

INFORMATION TO USERS

This material was produced from a microfilm copy of the original document. While the most advanced technological means to photograph and reproduce this document have been used, the quality is heavily dependent upon the quality of the original submitted.

The following explanation of techniques is provided to help you understand markings or patterns which may appear on this reproduction.

1. The sign or "target" for pages apparently lacking from the document photographed is "Missing Page(s)". If it was possible to obtain the missing page(s) or section, they are spliced into the film along with adjacent pages. This may have necessitated cutting thru an image and duplicating adjacent pages to insure you complete continuity.
2. When an image on the film is obliterated with a large round black mark, it is an indication that the photographer suspected that the copy may have moved during exposure and thus cause a blurred image. You will find a good image of the page in the adjacent frame.
3. When a map, drawing or chart, etc., was part of the material being photographed the photographer followed a definite method in "sectioning" the material. It is customary to begin photoing at the upper left hand corner of a large sheet and to continue photoing from left to right in equal sections with a small overlap. If necessary, sectioning is continued again — beginning below the first row and continuing on until complete.
4. The majority of users indicate that the textual content is of greatest value, however, a somewhat higher quality reproduction could be made from "photographs" if essential to the understanding of the dissertation. Silver prints of "photographs" may be ordered at additional charge by writing the Order Department, giving the catalog number, title, author and specific pages you wish reproduced.
5. PLEASE NOTE: Some pages may have indistinct print. Filmed as received.

Xerox University Microfilms

300 North Zeeb Road
Ann Arbor, Michigan 48106

74-395

LOERTSCHER, David Vickers, 1940-
MEDIA CENTER SERVICES TO TEACHERS IN INDIANA
SENIOR HIGH SCHOOLS, 1972-1973.

Indiana University, Ph.D., 1973
Library Science

University Microfilms, A XEROX Company, Ann Arbor, Michigan

© 1973

DAVID VICKERS LOERTSCHER

ALL RIGHTS RESERVED

MEDIA CENTER SERVICES TO TEACHERS IN
INDIANA SENIOR HIGH SCHOOLS
1972-1973

BY

DAVID VICKERS LOERTSCHER

Submitted in partial fulfillment of the requirements
for the Doctor of Philosophy degree
in the Graduate Library School
Indiana University
August, 1973

Accepted by the Faculty of the Graduate Library School, Indiana University, in partial fulfillment of the requirements for the degree of Doctor of Philosophy.

Doctoral Committee: Maya J. Ryznar, Co-Chairman

Suzanne R. Reed, Co-Chairman

H. Duane Johnson

Carolyn Gues

27 July 1973

ACKNOWLEDGEMENTS

I am indebted to Professor Margaret I. Rufsvold for co-chairing my research committee even though the completion of the study postdated her retirement from Indiana University. Her inspiration and encouragement have been invaluable. I am also most grateful to each of the other members of the committee: Dean Sarah R. Reed, W. Duane Johnson, and Dr. Carolyn Guss who gave valuable assistance at every step of the dissertation and made the study enjoyable and challenging.

I am grateful to the 123 media center staff members in 40 schools and 149 teachers in nine schools who took the time to respond to the questionnaire from which the data were gathered and also to those who assisted in the pretest of the questionnaire.

The encouragement from my fellow doctoral colleagues was greatly appreciated, especially from Dr. E. Blanche Woolls who made many suggestions and typed the entire manuscript.

The financial support received from the Higher Education Act, Title IIB, as a result of a project written by Margaret I. Rufsvold made it possible for me to pursue an advanced degree.

Finally, my wonderful wife, Sandra, and six sons sacrificed much to see that I had the time and attention to devote to the study.

D.V.L.

TABLE OF CONTENTS

Chapter	Page
I. THE PROBLEM AND REVIEW OF THE LITERATURE	1
Introduction and Purpose of the Study	1
Questions and Hypotheses	4
Definitions	6
Related Research	6
Need for the Present Study	20
II. METHODOLOGY	22
Selection of the Schools for the Study	22
Questionnaire Construction and Pretest	27
Method of Data Collection and Analysis	30
Summary	33
III. ANALYSIS OF THE DATA	35
Questionnaire Returns	35
The Importance of a Service Versus its Frequency	39
Correlation Between Quantity of Media Center Staff and Services	41
The Consensus of Teachers and Media Staff	46
Teacher Satisfaction with Media Center Services	55
The Media Center Service Program to Teachers	58
Consensus Among the Media Staff	84
Subject Area Teachers and Their Use of Media Center Services	94
IV. SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS	99
Summary of Findings	102
Conclusions	109
Recommendations for Further Study	111
BIBLIOGRAPHY	112
APPENDIX	116
Appendix A: Questionnaires Sent to Media Staff Members and Teachers	117
Appendix B: Services to Teachers in Indiana Senior High Schools: Mean Responses and Rankings by all Media Staffs and Teachers Arranged by Item Number	139

LIST OF TABLES

Table	Page
1. A Comparison of the Number of Students, Teachers, and Media Staff in Accredited Indiana High Schools for School Year 1972-1973	25
2. Response to the Questionnaire by Teachers in Nine Schools	35
3. The Use of Media Center Services by Non-Responding Teachers as Rated by the Head of the Media Center	36
4. Major Teaching Areas of Non-Responding Teachers in Nine Schools	38
5. Pearson Product-Moment Correlations of Media Staff Size and the Number of Services Reported by the Media Staff	44
6. A Comparison of the Number of Overestimations and Underestimations of Service by the Media Staff to the Teachers in Nine Schools	48
7. Pearson Product-Moment Correlations of Service Frequency as Reported by the Media Staff and Teacher Satisfaction in Nine Schools	56
8. Pearson Product-Moment Correlations of Service Frequency as Reported by Teachers and Their Satisfaction Ratings in Nine Schools	57
9. Pearson Product-Moment Correlations of Media Staff Size and Teachers' Satisfaction Responses	58
10. Ranking of 40 Schools by the Number of Services Offered to Teachers	62
11. Services to Teachers in Indiana Senior High Schools: Mean Responses and Rankings by all Media Staffs and Teachers Arranged by the Frequency Rankings in 40 Schools	65
12. Leik's Measure of Ordinal Consensus Among the Media Staff Members of 34 Schools	88
13. The Ratings and Leik's Consensus Score of 64 Service Statements by the Four Media Staff Members in School Number 32	91

Table	Page
14. A Comparison of the Ratings of the Heads of Media Centers with the Other Professional Staff and Clerical Staff Across 64 Items	93
15. Number of Media Center Services Reported by Teachers in 10 Subject Departments	95
16. The Mean Leik's Consensus Score of 64 Service Statements by Subject Area Teachers in Nine Schools	97
17. The Number of Services on Standard Deviation Above and Below the Grand Means on Three Rating Scales Categorized by Service Type	106

LIST OF FIGURES

Figure	Page
1. A Comparison of the Frequency Responses by the Media Staffs and Teachers in Nine Schools Concerning Media Center Services	52
2. Liesener's Media Program Model	99
3. Revised Media Program Model	100

CHAPTER I

THE PROBLEM AND REVIEW OF THE LITERATURE

Introduction and Purpose of the Study

Ever since the development of school libraries in early twentieth century America, services to faculty members have been considered a fundamental part of the school library program. As evidenced by the following quotations, standards for school libraries since 1920 have endorsed support of and participation with the teacher in providing an effective educational program:

From the C. C. Certain Standards of 1920:

The librarian should be present at all teachers' meetings held with reference to courses and policy governing instruction and should have the ability to work for and with teachers so well that mistakes in adaption of book collections to needs may not occur . . . helping teachers and pupils to find suitable material on special topics, notifying teachers of new books and articles on professional lines. . . .¹

From School Libraries for Today and Tomorrow of 1945:

The relationship of the classroom teacher and the school librarian in their joint responsibility for leadership in the mental, emotional, and social growth of young people makes it important that the librarian assume his share of the educational program.²

¹National Education Association of the United States, Department of Secondary Education, Committee on Library Organization and Equipment, C. C. Certain, Chairman; Standard Library Organization and Equipment for Secondary Schools, Report of a Committee of the National Education Association on Library Organization and Equipment, p. 19.

²American Library Association, Committee on Post-War Planning, School Libraries for Today and Tomorrow, p. 14.

From the 1960 Standards for School Library Programs:

The development and growth of a dynamic library program is possible only when teachers and librarians work together in formulating library policies, in selecting library materials, in stimulating and guiding the reading of students, and in enriching classroom instruction through the effective use of library resources.³

From the 1969 Standards for School Media Programs:

The emphasis is always upon the learner and upon the function of the media staff as a supportive arm to the teacher in achieving the goals of the instructional program.⁴

Paralleling the emphasis from school library standards on library services to teachers, accreditation instruments designed for use in secondary schools have included this area to be evaluated. The 1940 Evaluative Criteria used widely throughout the country included two checklists dealing with library services to teachers.⁵ The editions every 10 years since then have combined the checklists into one section containing from 10 to 12 statements.⁶

³American Association of School Librarians, Standards for School Library Programs, p. 65.

⁴Joint Committee of the American Association of School Librarians and the Department of Audiovisual Instruction of the National Education Association, Standards for School Media Programs, p. 3.

⁵Cooperative Study of Secondary School Standards, Evaluative Criteria, 1940, pp. 55, 59.

⁶Cooperative Study of Secondary School Standards, Evaluative Criteria, [1950], p. 217; National Study of Secondary School Evaluation, Evaluative Criteria, [1960], p. 261; National Study of Secondary School Evaluation, Evaluative Criteria for the Evaluation of Secondary Schools, pp. 287-288.

Numerous articles about library services to teachers have been published in the professional literature. The 1921-1932 Library Literature⁷ used the subject heading "School libraries - Relations with teachers" and indexed 19 articles. The next volume expanded the subject to read "School libraries - Relations with teachers and curriculum," which has remained in each index since 1933. Many authors writing before World War II were concerned with carving out a place for the library and the librarian as the major supporting arm of the teacher and the curriculum. Articles since that time have dealt with a description of services to teachers in specific schools as examples of what could be done in the school's educational program. Still others have taken the form of pleadings from library leaders to school librarians to improve their relationships with teachers so that the student could, in turn, benefit from the materials contained in school library collections.

But as with many areas of library service, current writers of library literature are still discussing the lack of teacher-media specialist cooperation. This is evidenced in an article by Richard Darling, past president of the American Association of School Librarians, who said in 1971:

We need to enlist the teacher in the entire library program making that program indistinguishable from the program of the school. This must begin with the selection of materials, continue through the planning, teaching and learning process, and culminate in the assessment of achievement. These have been

⁷Library Literature 1921-1932, p. 329.

our goals, but we have rarely become involved enough to accomplish them.⁸

During the past 10 years in an attempt to incorporate into school library programs new developments in instructional technology, leaders in the library and audiovisual fields have worked together to formulate new standards for unified programs. This has involved the creation of new terminology for describing the facilities, materials, and staff of a dynamic program. The "media center," the "cross-media approach," the "media specialist," are some of the terms used in the place of "school library" and "audiovisual department," "library program," "librarian," and "audiovisual coordinator."

