchasing

The purpose of the first question involving purchasing was to ascertain if the teacher-coordinators would like more input into what was being selected for purchase for the Lab. Eighteen (69%) of the respondents wanted more input. Eight (31%) did not want more input into selection of material for the D. E. Materials Laboratory.

The next question concerning purchasing asked which topical headings needed more material. Figure 9 presents the results. The topical headings were taken from the table of contents in the D. E. Materials Catalog. The area which was checked most frequently was Franchising. It received 35% of the responses. Buying and Salesmanship were the next most popular headings receiving 31% of the responses. Management, Marketing, Sales Promotion, Business Organization, Economics, and Wholesaling received 23% each of the responses for purchasing. The three areas checked most frequently by post-secondary teachers were Management, Marketing, and Advertising. Some specific recommendations for purchase which were written in the "other" category were DECA Information, Real Estate, Insurance, and informa-
tion for civic and social meetings.

The third and last question dealing with purchasing asked what types of material did the teacher-coordinators prefer. The results to this question are presented in Figure 10. It was found that the most popular request was for films which received 92% of the responses. Filmstrip with cassette was the next most popular choice and it received 69% of the responses. Slides with cassette was chosen in 54% of the cases. One-half (50%) of the teacher coordinators wanted games to be purchased. The other types of materials received 35% or less of the responses for this question. One coordinator checked "other" and requested that up-to-date and bestselling books about marketing be purchased.

**Actual Use of Materials From the Lab**

The past records of the D. E. Materials Laboratory were examined and tabulated to find out exactly which materials are being borrowed from the Lab. The results are given in Figure 11. Two tabulations are given within the table. One concerns the use of material by the D. E. teacher-coordinators who were included in the survey and the other concerns use of materials by people who are non-D. E. teacher-coordinators. The latter group includes state personnel, student teachers, business and office education teachers, Montana
Figure 10

TYPE OF MATERIAL REQUESTED FOR PURCHASE FOR THE LAB

<table>
<thead>
<tr>
<th>Type of Material</th>
<th>% of Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>films</td>
<td>92%</td>
</tr>
<tr>
<td>filmstrip with cassette</td>
<td>69%</td>
</tr>
<tr>
<td>slides with cassette</td>
<td>54%</td>
</tr>
<tr>
<td>games</td>
<td>50%</td>
</tr>
<tr>
<td>individualized instructional packets</td>
<td>35%</td>
</tr>
<tr>
<td>transparency</td>
<td>35%</td>
</tr>
<tr>
<td>printed unit of instruction</td>
<td>23%</td>
</tr>
<tr>
<td>tape recording</td>
<td>19%</td>
</tr>
<tr>
<td>workbook</td>
<td>12%</td>
</tr>
<tr>
<td>filmstrip without cassette</td>
<td>12%</td>
</tr>
<tr>
<td>text</td>
<td>8%</td>
</tr>
<tr>
<td>pamphlet</td>
<td>8%</td>
</tr>
<tr>
<td>bulletin board</td>
<td>8%</td>
</tr>
<tr>
<td>slides without cassette</td>
<td>8%</td>
</tr>
<tr>
<td>other</td>
<td>4%</td>
</tr>
<tr>
<td>manual</td>
<td>0</td>
</tr>
</tbody>
</table>
State University undergraduate and graduate business students, and other teachers. Records from September 16, 1976 through April 16, 1977 were studied. It was found that most material borrowed by D. E. teacher-coordinators (100 units) dealt with Advertising. This represented 48% of the total material borrowed by that group. Advertising was also the most popular topic for borrowed material by non-D. E. teacher-coordinators (19 units or 22% of the total material borrowed by that group). For D. E. teacher-coordinators the next most popular headings for borrowed materials were Management (12%), Job Activities (9%), Salesmanship (8%), and Curriculum Guidelines (5%). It must be remembered, however, that these tabulations do not cover material borrowed after April 16, 1977 and these figures may change if an entire year was studied. Non-D. E. teacher-coordinators borrowed 30% of the total materials lent out from the Lab and D. E. teacher coordinators borrowed 70% of the total material sent out from the Lab. A total of 294 units of material were borrowed from the Lab between September 16, 1976 and April 16, 1977.