Coupled with this change in terminology, the importance of the media staff's involvement in the instructional goals of the school was reemphasized in the 1969 Standards for School Media Programs. But progress toward excellence in the media center must begin with an assessment of the current program followed by a development of specific objectives for improvement and a time table for implementation.

The purpose of this study was to identify, analyze critically, and evaluate the services being offered to the teachers in the senior high schools of Indiana during the school year 1972-1973.

Questions and Hypotheses

The questions investigated in the study were:

⁸ Darling, R., "Accountability: Notes Toward a Definition," Library Journal 96:3806, November 15, 1971.

1. What types of services to teachers do media-staff members consider as important? unimportant?
2. What services do members of the media staff give to teachers most often? least often?
3. What services do the teachers report they receive most often? least often?
4. What services provided by the media center staff are most satisfying to teachers? least satisfying?

The hypotheses investigated in the study were:

1. There will be a consensus among media staff members in reporting the frequency of media center services to teachers.
2. There will be a positive correlation between the frequency of media center services and the importance given to these services by the media center staff.
3. There will be a positive correlation between the size of the media staff and the number of services to teachers reported by the media staff.
4. There will be a negative correlation between the media staff-to-teacher ratio and the number of services to teachers reported by the media staff.
5. There will be a consensus between the teachers and the media staff in reporting the frequency of services provided by the media center.
6. The greater the number of services to teachers reported by the media staff, the higher teachers will rate their satisfaction with those services.
7. There will be a positive correlation between the size of the media staff and the teachers' satisfaction.
8. There will be a negative correlation between the media staff-to-teacher ratio and the teachers' satisfaction rating.
9. English, social studies, and science teachers will report more services provided by the media center than will other teachers.

Definitions

Media means "printed and audiovisual forms of communication and their accompanying technology."⁹

The media center is the place or places in the school where the full range of media, equipment, and services are available to students and teachers.

The media specialist is an individual with broad training in educational media who works at the professional level and is responsible for instructional decisions. The specialist may serve (a) a level of instruction, e.g., elementary school, middle school, or high school, (b) areas of curriculum, (c) type of media, and/or (d) type of service.

School library is used in an historical sense when quoting from documents that use this term. The term is used synonymously with media center.

Media staff means the total paid personnel of the media center including professionals, technicians, and clericals.

Related Research

Studies of school library services. Three studies published before the 1960 Standards for School Library Programs are indicative of the interest at that time in a service-oriented philosophy of school libraries.

In 1958, the National Education Association conducted a study entitled, The Secondary-School Teacher and Library Services. The purpose

⁹ Joint Committee of the American Association of School Librarians and the Department of Audiovisual Instruction of the National Education Association, Standards For School Media Programs, p. xi.

was to:

Study school library services as they are viewed by secondary-school teachers and to obtain information about how and to what extent teachers use these services. A second purpose was to obtain information concerning the value of these services as recognized by teachers. Third, and most important, the study was designed to collect information that would be useful in improving library services.

Questionnaires were sent to 5,000 teachers of both large and small urban areas. The small return rate on the questionnaire (29 per cent) casts doubt on the representativeness of the study, but its findings are of interest as a background for the present dissertation.

Perhaps the most important result of the study was the breakdown by subject area of teacher use. English, social studies, and science teachers were the dominant library users and tended to rate the services of the library higher than infrequent user groups such as business education, industrial arts, and mathematics teachers. The study reported that a major expansion of materials and services should be extended to art, foreign language, music, household arts, health and physical education. The study raised an important question:

Are the limited library services available in these subject areas (math, business, etc.) the result of a limited demand for them, or is the limited use of library services in these areas the result of the limited services that are available?¹¹

Since the N.E.A. study was completed before the publication of the 1960 Standards for School Library Programs and before the great

¹⁰ National Education Association of the United States, Research Division, The Secondary-School Teacher and Library Services, p. 5.

¹¹ Ibid., p. 5.

infusion of federal funds into school library programs in the 1960's, many of its findings need to be replicated to discover the progress made in the intervening 13 years. Of particular interest is the contribution of the librarian to the teaching process, major and minor users among teachers, determination of library purchases, and the provision of professional materials for teachers.

Two years after the N.E.A. study, Sister Mary Peter Claver made a study of student and faculty use of the library in three Midwestern Catholic high schools. She queried 2,200 students and 108 teachers by questionnaire and followup random interviews to discover "the attitudes of the students and faculty toward the school library, faculty use of school and public libraries, and faculty evaluation of the need, importance, and adequacy of school library materials in the teaching program."¹²

The Claver study confirmed the N.E.A. study finding that English, social studies, and science teachers were the major users of library resources. But Claver also discovered that there was a lack of agreement among teachers of the same course concerning the importance of library resources. The study also confirmed the N.E.A. finding that major users tended to rate library materials as adequate. Teachers reported that lack of time was the most influential factor in their disuse of library materials. Some teachers stated they had inadequate training in the use of materials and others stated that they

¹²Claver, M. P., Student and Faculty Use of the Library in Three Secondary Schools, p. i.

found textbooks sufficient for their needs. Claver found that only about half of the teachers were involved with the selection of materials for purchase as compared to 76 per cent of the teachers reported in the N.E.A. study.

Approximately half of the teachers in Claver's study said that librarians were aware of library-related assignments before these were given to the students. Claver felt that her major hypothesis, that faculty members made only limited use of the school library, was supported by her findings and that use of the school library was often related to the personality of the librarian. In summary, Claver stated:

A wide variation exists in the estimates of the importance of library materials among teachers within the same subject area, and inconsistencies are apparent between an individual teacher's rating of the importance of resources and his motivation of student use of them. Assignments, for the most part, do not motivate students to use library resources, and classroom instruction is largely textbook centered.¹³

Voisard's study in 1955 concentrated on the participation of the high school librarian in curriculum improvement. His survey of 229 librarians in schools over 1,000 enrollment covered most of the states in the United States. He found that about half of the school librarians studied were members of the school curriculum committee and spent about 25 minutes daily on curriculum improvement. Voisard felt that librarians were using only a small part of their potential to be a real force in curriculum development.

Of the numerous ways librarians assisted in curriculum improvement programs, the following results are most germane to the present

¹³Ibid., p. ii.

study: 56 per cent of the school librarians cooperated in teaching library skills to students; 61 per cent assisted teachers in a better understanding of library materials; 57 per cent coordinated classroom assignments with teachers; 48 per cent prepared bibliographies; but only 12 per cent assisted in curriculum research.¹⁴

In discussing the whole area of evaluation and assessment of school library services, Voisard gave some observations about his research: "The most useful type of evidence in evaluation was the quality of library service offered to the school. The quantitative measures were losing their appeal."¹⁵

After the publication of the 1960 Standards, a national emphasis was placed on development of facilities and collections especially at the elementary school level. Demonstration school libraries were set up through the Knapp School Libraries Project and visitors toured the facilities and then duplicated or modified what they saw for their own programs. The Standards gave quantitative statements for personnel, equipment, materials, and budgets and was used as an evaluative instrument by many schools and school districts.

Some state departments of education undertook to compare the existing school library programs in their states with the program outlined in the Standards. These studies were done either by the department or by individuals as dissertation studies. The studies were for the most part quantitative in nature and gave data upon which to recommend

¹⁴Voisard, B. W., Librarian Participation in High School Programs of Curriculum Improvement, p. 116.

¹⁵Ibid., p. 244.

program improvement on a statewide basis.

One such study was done by Margaret Lane in 1966 in the state of Oregon. Her study is of interest because it contained one section dealing with library services to teachers with the following results: 64 per cent of the librarians kept teachers informed about new materials; 63 per cent worked with teachers in selection of materials; 53 per cent supplied classroom collections as needed; 44 per cent prepared bibliographies on request; 42 per cent provided professional materials for teachers; 37 per cent introduced new materials to classes through book talks, demonstrations, or displays; and 22 per cent helped in the planning of new units of instruction.¹⁶ Commenting on one service, Lane said:

The librarians' participation in curriculum planning and counseling and guidance programs was not as extensive as could be desired, as approximately 25 per cent of schools,¹⁷ reporting stated that librarians participated in such activities.

And in her conclusions, Lane stated, "Service to teachers and students appeared to be diversified and extensive in some schools; however, in many schools, programs of library service need to be expanded."¹⁸

The most important studies of the 1960's which concentrated on school library services were done by Mary Gaver in 1965 and 1969 and

¹⁶ Lane, M. E., A Study of School Library Resources in Oregon as Compared to State and National Standards, p. 211.

¹⁷ Ibid., p. 230.

¹⁸ Ibid.

are the studies upon which the present investigation is based.

In the 1965 study by Gaver and Jones,¹⁹ the services of 34 superior school library programs from across the country were compared to the services offered by high school libraries in one New Jersey county. No relationship was found between the number of services provided by a secondary school library and the number of professional staff, and services were categorized into three groups: those provided by all schools, those differentiating between good and poor programs, and those falling into a "growing edge" category.

The 1969 study by Gaver²⁰ replicated many of the aspects of the 1965 study using 44 schools in the national sample and 32 New Jersey schools. The questionnaire concerning the services was expanded by Gaver to 274 services and included many more audiovisual services than had the 1965 study of 110 services. Concerning both studies, Gaver said:

It is assumed that the program of a media center can be studied by measuring the number of separate services provided by the staff to students and faculty. This does not permit measurement of intensiveness of individual services. Center directors may choose to emphasize a small number of services rather than provide a variety.²¹

¹⁹Gaver, M. V., and Jones, M. L., "Secondary Library Services: A Search for Essentials," Teachers College Record 68:200-210, December, 1966.

²⁰Gaver, M. V., Services of Secondary School Media Centers: Evaluation and Development, 131 pp.

²¹Ibid., p. 19.

Two findings of the 1969 study are important as the basis for the selection of sample schools in the present investigation. Gaver found a strong correlation between the total paid staff and the number of services. She also found a high correlation between the ratio of paid staff to the enrollment of the school and to the number of services offered.

Instruments for task analysis and evaluation of school media programs. There have been a number of efforts by organizations and individuals to prepare self-evaluative study instruments and task analysis inventories for the programs and personnel of the media center.

In 1951, Frances Henne, Ruth Ersted, and Alice Lehrer published an evaluative guide for judging school library programs based on the 1945 standards, School Libraries For Today and Tomorrow. The purpose of this instrument was to provide information for parts one and two of the following program:

1. A survey of the services and facilities existing in the library.
2. An evaluation of these services and facilities
 - a. In terms of their effectiveness in achieving the objectives of the school library, and
 - b. In relation to accepted standards of practice and equipment.
3. A consideration of other school library services and facilities which the school library does not have now, on the basis of their potential contribution to the library:
 - a. In effectively achieving its objectives
 - b. In meeting accepted standards of practice and equipment.
4. The formulation of a planning program for the school library that notes
 - a. The types of services to be retained, improved, expanded, introduced, or dropped;
 - b. The facilities needed to implement these services;
 - c. The measures which have been taken to introduce new

- services and to obtain new facilities, and
 d. The time-span in which these measures can reasonably be expected to be accomplished.²²

The guide consisted of numerous questions about the services and program of the school library divided into 11 topics. Topic number 3 concerned library services to teachers with nine questions and two tables which the librarian was to fill out using the following scale:

<u>How good?</u>	<u>To what extent?</u>	<u>Yes or no?</u>
A - Excellent	A - Very extensively (or completely)	A - Yes
B - Good	B - Considerably	F - No
C - Fair	C - Some	X - Does not apply ²³
D - Poor	D - Very little	
F - Not at all	F - Not at all	
X - Does not apply	X - Does not apply	

After publication of the 1960 Standards, this evaluative guide was no longer current.

As the initial phase of the School Library Manpower Project, an N.E.A. research team devised a Task Analysis Survey Instrument. This instrument was developed in the study of a purposive sample of media centers throughout the United States considered by experts to meet specially developed evaluative criteria.²⁴ The study team analyzed the tasks and responsibilities of the various personnel employed by

²²Henne, Frances, Ersted, Ruth, and Lohrer, Alice, A Planning Guide for the High School Library Program, p. v.

²³Ibid., p. x.

²⁴National Education Association of the United States, Research Division, School Library Personnel Task Analysis Survey: A Report Prepared in Phase I of the School Library Manpower Project, 91 pp.

the media center and then formulated 300 task statements. No measure was taken of the quality or intensity of a given task -- only whether the task was performed regularly by the media center.

The most comprehensive job analysis of media support personnel at the paraprofessional level was accomplished through the Association for Educational Communications and Technology's study entitled Jobs in Instructional Media²⁵ published in 1970. The work of over 100 media staff members from schools, colleges and universities, industrial facilities, and government and military sites was analyzed according to the Department of Labor's technique of functional job analysis (FJA). The purpose of this task analysis study was to create a machine-readable comprehensive list of activities which could be used to restructure tasks in creating new jobs, to foster better utilization of current personnel, and to assist in designing the educational programs for new people entering the field.

In a 1970-1971 study of Illinois school audiovisual programs conducted by the University of Oregon, a task analysis instrument entitled Media Manpower Job Inventory²⁶ was utilized. There were 487 tasks listed under nine functions: research, evaluation, design, production, logistics, utilization, organization management, information management, and personnel management. All members of the media staff were asked to respond to the items and to indicate whether they did the activity, how much time they spent on the activity, where they received training to

²⁵Association for Educational Communications and Technology, Jobs in Instructional Media, 304 pp.

²⁶Hargrevs, D. G., Media Manpower Job Inventory, 29 pp.

accomplish the task, and how adequate that training had been.

A second study in Illinois during the 1970-1971 school year entitled Illinois School Library Media Survey²⁷ was conducted by Lucille M. Wert, Director of the Library Research Center at the University of Illinois. All school districts in the state, both public and private, were asked to participate in phase one of the study which identified staffing patterns, district center personnel, salaries of personnel, and amount of funds spent on materials in the various school library media centers under their jurisdiction. During phase two, a 22 per cent random sample of Illinois schools was selected and the librarians were asked to fill out a questionnaire concerning their building-level library media center program. One part of this questionnaire included a list of 19 services to teachers. The librarians were asked to check those services which had been provided during the 1970-1971 school year. While the response from the librarians in phase two was low, 55 per cent representing 120 schools, the results were germane to the present study especially since the data came from a neighboring state.

Wert reported that 75 per cent of the librarians:

1. Distributed notices about the library program.
2. Distributed lists of new library acquisitions.
3. Consulted teachers about needs of library collection.
4. Gave instruction in library use for classes.

²⁷Wert, L. M., "Illinois School Library Media Survey," Illinois Libraries 54:553-644, September, 1972.

5. Placed materials on reserve.

Sixty-six per cent of the librarians:

1. Made announcements about library programs at faculty meetings.
2. Circulated publishers' announcements and catalogs.
3. Consulted teachers about adequacy of service.
4. Consulted teachers about adequacy of resources for instructional units.
5. Scheduled use of AV equipment.

Fifty per cent of the librarians prepared reading lists and bibliographies while 33 per cent of the librarians:

1. Scheduled use of AV materials.
2. Arranged for renting or borrowing of AV materials.
3. Prepared instructional materials.

Twenty-five per cent of the librarians:

1. Gave in-service programs on use of materials and equipment.
2. Served on school curriculum committee.

Twenty per cent of the librarians:

1. Gave workshops on the library program.
2. Trained projectionists to serve in classrooms.
3. Scheduled projectionists.²⁸

In 1970 the Association for Educational Communications and Technology published the Evaluative Checklist: An Instrument for Self-Evaluating an Educational Media Program in School Systems.²⁹ This

²⁸ Ibid., p. 597.

²⁹ Fulton, W. R., and King, K. L., Evaluative Checklist: An Instrument for Self-Evaluating an Educational Media Program in School Systems, 13 pp.

instrument was divided into six areas: administrative commitment, media services center, facilities, budget and finance, and staff. The Checklist consisted of a number of progressive statements under each category and the respondent is given a score for the statement which most nearly matches his situation. The scores are then totalled and shown graphically on a continuum from weak to strong.

In a study conducted by James W. Liesener and Karen M. Levitan³⁰ at the University of Maryland in 1972, a 90-item questionnaire of library/media center services was developed. The purpose of the study was to develop a model for budgeting procedures utilizing the concepts of the Program, Planning and Budgeting System. The questionnaire was designed to be filled out by students, teachers, administrators, and school library/media specialists, but no indication was given in the report as to how many persons in each of these groups participated, nor were the responses reported. Respondents were asked to indicate the quantity of various materials available and whether or not a particular service was given. A "yes" answer that a service was provided by the library/media center meant that the service was consistently and currently provided.

Previous studies in Indiana. Wayne R. Dralle³¹ made a study of audiovisual programs in Indiana high schools during the school year 1963-1964. The study surveyed 460 high schools in the state by questionnaire with a followup study in depth of 10 high school programs. The study was concerned with the organization, training, student

³⁰ Liesener, J. W., Questionnaire for Survey of School Library/Media Center Services, 29 pp.

personnel, finance, facilities, utilization, local production, and the audiovisual materials and equipment available in the audiovisual programs.

Dralle expressed disappointment in the facilities, materials, and budgets available for the audiovisual programs. One conclusion of interest in the present study was: "An area which does not adequately serve the needs of the instructional staff in the schools of Indiana is the in-service audiovisual education program. Little effort is being expended by the audiovisual coordinators to inform teachers about audiovisual materials and techniques."³²

In a study of all types of Indiana libraries prepared in 1970, Edwin E. Olson³³ undertook to describe the kinds of services provided. A total of 314 school libraries including elementary, middle, and high schools participated in the survey. The questionnaire contained 460 services divided into six categories: access to materials, provision of bibliographic citations, answer services, user instruction and education programs, wherewithal (facilities and equipment), and user relations. A committee of experts was asked to distribute a total of 1,000 points among the 460 services in such a way as to indicate the importance placed on each service. The results of the weighting or emphasis given by the experts in each of the categories were as follows: 25 per

³¹Dralle, W. R., The Status of Senior High School Audiovisual Programs in Indiana in 1963-1964 with Recommendations for Improvement, 332 pp.

³²Ibid., pp. 285-286.

³³Olson, E. E., Survey of User Service Policies in Indiana Libraries and Information Centers, 287 pp.

cent of the total weight was given to the provision of material in the collection; 15 per cent of the weight was for circulation of material in the collection; 5 per cent was for the provision of material not in the collection; 7 per cent was for provision of citations; 3 per cent was for answer services; 20 per cent of the total weight was for user instruction and educational programs; 20 per cent was for wherewithal (facilities and equipment), and 5 per cent was for user relations.³⁴

Need for the Present Study

The focus of recent studies has been to develop inventories of tasks and services which the media center might provide. These instruments have been used as self-evaluation tools by the media staff and lack two important elements:

1. The first element is to allow the media staff to indicate how often a particular service or activity is provided.
2. The second is a check of some sort on what the media staff says it is providing.

Past studies have been interested primarily in services provided "regularly" and have assumed that media staffs are competent enough to make analytical judgments about their own service programs. Most often, the checklist of service items has been filled out by the head of the media center with no opportunity for other staff members to participate and thus arrives at a consensus judgment as to what services are

³⁴Ibid., p. 147.

provided.

Inevitably, any analysis about the services provided by the media center must involve the judgment of the users. The Evaluative Criteria for the Evaluation of Secondary Schools³⁵ used by the regional accrediting associations does involve interviews with users by visiting inspection teams, but the items in the section concerned with media services to teachers are too few and too general. Thus, not enough objective data on specific services are made available to the media staff for program improvement. Neither is there available a careful study of the diffusion of the media services throughout the various departments in the school.

³⁵National Study of Secondary School Evaluation, op. cit.

CHAPTER II

METHODOLOGY

This study consisted of two phases. The first phase included personal visits by the investigator to 42 senior high school media centers in various parts of Indiana where each member of the media staff was invited to respond to a questionnaire concerning the services offered by the media center to the faculty of the school. On the basis of the returns from this questionnaire, nine schools were selected for further study. In this second phase, a random sample of one-third of the teaching faculty was asked to respond to a similar questionnaire concerning the services they received from the media center. The specific details of the selection of the schools and teachers, the formation of the questionnaire and pretest, and the method of data collections and analysis of the study are described in this chapter.

Selection of the Schools for the Study

The population for the study was defined by using the following criteria:

1. Each school had to be recognized by the State Department of Public Instruction of Indiana as a public secondary school including grades 10 through 12.
2. Each school had to be accredited by the North Central Association of Colleges and Secondary Schools.
3. The head or director of the media center had to have been a member of the staff for at least one academic year prior to the study. In cases where the media program was separated into library and audiovisual

departments, the heads of both departments had to have been on the staff for one academic year prior to the study.

There was a total of 59 senior high schools in Indiana which included grades 10 through 12 and which were accredited by the North Central Association of Colleges and Secondary Schools¹. The superintendent of schools each senior high school in the population was contacted by a letter which explained the purpose of the study and asked permission to contact the school principal. After replies were received, letters were sent to each principal explaining the study and requesting his cooperation. The principal was asked to return the names of the media staff in his school to the investigator. These letters were sent during the second week of June, 1972, and replies were complete by September 15.