Comparing these results to what the D. E. teacher coordinators requested for purchase, it was found that Franchising was most frequently asked for in purchasing and no units were borrowed from the Lab in this area. A similar correlation exists in the areas of Buying, Business Organi-
Figure 11

MATERIALS BORROWED FROM THE MONTANA D. E. MATERIALS LAB
FROM SEPTEMBER 16, 1976 THROUGH APRIL 16, 1977

<table>
<thead>
<tr>
<th>Topical Heading</th>
<th>No. of items borrowed by D. E. teachers</th>
<th>No. of items borrowed by Non-D. E. teachers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advertising</td>
<td>100</td>
<td>19</td>
</tr>
<tr>
<td>Bus. Organization</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Buying</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>Communications</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Consumer Education</td>
<td>5</td>
<td>10</td>
</tr>
<tr>
<td>Credit</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>Curriculum Guidelines</td>
<td>10</td>
<td>4</td>
</tr>
<tr>
<td>Distribution</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Ecology</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Economics</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Franchising</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Intro to Distributive Ed.</td>
<td>6</td>
<td>1</td>
</tr>
<tr>
<td>Investments</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Job Activities</td>
<td>19</td>
<td>5</td>
</tr>
<tr>
<td>Management</td>
<td>25</td>
<td>7</td>
</tr>
<tr>
<td>Marketing</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Mathematics</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Personal Development</td>
<td>4</td>
<td>11</td>
</tr>
<tr>
<td>Pricing</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Projects</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Public Relations</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Salesmanship</td>
<td>18</td>
<td>4</td>
</tr>
<tr>
<td>Sales Promotion</td>
<td>6</td>
<td>9</td>
</tr>
<tr>
<td>Service Stations</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Transportation</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Warehouse</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Wholesaling</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Equipment</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Fashions</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Resource Materials</td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>

Total: 207                        | 87
zation, Economics, and Ecology. In checking the catalog, it was found that there are limited amounts of information available in these areas. Requests for purchase were also in the areas of Advertising, Management and Salesmanship and these same areas were used more often than others in sending out materials from the Lab. This suggests that more of a variety of material may be needed in these areas as well.

Time for Discussion

Teacher-coordinators were asked if time should be set aside for discussion of the D. E. Materials Laboratory at the Fall D. E. teacher-coordinators' meeting. It was found that 24 (92%) of the respondents wanted time set aside for this purpose. Two (8%) of the coordinators did not.

Additional Services

In an open-end question, the teacher-coordinators were asked what if any additional services should the D. E. Materials Lab perform. The most popular response was to have regular updating of the Lab and monthly announcements of new purchases sent out. One coordinator also suggested that an in-service workshop using materials from the Lab would be a help. He also suggested that perhaps the workshop could be held at a coordinators' conference.
Overall Performance

The teacher-coordinators were asked to rate the overall performance of the Lab by checking a poor, fair, good or excellent rating. The results are shown in Figure 12. It was found that 6 (23%) of the coordinators rated the Lab excellent. Thirteen (50%) of the coordinators who had used the Laboratory gave it a good rating. A fair rating was given by 7 (27%) of the teachers. No teacher-coordinators gave the Lab a poor rating.

Major Complaint

The teacher-coordinators were asked in an open-end question to give the major complaint if any of the D. E. Materials Laboratory. Twelve (46%) of the coordinators who used the Lab did not have any complaints at all. The most common complaint given by the others was that the teacher-coordinators were not receiving the materials on the dates requested by them. The common complaint from post-secondary teachers was that more material was needed for the post-secondary level of education. Some teachers requested that obsolete material should be discarded from the Lab. Another coordinator requested more duplication of demanded materials so that long waiting periods could be avoided. In this same context, a teacher expressed that coordinators should be notified if someone else has the requested material. Another
Figure 12

OVERALL PERFORMANCE RATING OF THE D. E. MATERIALS LAB

No. of respondents

Excellent: 6 (23%)
Good: 13 (50%)
Fair: 7 (27%)
Poor: 0
complaint was that there was too much printed material in the Lab. One coordinator felt more complete descriptions of materials available should be printed in the catalog.

**Major Compliment**

The teacher-coordinators were also asked in an open-end question to give their major compliments of the D. E. Materials Laboratory. One teacher did not respond to this question. The compliment given most often was that the service provided by the Lab was very good. The other frequent response was that there was a good selection of material. Many respondents expressed appreciation to the Administrator of the Lab, Ron Newville. Others commented that the mailing procedures were good and that the catalog was beneficial. The general impression given was that the teacher-coordinators much appreciated being able to use the Laboratory.
Chapter V

CONCLUSIONS, RECOMMENDATIONS, AND SUMMARY

Introduction

This, the final chapter, is for the purpose of presenting the conclusions that have been reached as a result of the study, for making recommendations based on the study, and finally, to summarize the study.

Conclusions

In the first chapter of this study, the researcher indicated in the statement of the problem that answers to a number of questions were sought through the use of the survey method. Consequently, the conclusions are presented here in respect to each of the questions posed in the statement of the problem.

These questions were related to the stated objectives of the D. E. Materials Laboratory:

1. Do Distributive Education teacher-coordinators in the state of Montana feel that the laboratory is meeting their needs and the needs of their students?

It was found in this study that 73% of the teacher-coordinators who used the D. E. Materials Lab felt their needs were met satisfactorily. Twenty-three percent felt their needs were met very well. Only four percent of the coordinators felt their needs as a teacher were unsatisfactorily met. The same responses and respective percentages were
given in respect to how well the needs of the students were being met. It can be concluded from these figures that the teacher-coordinators felt that the Lab is meeting their needs and the needs of their students.

2. How often is the Laboratory being used?
Fifty percent of the teachers use the Lab approximately 3-5 times during a school year. Thirty-two percent use the Lab 2 or less times a year. This figure includes those coordinators who do not use the D. E. Materials Lab at all. Six percent of the teachers use the Lab between 6 and 8 times a year and six percent use it between 11 and 12 times a year. In examining the past records of the Lab for the time period of September 16, 1976 through April 16, 1977, it was found that D. E. teacher-coordinators borrowed 207 units of materials. It was also discovered that many people besides D. E. teacher coordinators make use of the Lab including student teachers, business and office education teachers, Montana State University undergraduate and graduate business education students, state personnel, and other teachers. Eighty-seven units or 30% of total material borrowed from the Lab was sent to persons other than D. E. teacher-coordinators. It can be seen from these results that most of the D. E. teacher-coordinators use the Lab less than six times
a year and that the Lab is also used by people other than D. E. teachers.

3. Would D. E. teachers like more input into what is being selected and purchased for the Lab?

Eighteen of the respondents or 69 percent expressed that they did want more input into what material is selected for purchase for the Lab. Eight coordinators or 31 percent did not want more input. It can be concluded that the majority of D. E. teachers would like more input into what is being selected and purchased for the Lab.

4. Is the system of receiving and sending out materials a good one?

The teacher-coordinators evaluated the services of ordering, receiving, and returning materials. Of those who used the D. E. Materials Laboratory, the high majority of respondents rated all three services as excellent or good. The service of receiving materials received the lowest rating of poor but only by one coordinator. No other poor ratings were given. A fair rating was given to the service of ordering by three coordinators, to the service of receiving by seven of the coordinators, and to the service of returning by one of the teachers. Another question was asked to see if materials were received when the teacher-coordinators requested them. Fifty-four percent of the teachers who used the Lab
received material most of the time when they wanted them. Twenty-seven percent received materials some of the time and nineteen percent received material all of the time when they wanted it. No teacher-coordinator responded that materials were never received on time. The system of receiving and sending out materials is basically a good one, but there were some complaints about receiving material on time.

5. Should there be an extension of topical headings in the Laboratory?

Only twelve percent of the teacher-coordinators wanted an extension of topical headings and these headings were DECA, Real Estate, and Insurance. However, the teachers did express that for future purchasing more material was needed particularly in the areas of Franchising, Buying, Salesmanship, Advertising, Management, Marketing, Business Organization, Economics, Sales Promotion and Wholesaling. It can be concluded that an extension of topical headings in the Laboratory is not needed; but rather an extension of materials within the existing headings is needed.