Among the 59 schools asked to participate, there were 17 which could not be used in the study. Of this number, three schools could not participate because of school divisions and construction; five schools could not be included because the head of the media center was new to the staff; seven superintendents or principals would not give permission for their schools to participate; and two schools changed from grades 9-12 to 10-12 too late to be included in the study. Thus, 42 schools constituted the final population.

After visiting each of the 42 schools and receiving questionnaires by mail from the media staffs, two schools were eliminated from the data analysis. The questionnaires from these two schools were judged

¹North Central Association of Colleges and Secondary Schools, Commission on Secondary Schools, Complete List of Accredited High Schools in Indiana for School Year 1972-1973, 17 pp.

unrepresentative of the actual media center service programs on the basis of the investigator's observations and interviews at these schools. This left 40 senior high schools in Indiana to be included in the data analysis for the first phase of the study.

Because it was not economically feasible to study all the secondary schools in Indiana, it was of interest to compare the size of the schools in the study with the size of the various types of high schools in the state. The data for comparing the number of teachers and students in the schools were obtained from the North Central Association list of accredited schools;² the size of the media staffs in all schools was not available. The mean number of students and teachers with the mean number of media staff personnel only for schools included in this study is presented in Table 1.

From Table 1, it is apparent that the high schools in the final population of the study (grades 10-12, N = 40) were approximately 10 teachers or 300 students larger than the high schools which include grades 7-12, 9-12, and 10-12; and were 7 teachers or 200 students larger than the high schools which include 9-12 and 10-12.

²Ibid.

TABLE 1. A COMPARISON OF THE NUMBER OF STUDENTS, TEACHERS, AND MEDIA STAFF IN ACCREDITED INDIANA HIGH SCHOOLS FOR SCHOOL YEAR 1972-1973

Schools	Students		Teachers		Media Staff	
	Mean Number	Standard Deviation	Mean Number	Standard Deviation	Mean Number	Standard Deviation
Schools including grades 7-12, 9-12, 10-12 (N = 246)	1180	689.70	53.10	27.97	*	
Schools including grades 9-12, 10-12 (N = 194)	1268	727.30	56.43	29.20	*	
Schools including grades 10-12 (N = 59)	1381	615.80	60.60	25.51	*	
Schools including grades 10-12 in final population studied. (N = 40)	1451	669.10	63.80	28.09	2.97	1.87
Nine schools in case studies	1467	562.20	63.99	23.30	2.74	1.88

* data not available

Geographically, the 40 schools in the final population were well distributed throughout the state with the exception of the southwestern area. The population included schools in large cities, suburban areas, medium-sized cities and rural communities. It also included schools in all types of socioeconomic areas, industrial cities, farming communities, inner-city areas, and wealthy suburban districts.

For the second phase of the survey, nine schools were selected from the 40 as case studies for more intensive research. After the questionnaires from the media staffs of all 40 schools were analyzed, the schools were ranked according to the total number of services which they reported. This was done by adding the number of services which the media staff reported as given "regularly" to those services reported as given "occasionally" (See Table 10). Out of 64 possible services to teachers, the media staffs reported a range from a high of 62 total services to a low of 21 services. The ranked schools were then stratified into three equal size groups: those giving a high number of services (52-64), those giving a moderate number of services (45-51), and those providing a low number of services (21-44). Three schools were then selected from each of the strata as "typical" of that stratum by the writer and his research committee. Some of the criteria used for this selection were:

1. The case study schools had to include large, medium, and small staffs.
2. The case study schools must not have problems with facilities and media staff-teacher relationships that would prevent an objective study of the situation.

3. The media centers had to be "typical" of the stratum in terms of media staff size, media collection, and media staff training. A comparison of the size of the nine case study schools with the 40 schools in Table 1 shows the two groups almost identical in the mean number of teachers, students, and media staff personnel.

Questionnaire Construction and Pretest

The most comprehensive list of media center services available was prepared by Mary Gaver and used in her study of secondary school media centers.³ This list included both services to teachers and students. After drawing from the list only those services that applied to teachers, the investigator judged the list as lacking in several areas. These areas pertained to services advocated by instructional technologists and included instructional design, implementation, and evaluation, i.e., those services where the media staff are directly involved in the instructional program in contrast to services which are considered supportive of that program.

Permission was granted by Miss Gaver to use her list of services as the basis of the present questionnaire since some of the services in the final instrument were worded similarly to those in the Gaver list. The investigator then sought out many other lists of media center services, categorized each service found, compared similar items with the Gaver list, added some services not present in any of the

³Gaver, Mary Virginia, Services of Secondary School Media Centers: Evaluation and Development, 131 pp.

lists and then formulated the preliminary list for this study. The following sources were utilized: Gaver;⁴ National Study of Secondary School Evaluation;⁵ National Education Association of the United States;⁶ Henne, Ersted, and Lohrer;⁷ School Library Personnel Task Analysis Survey;⁸ Association for Educational Communications and Technology;⁹ Fulton and King;¹⁰ Hargrevs;¹¹ Liesener;¹² Hardman;¹³ Newcomb;¹⁴ and A Survey of the Educational Media Services of Calgary Public Schools.¹⁵

⁴ Ibid.

⁵ Evaluative Criteria for the Evaluation of Secondary Schools, pp. 287-288.

⁶ National Education Association of the United States, Research Division, The Secondary-School Teacher and Library Services, p. 5.

⁷ Henne, Frances; Ersted, Ruth; and Lohrer, Alice, A Planning Guide for the High School Library Program, p. v.

⁸ National Education Association of the United States, Research Division, School Library Personnel Task Analysis Survey: A Report Prepared in Phase I of the School Library Manpower Project, 91 pp.

⁹ Association for Educational Communications and Technology, Jobs in Instructional Media, 304 pp.

¹⁰ Fulton, W. R., and King, Kenneth L., Evaluative Checklist: An Instrument for Self-Evaluating an Educational Media Program in School Systems, 13 pp.

¹¹ Hargrevs, Dale G., Media Manpower Job Inventory, 29 pp.

¹² Liesener, James W., Questionnaire for Survey of School Library/Media Center Services, 29 pp.

¹³ Hardman, R. R., Philosophy of Role and Identification of Critical Tasks Performed by Educational Media Specialists in Elementary and Secondary Schools of Iowa, 197 pp.

¹⁴ Newcomb, R. B., Role Expectations of the County School Library Supervisor and Their Perceived Fulfillment, 182 pp.

¹⁵ A Survey of the Educational Media Services of Calgary Public Schools, 137 pp.

In addition to the list of service statements, three scales for response were constructed utilizing the suggestions and examples from the various instruments listed above. The preliminary questionnaire was then submitted to the investigator's research committee members and several fellow doctoral students who made corrections and revisions and who recommended services to be added or deleted from the list.

The results of this first revision were incorporated into a pilot questionnaire. This instrument was then pretested by 19 practicing professional media staff members and media clerks in Indiana, Maryland, and Idaho, 10 library and audiovisual educators in Indiana, Kentucky, New Jersey, and Idaho; and one state school library consultant. The pretest included a complete study of one senior high school media center in Idaho which involved three media staff members and 13 teachers. The pretest results were incorporated into the instrument and then reviewed once more by the research committee before the final printing.

The final questionnaire was printed in two versions: one for the media staff and one for teachers. Both versions contained the same 64 services statements divided into eight categories:

1. Making media (print and nonprint) and equipment accessible to teachers.
2. Assisting teachers to develop skill in the utilization of instructional media and equipment.
3. Making teachers aware of services and materials.
4. Planning, designing and organizing materials and instruction.
5. Producing or adapting instructional materials.

6. Acquiring instructional materials through purchase, borrowing, or rental.
7. Evaluating the quality of instructional materials and their use.
8. Stimulating teachers' growth as professional educators and as subject specialists.

Both versions of the questionnaires asked the participant to respond twice to the same service item on two different scales. One of these scales "How Often Do You Provide (Receive) This Service" was parallel. The second scale for each group differed in that media staff members were asked how important they considered the suggested service to be in their own program and the teachers were asked to rate how satisfactorily each service was provided by their media staffs. A copy of both versions of the questionnaire is included in Appendix A.

Method of Data Collection and Analysis

During the first two weeks of October, 1972, appointments were made by telephone with the heads of the 42 senior high school media centers. These visits were spread over a period of four weeks with as many as three centers visited in one day. The visit at each center took approximately one hour. Each member of the media staff was interviewed briefly and was introduced to the questionnaire. The participant was invited to respond to the questionnaire at his or her convenience and then mail it back to the researcher. The head of the media center gave the author a tour of the facilities and there was time to investigate the service program and media collection briefly. Four questions were posed to each participant largely to induce discussion and to gain

acceptance for the study. The questions were:

1. A number of years ago, a study was done by the National Education Association concerning library services to teachers. A national sample of 5,000 teachers was asked to indicate what services they received from the library. The study reported that social studies teachers and English teachers were the heaviest users of library materials. Science teachers rated somewhat lower, and the teachers in the remaining departments were negligible users. If this study were to be repeated in your school today, would the results be the same, or have other departments emerged as major users?

2. What do you consider to be one of the most important services you give to teachers?

3. What do you consider as a problem in giving the kind of service you would like to give to the faculty?

4. As you observe teachers utilizing audiovisual materials, are teachers integrating these materials into the instructional process, or are they considered as supplementary?

The clerical and technical members of the staff were cautioned in the interview to respond only to those services with which they were familiar and to circle Xs (meaning: Don't know) for the rest of the items.

Followup letters to non-respondents were staggered so that they were received by the participant approximately two weeks after the visit. The followup letters were most often a personal note, and an individual thank-you note was written to each respondent on the receipt of the questionnaire. As the first of December approached, some telephone

calls were made to non-respondents. As a result, 123 usable questionnaires were received out of a possible 130 media staff members in 40 Indiana high schools for a response rate of 94.6 per cent.

As the questionnaires were received, the responses were tabulated quickly so that the second phase of the study could be conducted before Christmas vacation. Nine "typical" schools were selected for the second phase of the study as already outlined. The superintendents of each of the nine schools were contacted by telephone and asked for permission to have one-third of the teaching staff of the school participate in the study. All superintendents responded in the affirmative. The principals of the schools were then contacted and their participation was requested. At the same time, an appointment was made for the investigator to visit the school and distribute the questionnaires.

Eight schools were visited in the month of December, 1972, and one school in January, 1973. During this visit, the investigator obtained a list of the teaching faculty from the principal. Those teachers who had not been on the faculty during the school year 1971-1972 and those who did not teach at least half-time in the school were eliminated from the list. A simple random sample was then taken of one-third of the total teaching faculty utilizing a random number table, and the questionnaires were distributed to the teachers' boxes. Followup letters were sent to the non-respondents approximately two weeks after the initial visit. The response rate from one school, however, was so poor, that a second visit was made and the non-respondents were personally asked to participate.