6. Is duplicate material needed in some areas?

Fifty-eight percent of the teacher-coordinators felt that more copies of some material were needed and most of the
teachers specified a request for the CLIO film. Others commented that those materials that are most often used should be duplicated. Twenty-seven percent of the coordinators felt that no duplicate material was needed. It can be concluded that duplicate material is needed in some areas but not many specific recommendations for duplication except for the CLIO film were given by the teacher-coordinators.

The following questions pertain to issues that have arisen over the past four years concerning the Laboratory:

1. Should the Laboratory be housed in another location? The teacher-coordinators were asked this question and it was found that 44 percent of them wanted the D. E. Materials Lab to be located at its present location in Bozeman Senior High School. Thirty percent wanted it moved to Montana State University. Eleven percent wanted the Lab to be located at the Office of Superintendent of Public Instruction in Helena. Fifteen percent chose "other" for this question. Half of these respondents commented that it should be located wherever it would be best handled and the remaining half who chose "other" indicated that it didn't make any difference where the Lab was located.

In studying the comparison between frequency of use of the Lab and choice of location for the Lab, it was found that
there was a slight correlation between those who used the Lab most frequently and those who wanted the Lab located at Bozeman Senior High School.

Since 56 percent of the teacher-coordinators did not want the Lab located at Bozeman Senior High School, but were divided on where else to locate it, and 44 percent of the teachers wanted the Lab to be located at Bozeman Senior High School, it can be concluded that the Laboratory should not be housed in another location for the time being. Teachers, however, are divided on this issue.

2. Should there be a combined Office Education and Distributive Education Materials Laboratory?

Five (19%) of the teacher-coordinators wanted to see a combined O. E. and D. E. Materials Laboratory. Twenty (77%) did not want such a Lab established. One coordinator (4%) did not respond to the question. These findings indicate that there should not be a combined Office Education and Distributive Education Materials Laboratory for the State of Montana.

3. Is revision of the format and contents of the catalog needed?

All of the teacher-coordinators who had used the catalog felt that it informed them about the contents of the D. E. Materials Lab satisfactorily or very well. No one felt
the catalog informed them unsatisfactorily about the Lab.

Sixty-two percent of the teachers felt that more cross-referencing of the catalog was not needed. Sixty-one percent of the teachers felt that sequencing of material in the catalog in relation to the Montana Curriculum Guidelines for Distributive Education would make no difference or be confusing; while only thirty-five percent felt it would be helpful. Sixty-five percent of the coordinators felt that there should be a division in the catalog of two sections—one for non-printed material and the other for printed material. Thirty-one percent did not want to have this division. Eight-one percent of the respondents wanted the catalog to be hole-punched so that it could be placed in a three-ring binder and pages could be added to or taken away from it. Nineteen percent did not want this change in form to take place. It can be concluded that while the catalog does inform the teachers satisfactorily about the contents of the Lab, most of the teachers would like the catalog to be hole-punched and to be divided into a section for audio-visual material and a section for printed material.

4. What, if any, additional services should the D. E. Materials Laboratory perform?

The most popular response to this question was to have reg-
ular up-dating of the Lab and monthly announcements of new purchases sent out. One coordinator also suggested that an in-service workshop using materials from the Lab be arranged. It can be deducted from these findings that the only additional service that the D. E. Materials Laboratory should perform is to up-date the Lab and keep teachers informed of new materials throughout the school year.

5. Should time be set aside for discussion of the D. E. Materials Laboratory at the Fall Distributive Education teacher-coordinators' meeting?

It was found that 24 (92%) of the teacher-coordinators wanted time set aside for this purpose. Two (8%) of the coordinators did not. It can be definitely concluded that time should be set aside for discussion of the D. E. Materials Laboratory at the Fall D. E. teacher-coordinators' meeting.

Recommendations

Based upon the analysis of the data from the survey of Distributive Education teacher-coordinators teaching during the 1976-77 school year, from the past records of the D. E. Materials Laboratory, and from the research presented in the review of literature, the following recommendations are offered:
1. Monthly up-dates of new acquisitions of material for the Lab should be sent out to D. E. teacher-coordinators. This way teachers in the field will know which new material is available on a regular basis. This material can then be used during the school year it is purchased rather than waiting until the following school year when the yearly up-date sheets are sent out.

2. It is recommended that standard criteria be used for evaluating new material for purchase so that better comparisons and wiser choices can be made. A form similar to the one used by the Department of Educational Media in Portland, Oregon which was presented in Chapter II of this study should be used for evaluation and selection of new materials.

3. Since it is difficult for an Advisory Board to be organized for the purpose of screening and selecting new materials for purchase for the Lab, it is suggested that a one or two credit seminar be established at Montana State University. The purpose of the seminar would be to obtain sources of material, request to preview material, screen material, and finally present suggestions of material for purchase to the D. E. teacher-educator at MSU and to the administrator of the Lab. Students, teachers in the
field, and the D. E. Materials Lab itself would benefit by such an arrangement.

4. Time for discussion of the D. E. Materials Lab should be set aside at the Fall D. E. teacher-coordinators' meeting. In this way teachers can give input into what is being purchased in the Lab and into the services of the Lab. Also some material contained in the Lab can be presented and demonstrated to further understanding and use of material.

5. If requested material is not available at the time it is asked for, a post card should be sent to the teacher who requested the material so that he will know the material will be delayed and can plan accordingly.

6. When ordering new material for purchase, a request should be made to also purchase the right to re-record. In this way a copy of the recording can be used when sending out material and the original will always be kept in the library. This process is explained in Chapter II of the study and was suggested by Mr. Paul Marsh, media specialist at MSU.

7. It is recommended that more material be purchased for use on the post-secondary level of education. While there are more secondary than post-secondary programs in the state, emphasis is still needed on the post-secondary
level, particularly in the areas of Marketing, Management, Mathematics, Salesmanship, Advertising, and Buying.

8. Based on overall requests by the D. E. teacher-coordinators, it is recommended that more material be considered for purchase in these areas: Franchising, Salesmanship, Advertising, Buying, Wholesaling, Sales Promotion, Management, Business Organization, and Economics. In particular a duplicate copy of the CLIO film should be considered for purchase.

9. When purchasing material for the Lab more consideration should be given to audiovisual material rather than printed material. Particular attention should be given to films, filmstrips with cassettes, slides with cassettes, and games.

10. For a trial period of one school year a short assessment form (similar to the one used by New Jersey's Curriculum Development Center at Rutger's University presented in Chapter II) should be included in each mailing of material that goes out from the D. E. Materials Lab. In this way an on-going evaluation can be made of materials by the teachers who are using them. This way the condition and relevancy of materials could be evaluated continuously. However, if coordinators do not fill out the form and return
it with the materials, it will not be of any help. So for this reason a trial period of one year usage of the form is recommended.

11. A thorough evaluation of existing material contained in the Lab should be completed at the end of the school year so that all damaged material can be fixed or replaced and obsolete material can be discarded.

12. It is recommended that the Montana D. E. Materials Catalog be hole-punched so that it can be placed in a three-ring binder and pages could be added to or taken away from it.

13. The D. E. Materials Laboratory should remain at its present location at Bozeman Senior High School for the time being. However, since coordinators were divided on this issue, it is recommended that further study be done in this area by the State Supervisor for D. E. through the Office of Superintendent of Public Instruction.

14. More funding of the D. E. Materials Lab is needed in order to purchase materials and properly facilitate use of the Laboratory so that the needs of teachers and students can be met effectively.

15. A formal evaluation of the D. E. Materials Lab should be completed at least every three years so that the Lab could be examined, improved, and helped to meet its objectives.
Summary

The Montana Distributive Education Materials Laboratory is performing a valuable service for Distributive Education teacher-coordinators and students throughout the state. Through this evaluation it has been found that the Lab is meeting its objectives and that the vast majority of teacher-coordinators feel that it is doing a good job and sincerely appreciate the resources and help made available through the Lab.