During the month of April, 1973, each of the nine schools was revisited and the results of the study of that school were shown to the media staff. During these sessions which took approximately one and one-half hours, each item of the questionnaire was discussed comparing the responses of the media staff with the responses of the teachers. The purpose of this visit was to allow the media staff to respond to the results and to help explain the differences which occurred between what media staff members indicated they were giving to the teachers and what teachers indicated they were receiving.

The data from all questionnaires were hand coded. Analysis of the data for the various questions and hypotheses was done by entering the data into the Control Data Corporation 6600 computer at the Indiana University Research Computing Center via the Hazeltine 2000 intercom terminal located in the Graduate Library School Research Center. The intercom statistical package Interactive Statistical Instruction System¹⁶ was used. One other statistical test was programmed specifically for this study by Miles Libbey, former director of the Graduate Library School Research Center, Indiana University.

Summary

In summary, the methodology for this study was based upon the same type of service investigation as the Gaver study,¹⁷ but differed in several ways:

1. All members of the media staff rather than just the head of the media center were asked to indicate what services were

¹⁶Interactive Statistical Instruction System, computer program.

¹⁷Gaver, op. cit.

given in the media center.

2. The members of the media staff were asked to rate the frequency of the service given in their center rather than check only those services provided regularly by the media center.
3. The users (teachers) of the services were asked to indicate how frequently a service was given to them by the media staff.

The survey method chosen for this study did have certain limitations commonly associated with questionnaires. Service statements were difficult to construct so that they would be understood by both teachers and media staff. Asking respondents to mark each service on two different scales added a dimension of difficulty and gave opportunity for a larger error rate. Also, testing variety, frequency, and dispersion of the services among the various departments of the school was not a measure of the depth or quality of a given service. The study assumed that both teachers and media staff would feel free to assess honestly the services provided by the media center.

Advantages of using a mail questionnaire included the possibility of obtaining a large amount of information about the media center service program in a relatively short period of time. Utilizing a frequency scale gave the media staff and teachers an opportunity to identify the occasional, yet perhaps significant, service without having to boost the claim to "regularly given" just to identify that the service was a part of the program.

The data from this investigation are presented and analyzed in Chapter III.

CHAPTER THREE
ANALYSIS OF THE DATA

Questionnaire Returns

During phase one of the study, questionnaires were distributed to 130 media staff members in 40 Indiana senior high schools. The number of usable returns was 123 or 94.6 per cent. In phase two of the study, a random sample of one-third of the teaching staff in nine schools was asked to respond to the questionnaire. Table 2 shows the number of responses from teachers in each school.

TABLE 2. RESPONSE TO THE QUESTIONNAIRE BY TEACHERS IN NINE SCHOOLS

School identification number	Number of teachers in sample	Number of usable responses	Per cent of response
32	25	21	84.00
15	27	17	62.96
10	20	18	90.00
11	23	17	73.91
37	22	14	63.64
17	10	9	90.00
25	15	15	100.00
1	11	9	81.82
29	37	29	78.38
Totals	190	149	78.42

The response from the teachers in the nine schools ranged from a low of 62.92 per cent to a high of 100.00 per cent with a mean usable response for all teachers of 78.42 per cent. Inasmuch as the investigator made several return visits to each of the nine schools, it was possible to analyze the types of teachers who did not respond. Two questions were of interest: (1) Were non-respondents generally non-users of media centers services?, and (2) Were non-respondents spread throughout the various subject departments of the school, or did they cluster in a few subject departments?

To answer question one, the head of the media center was asked to rate each non-responding teacher as a heavy user, a moderate user, or a non-user of media center services. The results of this question are given in Table 3.

TABLE 3. USE OF MEDIA CENTER SERVICES BY NON-RESPONDING TEACHERS AS RATED BY THE HEAD OF THE MEDIA CENTER

School identification number	Number of teachers by rating		
	Heavy users	Moderate users	Non-users
15	1	3	8
10	0	0	2
11	0	2	2
25	0	0	0
17	0	1	0
37	2	0	6
1	1	0	1
29	2	2	3
32	1	1	2
Totals	7	9	24

Table 3 shows that there was a balance among heavy, moderate, and non-user teachers in all except two schools: school 15 and school 37.

The response rate of the faculty in school 15 was the lowest of the nine schools in the study (62.96 per cent). The media staff from this school received a moderate amount of criticism from the faculty who did respond, so that a higher non-response rate might have been anticipated. The results from the faculty of this school were probably skewed, but in the judgment of the investigator, not severely enough to negate the value of the responses.

The response rate from the teachers in school 37 was also low (63.64 per cent) and six of the eight non-respondents were judged as non-users of media center services. The head of the media staff indicated that a teaching position in this school was much sought-after by teachers in the surrounding districts. The teachers were characterized as being very self-satisfied and self-sufficient. The investigator did receive some evidence of an uninterested response to some of the items by teachers, but again, the amount of unreliability in the total response was judged to be not great enough to suggest dropping the school from the analysis.

Table 4 shows the non-respondents categorized by the subject departments in which they did the majority of their teaching.

It is immediately apparent from Table 4 that non-respondents were spread among the various departments and thus gave confidence that the response was representative of the various departments in the nine schools.

TABLE 4. MAJOR TEACHING AREAS OF NON-RESPONDING TEACHERS IN NINE SCHOOLS

School identi- fication number	English	Social Studies	Science	Fine Arts	Business	Foreign Language	Industrial arts	Home economics	Physical education and recreation	Mathematics	Total
15	2	2	1	0	2	0	0	1	0	2	10
10	1	0	1	0	1	1	0	0	0	0	4
11	1	1	1	1	0	1	0	1	0	0	6
25	0	0	0	0	0	0	0	0	0	0	0
17	0	0	1	0	0	0	0	0	0	0	1
37	0	2	1	1	1	0	1	0	0	2	8
1	0	1	0	0	0	0	0	0	0	1	2
29	0	2	2	0	2	0	2	0	0	0	8
32	0	1	0	2	0	0	1	0	0	0	4
Total	4	9	7	4	6	2	4	2	0	5	43

The remainder of the data analysis chapter is divided into sections based upon the hypotheses and questions posed for investigation. The evidence for acceptance or rejection of the various topics under consideration is drawn from the ratings of 130 media staff members and 190 teachers.

The Importance of a Service
Versus Its Frequency

The media staffs of the 40 schools were asked to rate the importance of each service as well as to indicate how frequently they provided that service to teachers. The scale used for this rating was:

- 3 -- very important
- 2 -- of some importance
- 1 -- of little or no importance
- X -- don't know; doesn't apply

In discussing the questionnaire in the introductory interview, the investigator asked each respondent to consider this scale as a measure of "practical importance," i.e., "In your own school, with its budget, materials collection, media staff, and with the strengths and weaknesses of your total effort, how important do you feel each of the items on the questionnaire is in your media center program?" The reasoning behind this approach was to encourage the respondent to rate his own priorities rather than give a "vote for the literature," since every service included in the questionnaire had had a "very important" rating given it by some writer or educator in the field.

The mean response on the importance scale across all 64 items was 2.54 with a standard deviation of .25, i.e., 68 per cent of the responses were between 2.79 and 2.29. This will be discussed at greater length later in this chapter.

The hypothesis to be tested was: There will be a positive correlation between the frequency of media center services and the importance given to these services by the media staff. To test this.

hypothesis, the media staff's grand mean response on the importance scale for each item was correlated with the grand mean response on the frequency scale. The frequency scale was:

3 -- regularly; as the need arises

2 -- occasionally

1 -- rarely; or never

X -- don't know

The 64 pairs of means were correlated using the Pearson product-moment correlation technique. The result was a coefficient of .911. This number is significant at the .05 level and accounts for 83 per cent of the variance. Thus, the hypothesis was accepted.

The grand mean on the importance scale of all 64 items was 2.54 in comparison with a grand mean of 2.13 on the frequency scale. On all items except two, the mean response on the importance scale was higher than the mean response on the frequency scale. The exceptions were items 4 and 50 as follows:

4. Establishes loan policies (i.e., checkout procedures, due dates, etc.) sufficiently flexible to meet teachers' needs. (2.95 vs. 2.97)
50. Plans with the teacher to rectify problems with materials (e.g., purchasing more or better materials, modifying existing materials, etc.). (2.19 vs. 2.31)

The response to this scale is of most value in an item-by-item comparison of importance, frequency, and teacher satisfaction which is shown in a later section of this chapter.

Correlation Between Quantity of Media
Center Staff and Services

Two hypotheses in this study were designed as corollaries of those tested by Gaver in her study entitled Services in Secondary School Media Centers.¹ She tested the relationship between (1) the number of paid library staff and the percentage of services checked by the library staff and (2) the number of library staff to student enrollment and the percentage of library services checked by the library staff. Since this study dealt only with services to teachers, the corollary hypotheses were:

1. There will be a positive correlation between the size of the media staff and the number of services to teachers reported by the media staff.
2. There will be a negative correlation between the media staff-to-teacher ratio and the number of services to teachers reported by the media staff.

The media staffs in this study rated each service on the scale:

3 -- regularly; as the need arises

2 -- occasionally

1 -- rarely; or never

X -- don't know; doesn't apply

In cases where there was only one person on the media staff, it was simple to count the number of services offered regularly by the media center. However, in 36 schools where the media staff was larger than

¹Gaver, M. V., Services of Secondary School Media Centers: Evaluation and Development, p. 38-40.

one, a method of counting the number of services was developed. The mean response to each item was considered as the best estimate or consensus of the frequency of a given service. For example, if there were three members on a staff and they rated an item: 3, 2, 3; then the mean of 2.67 was considered as the frequency of that particular service. A response of "X" was ignored in computing the mean. Furthermore, the following scale was used to count each of these means:

A mean of 2.50 - 3.00 was counted as one service given regularly.

A mean of 1.50 - 2.49 was counted as one service given occasionally.

A mean of 1.00 - 1.49 was counted as one service given rarely or never.

Thus, from our previous example, the three media staff members who marked 3, 2, 3 on one service item for a mean of 2.67 were credited as giving that service regularly. This method of counting the number of services was used throughout the study.

The number of full-time-equivalent members of the media staff was computed using a work week of 40 hours.