In examining the various issues that have arisen during the past four years of operation of the Lab, it was found that most of the teacher-coordinators:

1. did not want to see a combined Office Education and Distributive Education Materials Lab
2. were divided on where to locate the D. E. Materials Lab
3. would like more input into what is being purchased by the Lab
4. wanted time set aside at the Fall D. E. Teacher-coordinators' meeting for discussion of the Lab
5. requested that audio-visual material rather than printed material be purchased for the Laboratory.
While some improvements can be made in up-dating materials, sending out materials, and in the format of the catalog, the Laboratory did receive mostly good to excellent ratings in overall performance. The data about the D. E. Materials Laboratory obtained from this research seems to agree with the statement given by one teacher-coordinator--"it is a start in the right direction".
Dear Director:

I am a graduate teaching assistant in the School of Business at Montana State University in Bozeman. Currently I am working towards a Master of Science Degree in Business Education with major emphasis on Distributive Education. For my professional project for one of the requirements of the degree, I have chosen to undertake an evaluation of the Distributive Education Materials Laboratory in Montana.

This materials laboratory has been in existence for four years and is used by distributive education teachers and personnel within the State of Montana. Now some questions are being raised concerning the type of materials available, frequency of use of the laboratory, method of distribution of materials, layout of the library and catalog, and selection of materials.

As of now I have been unable to find much research or other evaluations completed of instructional materials laboratories of this type. Has there been an evaluation of your materials lab? Do you have a list of materials laboratories in other states? Do you have any information or references that might be of help to me on this project?

I truly appreciate any assistance you can give me. Please send your response to me at the above address.

Sincerely,

Mrs. Maryann Doe
Dear Coordinator,

Would you please take just a few minutes out of your busy schedule to fill out the enclosed questionnaire? I am conducting research to evaluate Montana's Distributive Education Materials Laboratory as a requirement of my master's program at Montana State University. The topic was chosen to provide data to evaluate and improve the Lab so that it can better serve the D. E. teacher-coordinators within the state of Montana.

It is very important that I receive your reply to provide accurate information. All answers to the questionnaire will be kept confidential.

A self-addressed, stamped envelope is enclosed for your convenience. Please return the questionnaire to facilitate the gathering of the data.

Thank you for your help and cooperation.

Sincerely,

Maryann Doe
Graduate Teaching Assistant

Barbara Robertson
Consultant, Marketing and Distributive Education

Enclosures 2
APPENDIX C

Survey Instrument for Evaluation of the

Distributive Education Materials Laboratory

Located at Bozeman Senior High School

*Survey # _____

Instructions: Please indicate your answer to the following questions by placing a check mark on the lines provided or by filling in where appropriate.

1. How many students are enrolled in your program? ________

2. What is the level of instruction in your program?
   ______ secondary ______ post-secondary

3. How many years have you taught distributive education in Montana on the secondary and/or post-secondary level? ______

4. What are the sources of media (printed such as book and/or non-printed such as films) in your program?
   ____ own personal materials ____ businesses
   ____ other teachers ____ libraries
   ____ personal acquaintances ____ government
   ____ local school ____ publishing companies
   ____ organizations in the Montana’s D.E. Materials Lab
   community ______ other, specify ______

If you have not checked Montana’s D. E. Materials Lab in the previous question, please state why you do not use it.

If you did not check Montana’s D. E. Materials Lab above, you need not complete the questionnaire further. Please return it in the enclosed envelope. Thank you for your cooperation.

*For follow-up purposes only
5. Approximately how many times do you use the D. E. Materials Lab during a school year?

_____ 0-2  _____ 3-5  _____ 6-8

_____ 8-10  _____ 11-12  _____ 13 or more

6. Please check the purposes(s) for which you use material from the D. E. Materials Lab:

_____ to prepare lesson plans
_____ to complement lesson plans
_____ to fill-in time
_____ to aid substitute teacher when you cannot be present
_____ for coordination
_____ for community meetings or presentations

_____ other, please specify: ____________________________

7. How well do you feel the D. E. Materials Lab meets your needs as a teacher?

_____ very well  _____ satisfactorily  _____ unsatisfactorily

8. Do you feel the D. E. Materials Lab provides you with materials that would otherwise not be available to you because of budget problems?

_____ yes  _____ no

9. How well do you feel the D. E. Materials Lab meets the needs of your students?

_____ very well  _____ satisfactorily  _____ unsatisfactorily

10. Do you feel that you have adequate knowledge of the resources contained in the D. E. Materials Lab?

_____ yes  _____ no

11. When asking for help in selecting materials, do you receive advice or suggestions from the D. E. Materials Lab?

_____ yes  _____ no

12. Is more than one copy of any item in the D. E. Materials Lab needed?

_____ yes  _____ no
13. From your experience, please rate the following services involved in transmitting materials to and from the D. E. Materials Lab:

<table>
<thead>
<tr>
<th>Activity</th>
<th>excellent</th>
<th>good</th>
<th>fair</th>
<th>poor</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) ordering material</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b) receiving material</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c) returning material</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

14. Are you receiving the materials you request from the D. E. Materials Lab when you want them?

_____ all of the time  _____ most of the time
_____ some of the time  _____ none of the time

15. Should a short assessment form for each of the materials being sent out from the D. E. Materials Lab be included in the mailing so that an on-going evaluation can be made of materials in the Lab?

_____ yes  _____ no

16. Have you used the Montana D. E. Materials Catalog?

_____ yes  _____ no

17. How well does the catalog inform you about the contents of the D. E. Materials Lab?

_____ very well  _____ satisfactorily  _____ unsatisfactorily

18. Is more cross-referencing needed in the catalog?

_____ yes  _____ no

19. Sequencing of material in the catalog in relation to the D. E. State Curriculum Guideline would be:

_____ helpful  _____ make no difference  _____ confusing

20. Should the catalog be divided into a section for printed materials such as books and a section for audiovisual materials such as films?

_____ yes  _____ no
21. Should the catalog be hole punched so that it could be placed in a three-ring binder and pages could be added to or taken away from it?

_____yes  _____no

22. Where should the D. E. Materials Lab be located?

_____at Bozeman Sr. High School (present location)
_____at Montana State University
_____at the Office of Superintendent of Public Instruction in Helena
_____other, please specify: ________________________________

23. Would you like to see a Distributive Education and Office Education Materials Lab combined for the state of Montana?

_____yes  _____no

24. Would you like more input into what is being selected and purchase for the D. E. Materials Lab?

_____yes  _____no

25. For future purchasing, please check the heading(s) where you think more material is needed:

____ Advertising  ____ Marketing
____ Business Organization  ____ Mathematics
____ Buying  ____ Personal Development
____ Communications  ____ Pricing
____ Consumer Education  ____ Projects
____ Credit and Collections  ____ Public Relations
____ Curriculum Guidelines  ____ Salesmanship
____ Distribution  ____ Sales Promotion
____ Ecology  ____ Service Stations
____ Economics  ____ Transportation
____ Franchising  ____ Warehousing
____ Intro to DE  ____ Wholesaling
____ Investments  ____ Equipment
____ Job Activities  ____ Fashions
____ Management  ____ Resource Materials
____Other:__________

____________________
26. For future purchasing, please check the types of material you would prefer:
   - text
   - workbook
   - manual
   - printed unit of instruction
   - pamphlet
   - bulletin board
   - games
   - individualized instructional packets
   - films
   - filmstrip with cassette
   - filmstrip without cassette
   - slides with cassette
   - slides without cassette
   - transparency
   - tape recording
   - other, specify:

27. Should there be time set aside at the Fall D. E. teacher-coordinators meeting for discussion of the D. E. Materials Lab?
   - yes
   - no

28. What, if any, additional services should the D. E. Materials Lab perform?

29. In overall performance how would you rate the D. E. Materials Lab? (Please check one line only)
   - Poor
   - Fair
   - Good
   - Excellent

30. Your major compliment, if any, of the D. E. Materials Lab is:
31. Your major complaint, if any, of the D. E. Materials Lab is:

THANK YOU FOR YOUR ASSISTANCE IN THIS EVALUATION!!
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