Utilizing these two methods of analysis, the raw data for the two hypotheses were correlated. The parametric test, Pearson product-moment coefficient of correlation, was selected as the proper statistic for computing the correlations in the phase one 40 schools and in the phase two nine case study schools. This statistic was selected instead of the Spearman rank order coefficient of correlation which Gaver used because the data of the present study met all the assumptions except

one and the Pearson coefficient is a more powerful statistic.² Uncertainty about the normality of the data did not deter the use of the Pearson coefficient. This decision was supported by a statement from Kerlinger's book entitled Foundations of Behavioral Research:³

It is not necessary to assume normality to compute r . It is necessary to assume normality if one wishes to make statistical inferences from sample r 's to population values. But if one only wants to know the relation between two variables, one needs no such assumption

The results of the analyses for both hypotheses are presented in Table 5. The .05 significance level was selected to test the correlation coefficients. For the 40 schools, the coefficient had to be greater than .31⁴ to be significant and the coefficient for the nine schools had to be greater than .66.⁵

The point should be emphasized concerning Table 5 that the size of the media staff was correlated with the services reported by the media staff without a check from users. In other words, Was the size of the media staff correlated with what the media staff thought it was doing for the faculty? The correlation coefficients computed gave a reserved "yes" answer to this question.

²Siegel, Sidney, Nonparametric Statistics for the Behavioral Sciences, p. 19.

³Kerlinger, F. N., Foundations of Behavioral Research, p. 261.

⁴Bruning, J. L., and Kintz, B. L., Computational Handbook of Statistics, p. 229.

⁵The difference in the level of significance for the two groups is based on the sample size. Because only nine schools were used in the second phase, correlation coefficients had to be very high to achieve the significance level.

TABLE 5. PEARSON PRODUCT-MOMENT CORRELATIONS OF MEDIA STAFF SIZE AND THE NUMBER OF SERVICES REPORTED BY THE MEDIA STAFF

Variables correlated with number of services offered to teachers	Services offered in 40 schools			Services offered in 9 case study schools		
	Regularly	Occasionally	Total services offered	Regularly	Occasionally	Total services offered
Number of professional media staff members	$r = .53^*$	$r = .09$	$r = .53^*$	$r = .76^*$	$r = .23$	$r = .71^*$
Number of clerical media staff members	$r = .32^*$	$r = .30$	$r = .50^*$	$r = .37$	$r = .61$	$r = .74^*$
Total number of media staff members	$r = .47^*$	$r = .25$	$r = .60^*$	$r = .61$	$r = .49$	$r = .82^*$
Number of media staff to teacher ratio	$r = -.34^*$	$r = -.29$	$r = -.51^*$	$r = -.20$	$r = -.58$	$r = -.60$

* significant at the .05 level

In the 40 schools group, both hypotheses were accepted. The services offered regularly and the total number of services offered correlated significantly with the size of the media staff and with the media staff-to-teacher ratio (.60 and .47 respectively). Three of the four coefficients dealing with services offered occasionally, approached, but did not exceed the .31 needed for significance.

In the nine case study schools, the first hypothesis was accepted; i.e., the raw size of the media staff was significantly correlated with the total number of services. However, the media staff-to-teacher ratio was not correlated high enough negatively to achieve significance (-.60 against -.66 needed for significance). This may have been due to the small number of schools in the phase two sample.

As in the Gaver study, the general concept of an association between the size of the media staff and the frequency of services was upheld. This is not to say that a causal relationship existed, for there may have been other rival hypotheses which explained service frequency. Gaver has outlined some of these possible variables:

1. Overall library support, most commonly a function of percentage of total school budget, or raw budget.
2. School administration's attitude towards support of library services.
3. School faculty's acceptance of library services.
4. Adequacy of the library/media center facility for providing services.
5. "Educational," "intellectual," "achievement" level of the school's student body and faculty, as determined by localized socioeconomic factors evident in the school's community.⁶

⁶Gaver, op. cit., p. 40.

Added to Gaver's list, other variables might include:

1. Efficiency of the media staff.
2. Quality of the training and background of media staff members.
3. Personality traits of media staff members which foster harmony and cooperation with teachers.
4. Acceptance by teachers of the media staff's participation in the actual instructional program above and beyond traditional acquisition, storage, and retrieval roles.

The Consensus of Teachers and Media Staff

The hypothesis of major interest in this study was: There will be a consensus between teachers and the media staff in reporting the frequency of services provided by the media center. The testing of this hypothesis was difficult because it required the quantification of two groups of raters who may or may not have agreed among themselves on the frequency of a given service. Numerous methods of counting services and figuring agreement were employed. All methods left much to be desired because of the amount of error involved. Three different ways of looking at the data are presented here.

The first method attempted to compare the number of times the media staff overestimated or underestimated the frequency of their services to the faculty. The media staff marked on scale one, the teachers marked on scale two as follows:

1. Scale for Response

How often does your center provide?

3 - regularly; as the need arises

2 - occasionally

1 - rarely; or never

X - don't know; doesn't apply

2. Scale for Response

How often does your center provide this service to your department?

3 - regularly; as the need arises

2 - occasionally

1 - rarely; or never

X - don't know

To accomplish the analysis the following method was employed:

1. The mean response of the media staff and the teachers was considered the best estimate of the frequency of a given service.
2. A mean of 2.50 - 3.00 was counted as one service given (received) regularly.
3. A mean of 1.50 - 2.49 was counted as one service given (received) occasionally.
4. A mean of 1.00 - 1.49 was counted as one service given (received) rarely or never.
5. A response of X was not computed into the mean.
6. When comparing two means for the same service item (one from the media staff and one from the teachers), if the two means crossed the critical points 2.50 or 1.50, a disagreement was said to have taken place. For example: A media staff mean of 2.68 compared to the teachers' mean of 2.32 crosses 2.50 and was counted as one disagreement. The media staff provided the service regularly; the teachers received the service occasionally. Therefore, one overestimation of service by the media staff had occurred. Similarly, if the media staff mean was 1.23 and the teachers' mean was 1.95, then one underestimation of service by the media staff had occurred. The media staff indicated that the service was given rarely or never, but the teachers rated it as an occasional service.

The two means (one from the media staff and one from the teachers) for each of the 64 service statements were compared according to the

computational procedure described and the results are presented in Table 6.

TABLE 6. A COMPARISON OF THE NUMBER OF OVERESTIMATIONS AND UNDERESTIMATIONS OF SERVICES OFFERED BY THE MEDIA STAFF TO THE TEACHERS IN NINE SCHOOLS

School identification number	Media staff in full-time-equivalents	Number of overestimations of services	Number of underestimations of services
17	1.63	35	1
15	3.00	33	0
10	2.00	30	0
29	7.00	26	3
32	4.00	26	5
11	2.00	22	12
37	3.00	15	12
25	1.50	12	15
1	1.00	3	22

The data in Table 6 were used in the followup interview with the heads of each media staff. The investigator was probing to discover why there was such a wide range in the patterns of overestimating and underestimating services. After an item-by-item comparison of the media staff responses with the teacher responses, four patterns emerged:

The first group, the "overestimating" media staffs, included schools 17, 15, and 10 with 35, 33, and 30 overestimations respectively. Since there were only 64 items on the questionnaire, these media staffs were overestimating their services about 50 per cent of the time.

Group two, the "typical" media staffs, included schools 29 and 32 with 26 overestimations for each staff. The pilot study school, not reported in the table, was also a member of this group. The media staffs in these schools overestimated their services 30 per cent to 40 per cent of the time. These staffs seemed to serve a block of teachers very well, but there was a large group of teachers from varying subject departments not getting or taking advantage of the services which the media center staff was willing to provide.

Group three, the "modest" media staffs which included schools 11, 37, and 25, was more nearly balanced between overestimations and underestimations: 22-12, 15-12, and 12-15 respectively. The heads of the media centers at these schools had been employed 2-4 years. All explained that their predecessors had been giving few services to the faculty and students. When the investigator reviewed each service item where an underestimation occurred, the question was posed: Why have the teachers marked higher than the media staff: Four answers were given:

1. The teachers had misunderstood the service.
2. The teachers had overestimated their reception of the service.
3. The media staff had underestimated their services.
4. No explanation could be given.

These teachers seemed to give the "benefit of the doubt" by marking so as to communicate their approval of the service program of their media center. In fact, the teachers' mean satisfaction ratings for these three schools was above average in comparison with the other six schools.

The fourth group was the "humble" media staff. School number one presented the strangest overestimation-underestimation pattern. The media specialist in this school had no clerical or professional assistance but had an excellent working relationship with the faculty. In discussing a particular service with the media specialist and asking why on a particular service the faculty rated higher on the frequency scale than he did, often there would be a denial of the existence of that service. For example, in the discussion of the service item: "Orients new teachers to media center services" the teachers rated this as a regular service, but the media specialist rated it as given rarely or never. The media specialist said that he did not discuss the services of the media center in a teachers' meeting at the beginning of the school. The investigator asked how the teachers found out about what services were available. The media specialist didn't know. They just said what they wanted and he would try to do it for them. Numerous times the media specialist disclaimed a "formalized" program for giving a particular service and had a difficult time recognizing that an informal program might be considered as fulfilling the intent of a service description on the questionnaire.

Like the schools in the "modest" group, the predecessor of this media specialist had been a very strict and formalized person with a willing but limited service program. Obviously, the teachers in this school were trying to express approval of the services offered by the present media specialist and at times clearly overestimated his services.

After an item-by-item review with the head of each of the nine media centers, the investigator judged this analysis as the best across-schools method for comparing services. But the method was not without problems. For example, the two mean responses of media staff and teachers might be very close (2.51 - 2.49), but because the means crossed the critical point of 2.50, the item was considered a disagreement. Conversely, the two means might be spread far apart (2.49 - 1.51), yet because the critical points of 2.50 or 1.50 were not crossed, the responses were judged as an agreement.

The second method of analyzing consensus between the media staff and the teachers involved the graphing of the frequency ratings of both groups. The same method of counting the frequency of a service was used here as has been described previously; i.e., the mean response of the group was used and then compared with the scale:

2.50 - 3.00 = one service provided (received) regularly.

1.50 - 2.49 = one service provided (received) occasionally.

1.00 - 1.49 = one service provided (received) rarely or never.

The responses of the nine schools are presented graphically in Figure 1 from left to right according to the size of the media staff.

It is apparent from Figure 1 and from Table 6 that the media staff and the teachers disagreed on the frequency of services. The two groups' judgments of service output were based on their concepts of the words: "Regularly; as the need arises;" "Occasionally;" and "Rarely; or never" in addition to their day-to-day experiences. The true picture of service offered was probably somewhere between the conceptions of the two groups. Therefore, a mean response line was added

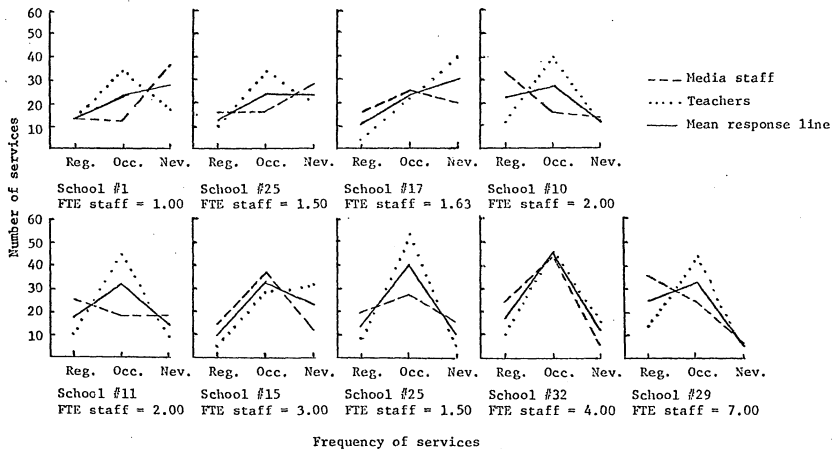


Figure 1. A Comparison of the Frequency Responses by the Media Staffs and Teachers in Nine Schools Concerning Media Center Services

to the graph in Figure 1 to assist in the viewing of the various service patterns across schools. A comparison between School 1 and School 29 shows generally a pattern change as the size of the media staff increases; i.e., from an ascending line to a broken but descending line.

This second method of analysis has the advantage of showing general service trends among different schools but was judged inferior because of its deception. For example, the media staff might have reported offering 10 services occasionally to the teachers and the teachers might also have reported receiving 10 services occasionally, yet these 10 services might not be the same set of services. Thus, School 32 on Figure 1 shows very close agreement between the media staff and teachers, but this media staff overestimated its services 26 times and underestimated five times in Table 6. The investigator and the head of this media center judged that the latter was the more accurate picture of the evaluation.

The best method of analysis occurred on an individual school item-by-item probe. This method, involving the investigator and the head of the media center, has the advantage of looking at patterns of responses as well as comparing mean responses of the media staff and the teachers. Three hypothetical examples will illustrate this point:

Service Number	Individual Media Staff's Responses	Media Staff Mean	Teachers' Mean	Individual Teacher's Responses
1	3, 3, 3	3.00	2.70	3, 3, 2, 3, 3, 3, 2, 2, 3, 3
2	3, 2, 2	2.33	2.16	3, 2, x, x, 3, 2, 2, 1, x, x
3	3, 2, 1	2.00	1.20	1. x, 2, x, x, x, 1, 1, 1, x

For service number one, there was agreement among media staff members and a good diffusion of this service throughout the various departments of the school. The two means were an accurate indicator of agreement.

There was moderate agreement on service number two among the media staff. Again, the two means showed agreement, i.e., the service in question was given occasionally, but the means were no indication of the diffusion of that service throughout the various departments. Two teachers claimed regular receipt of the service, three others received the service occasionally, one teacher never received the service, and four teachers did not know if the service was provided by the media staff.

The media staff members disagreed on the frequency of service number three and only one teacher indicated having received this service. Therefore, the media staff had overestimated its service.

This type of analysis in discussion with the head of the media staff produced satisfaction for both parties. The media specialist in every case was extremely interested in the patterns of responses which

developed as the items were discussed, and it gave the investigator enough information to suggest possible ways to improve the service program of the media center. All media specialists agreed that the research had given them a new perspective of their service programs.

In summary, of the three methods of data analysis used to test the media staff-teacher agreement hypothesis, the individualized investigator-media specialist conference proved to be the most satisfactory method. For a comparison across schools, the overestimation-underestimation technique served as the best method. All three methods showed a definite discrepancy between the perception of the media staff and the teachers concerning the frequency of media center services. Therefore, the hypothesis that there will be a consensus between teachers and the media staff in reporting the frequency of services provided by the media center was rejected.

Teacher Satisfaction with Media Center Services

The teachers in the nine case study schools were asked to indicate their satisfaction with each of the 64 items on the following scale:

- 3 -- entirely satisfactory
- 2 -- usually satisfactory with occasional problems
- 1 -- unsatisfactory; needs improvement
- X -- doesn't apply; cannot evaluate fairly

The analysis of the responses to this scale is most meaningful in an item-by-item comparison with the importance and frequency responses. Three hypotheses were tested and the results were as follows.

Hypothesis: The greater number of services to teachers reported by the media staff, the higher teachers will rate their satisfaction with those services. In order to test this hypothesis, the number of services offered regularly, occasionally, and rarely or never (in the view of the media staff) was correlated with the grand mean teacher satisfaction response across all 64 items. A Pearson product-moment correlation coefficient for each variable is shown in Table 7.

TABLE 7. PEARSON PRODUCT-MOMENT CORRELATIONS OF SERVICE FREQUENCY AS REPORTED BY THE MEDIA STAFF AND TEACHER SATISFACTION IN NINE SCHOOLS

Variables correlated with the mean teacher's satisfaction rating	r
Services offered regularly	r = .58
Services offered occasionally	r = -.36
Total Services offered (adding regular and occasional services)	r = .12

The results shown in Table 7 were rather surprising. Only the services offered regularly approached the significance level at .05 of .66. The negative correlation between occasional services and teacher satisfaction raised a number of interesting questions if the frequency reportings of the media staff were accurate. A deeper probe, however, showed a different picture. When the teachers' own rankings of the frequency with which they received services were correlated with their satisfaction ratings, the following results were obtained and are

reported in Table 8.

TABLE 8. PEARSON PRODUCT-MOMENT CORRELATIONS OF SERVICE FREQUENCY AS REPORTED BY TEACHERS AND THEIR SATISFACTION RATINGS IN NINE SCHOOLS

Variables correlated with the mean teacher's satisfaction rating	r
Services offered regularly	$r = .84^*$
Services offered occasionally	$r = .74^*$
Total services offered	$r = .86^*$

* Significant at .05

Table 8 shows that there was a significant correlation between the services which the teachers perceived they were receiving and their satisfaction rating. The results in Tables 8 and 9 lend support to the previous conclusions that there was a discrepancy between the concept of "regular" and "occasional" in the ratings of the media staff and the teachers. Because of this difference in frequency interpretation, the hypothesis was rejected.

Hypothesis: There will be a positive correlation between the size of the media staff and the teachers' satisfaction rating.

Hypothesis: There will be a positive correlation between the media staff-to-teacher ratio and the teachers' satisfaction rating.

The two hypotheses stated above were tested using the number of media staff members and the grand mean satisfaction rating by teachers in the nine schools. The results of this test are presented in Table 9.

TABLE 9. PEARSON PRODUCT-MOMENT CORRELATIONS OF MEDIA STAFF SIZE AND TEACHERS' SATISFACTION RESPONSES

Variables correlated with teachers' satisfaction ratings	r
Number of professional media staff members	r = .55
Number of clerical media staff members	r = .30
Total number of media staff members	r = .46
Number of media staff-to-teacher ratio	r = -.35

None of the coefficients listed in Table 9 was significant, but the number of professionals correlated with teacher satisfaction approached significance (.55 against .66 needed for significance at .05). Technically, the two hypotheses were accepted since a significant coefficient was not called for, yet the investigator feels that the results were inconclusive. A replication of the study utilizing a larger sample size would give a much clearer picture for theory testing.

The Media Center Service Program to Teachers

Four general questions were posed at the beginning of the study which would lend themselves to a critical analysis of the media center service programs. The four questions were:

1. What types of services to teachers do the media staff consider as important? unimportant?
2. What services do the media staff give to teachers most often? least often?
3. What services do teachers report they receive most often? least often?
4. What services provided by the media center staff are most satisfying to teachers? least satisfying?

In order to study these four questions within a workable framework, the 64 service statements in the questionnaire were divided into eight categories:

1. ACCESSIBILITY SERVICES -- "Making media (print and nonprint) and equipment accessible to teachers." (items 1-7)
2. UTILIZATION SERVICES -- "Assisting teachers to develop skill in the utilization of instructional media and equipment." (items 8-15)
3. AWARENESS SERVICES -- "Making teachers aware of services and materials." (items 16-20)
4. INSTRUCTIONAL DESIGN SERVICES -- "Planning, designing and organizing materials and instruction." (items 21-33)
5. PRODUCTION SERVICES -- "Producing or adapting instructional materials." (items 34-37)
6. ACQUISITION SERVICES -- "Acquiring instructional materials through purchase, borrowing, or rental." (items 38-47)
7. EVALUATION SERVICES -- "Evaluating the quality of instructional materials and their use." (items 48-55)
8. PROFESSIONAL SERVICES -- "Stimulating teachers' growth as professional educators and as subject specialists." (items 56-64)

These eight categories will be used often in the comparison of the frequency, importance, and satisfaction responses in the 40 schools and in nine case study schools.

Responses to the "How Important" scale. As reported previously in this chapter the mean response of the 40 media staffs on the importance scale was 2.54 with a standard deviation of .25. Because the mean was so high, the investigator was interested in the services ranked one standard deviation above and below the mean.

The services above 2.79; i.e., those services considered as the most important, were 1, 2, 4, 7, 8, 16, 17, 18, 19, and 44. These items were mainly in the areas of accessibility and awareness. The services rated lower than one standard deviation below the mean included items considered "of some importance" (items 24, 29, 30, 46, 48, 49, 50, 53, 54, 56, 61). As expected, almost all of these services were those advocated by instructional technologists in their expanded view of the instructional role of the media specialist, e.g., actual media staff participation in the formulation of behavioral objectives and the evaluation of instruction where several forms of media are being integrated into a curricular unit.

Two services which received "low" importance ratings deserve comment. The community resource file service (item 46) was rated 2.19. This service has been advocated for over 50 years by school librarians but still received a low rating. The low rating received by service 50: "Plans with the teacher to rectify problems with materials (e.g., purchasing more or better materials, modifying existing materials, etc.)" was surprising in view of the emphasis given in the professional literature and in library education programs on the evaluation of materials collections. This service was rated as only occasionally performed by the media staff (2.31).

Responses to the "How Often" or Frequency Scale. The two questions treated in this section were:

1. What services do the media staff give to teachers most often? least often?
2. What services do teachers report they receive most often? least often?

As an introduction to this analysis, it was of interest to find out how many of the 64 services listed in the questionnaire were being given in the 40 senior high schools of Indiana. Table 10 shows the number of services reported by each of the 40 schools. There was a tremendous range in the number of services reported by the media staffs -- from a low of 21 to a high of 62. Some criticism was given to the investigator by some media staff members and teachers that the questionnaire contained too many services which were unrealistic and not within the domain of the media specialist. For the schools offering fewer than half the services, the questionnaire was discouraging. In these schools, the media specialist was often without clerical or other professional help and the fact that he was able to report the existence of only half of the services seemed an affront to a hard-working individual. Yet, the questionnaire had to be comprehensive enough to test service variety in schools where media staffs were larger. Six schools offered 60 or more services out of the 64 listed in the questionnaire. The mean number of services offered at least occasionally was 47.97 or 75 per cent of the 64 items. The mean number of services offered regularly was 24.65 and the mean number of services offered occasionally was 23.25.

TABLE 10. RANKING OF 40 SCHOOLS BY THE NUMBER OF SERVICES OFFERED TO TEACHERS

School identification number	Number of media staff in full-time-equivalents	Media staff-to-teacher ratio	Number of services offered regularly	Number of services offered occasionally	Total number of services offered
16	1.00	27.30	10	11	21
1	1.00	29.00	14	12	26
6	1.00	31.60	18	16	34
25	1.50	27.47	17	18	35
19	2.56	31.64	13	27	40
33	1.50	37.80	13	27	40
18	2.70	31.19	14	26	40
26	2.88	24.10	33	17	50
9	2.00	27.50	24	18	42
12	3.00	32.00	28	14	42
7	1.13	20.53	28	14	42
2	3.00	24.20	19	23	42
17	1.13	45.87	18	26	44
14	2.75	23.71	20	24	44
35	2.50	24.40	29	16	45
11	2.00	33.25	26	19	45
22	3.00	15.77	25	21	46
8	3.75	11.28	23	23	46
40	2.00	44.80	26	20	46
37	3.00	20.90	20	27	47
34	2.38	31.07	19	26	48
24	2.33	22.02	25	23	48
30	1.50	18.53	20	29	49
10	2.00	32.75	34	16	50
20	2.75	13.45	33	18	51
39	3.00	22.53	25	26	51
5	4.79	19.05	36	15	51
36	3.25	27.48	24	28	52
3	2.13	8.09	17	36	53
15	3.00	25.67	15	38	53
23	2.50	13.52	22	34	56
27	10.50	14.38	25	32	57
13	2.75	26.55	33	24	57
38	1.94	16.83	23	36	59
32	4.00	17.85	23	37	60
4	3.88	13.42	37	24	61
21	7.50	13.33	37	24	61
28	5.00	22.00	41	20	61
29	7.00	15.86	36	26	62
31	3.38	19.67	43	19	62

In order to get a clear picture of the types of services offered in the various programs, a comprehensive table was constructed which gave the mean responses across the 40 schools and the nine case study schools on each of the scales. But before the table can be understood properly, the various response scales must be clearly in mind. They were:

Scales for the media staff

HOW IMPORTANT OR UNIMPORTANT FOR YOUR CENTER TO PROVIDE?	HOW OFTEN DOES YOUR CENTER PROVIDE?
3 -- very important	3 -- regularly; as the need arises
2 -- of some importance	2 -- occasionally
1 -- of little or no importance	1 -- rarely; or never
X -- don't know	X -- don't know; Doesn't apply

Scales for the teachers

HOW OFTEN DOES YOUR CENTER PROVIDE THIS SERVICE TO YOUR DEPARTMENT?	WHEN THIS SERVICE IS PROVIDED TO YOUR DEPARTMENT, HOW SATISFACTORILY IS IT GIVEN?
3 -- regularly; as the need arises	3 -- entirely satisfactory
2 -- occasionally	2 -- usually satisfactory with occasional problems
1 -- rarely; or never	1 -- unsatisfactory; needs improvement
X -- don't know	X -- doesn't apply; cannot evaluate fairly

Also, before Table 11 is presented, a word about its arrangement is necessary. The 64 services are presented in rank order according to the mean "frequency" response by the media staffs in all 40 schools. Thus, the service list is arranged from those services offered most often to those offered least often. This arrangement has utility in a number of ways:

1. A media staff might compare its own frequency ratings to those of the 40 schools in the study.
2. The list may be used as a planning instrument to assist in setting service priorities.
3. The first one-third of the list might be considered "basic" services which every media center should offer regularly.
4. The further down the list a media staff could claim frequent service, the closer the program would be to the "growing edge" media programs in Indiana.
5. Library and instructional technology educators could use the list as the basis of one part of their instructional programs.
6. Workshops and conferences could be structured around techniques of providing the services which appeared toward the end of the list.
7. Evaluative teams could use the list to selectively probe the depth or quality of services claimed as "regular" or "occasional" by the media staff.
8. Instructors of education courses could use the list to inform prospective teachers concerning the services they might expect from a media staff.
9. Administrators and media specialists might use the list in a program-planning-budgeting-system analysis.
10. School library supervisors might use a few service statements for a rotating and systematic observational check during school visits.

TABLE 11. SERVICES TO TEACHERS IN INDIANA SENIOR HIGH SCHOOLS: MEAN RESPONSES AND RANKINGS BY ALL MEDIA STAFFS AND TEACHERS ARRANGED BY THE FREQUENCY RANKING IN 40 SCHOOLS

Service number and description	Importance of service as perceived by media staffs in 40 schools			Frequency of services given (received)									Satisfaction rating of teachers in 9 schools		
				By the media staffs in 40 schools			By the media staffs in 9 schools			By the teachers in 9 schools					
	N	\bar{X}	Rank	N	\bar{X}	Rank	N	\bar{X}	Rank	N	\bar{X}	Rank	N	\bar{X}	Rank
4. Establishes loan policies (i.e., check-out procedures, due dates, etc.) sufficiently flexible to meet teachers' needs	120	2.95	4	120	2.97	1	25	3.00	1	144	2.77	2	144	2.56	2
1. Makes equipment readily accessible to teachers including scheduling, delivery and pickup.	118	2.97	2	114	2.97	2	25	3.00	2	144	2.84	1	145	2.47	6
17. Informs teachers about new materials acquired by the media center.	122	2.98	1	121	2.88	3	26	2.88	5	141	2.55	5	140	2.57	1
2. Provides assistance when equipment emergencies occur.	116	2.96	3	114	2.88	4	25	2.92	4	139	2.57	4	138	2.38	10
14. Makes media center facilities readily accessible to groups or individual students upon teacher request.	123	2.92	7	122	2.88	5	26	2.88	6	137	2.61	3	137	2.47	5
7. Keeps materials and equipment in repair and operating condition.	121	2.88	8	121	2.85	6	26	2.92	3	140	2.37	10	139	2.19	22
6. Provides access to the media center before and after regular class hours so that teachers can use facilities and materials.	122	2.78	13	119	2.82	7	25	2.88	7	140	2.27	15	134	2.49	4

TABLE 11. SERVICES TO TEACHERS IN INDIANA SENIOR HIGH SCHOOLS; MEAN RESPONSES AND RANKINGS BY ALL MEDIA STAFFS AND TEACHERS ARRANGED BY THE FREQUENCY RANKING IN 40 SCHOOLS

Service number and description	Importance of service as perceived by media staffs in 40 schools			Frequency of services given (received)									Satisfaction rating of teachers in 9 schools		
				By the media staffs in 40 schools			By the media staffs in 9 schools			By the teachers in 9 schools					
	N	\bar{X}	Rank	N	\bar{X}	Rank	N	\bar{X}	Rank	N	\bar{X}	Rank	N	\bar{X}	Rank
16. Informs teachers about new equipment acquired by the media center.	122	2.92	5	111	2.82	8	25	2.80	9	141	2.45	7	140	2.46	8
39. Furnishes selection aids for locating new materials (e.g., recommended lists, catalogs, etc.).	119	2.86	9	118	2.70	9	25	2.72	12	137	2.53	6	136	2.49	3
18. Informs and reminds teachers about services offered by the media center.	116	2.82	10	120	2.64	10	26	2.58	13	140	2.21	16	136	2.33	13
5. Provides reserve and special collections (e.g., in classrooms, subcenters, etc.) which meet teachers' needs.	121	2.71	16	117	2.64	11	26	2.73	11	121	2.35	12	118	2.33	14
8. Helps teachers develop skill in locating media center materials (e.g., use of bibliographic tools, card catalog, special reference books, indexing systems, etc.).	116	2.81	11	113	2.63	12	22	2.77	10	141	2.39	9	137	2.47	7
44. Procures materials (books, filmstrips, etc.) in a reasonable amount of time after recommendation for purchase by teachers.	118	2.81	12	113	2.61	13	25	2.80	8	123	2.37	11	120	2.35	11

TABLE 11. SERVICES TO TEACHERS IN INDIANA SENIOR HIGH SCHOOLS: MEAN RESPONSES AND RANKINGS BY ALL MEDIA STAFFS AND TEACHERS ARRANGED BY THE FREQUENCY RANKING IN 40 SCHOOLS

Service number and description	Importance of service as perceived by media staffs in 40 schools			Frequency of services given (received)									Satisfaction rating of teachers in 9 schools		
				By the media staffs in 40 schools			By the media staffs in 9 schools			By the teachers in 9 schools					
	N	\bar{X}	Rank	N	\bar{X}	Rank	N	\bar{X}	Rank	N	\bar{X}	Rank	N	\bar{X}	Rank
19. Orients new teachers to media center services.	123	2.92	6	118	2.58	14	26	2.50	14	101	1.95	24	98	2.33	15
3. Provides the assistance of trained equipment operators when needed.	110	2.74	15	107	2.53	15	25	2.36	18	132	2.13	17	123	2.20	19
13. Suggests materials of appropriate level and diversity to meet specific teaching needs.	113	2.75	14	108	2.51	16	24	2.42	17	111	2.08	20	113	2.02	38
64. Provides current books and other materials about professional education.	108	2.69	18	105	2.49	17	23	2.48	15	117	2.13	18	114	2.20	20
47. Obtains instructional media from other sources upon request of teachers (interlibrary loan, from district center, etc.).	109	2.61	24	105	2.42	18	25	2.24	24	113	2.33	13	106	2.35	12
41. Obtains commercial products for preview by teachers and media center staff.	106	2.65	21	101	2.36	19	23	2.43	16	104	2.42	8	109	2.16	25
59. Makes available materials and information on recent developments in the teacher's subject area.	111	2.67	20	105	2.34	20	23	2.35	19	129	1.95	26	117	2.18	23

TABLE 11. SERVICES TO TEACHERS IN INDIANA SENIOR HIGH SCHOOLS: MEAN RESPONSES AND RANKINGS BY ALL MEDIA STAFFS AND TEACHERS ARRANGED BY THE FREQUENCY RANKING IN 40 SCHOOLS

Service number and description	Importance of service as perceived by media staffs in 40 schools			Frequency of services given (received)									Satisfaction rating of teachers in 9 schools		
				By the media staffs in 40 schools			By the media staffs in 9 schools			By the teachers in 9 schools					
	N	\bar{X}	Rank	N	\bar{X}	Rank	N	\bar{X}	Rank	N	\bar{X}	Rank	N	\bar{X}	Rank
52. Informs teachers concerning student skills in locating media center materials (e.g., using periodical indexes, card catalog, reference skills, etc.).	105	2.50	38	95	2.34	21	22	2.18	27	111	1.95	25	96	2.24	18
34. Produces audiovisual materials for teachers (slides, transparencies, tapes, graphics, TV programs, etc.).	105	2.70	17	99	2.32	22	24	2.29	20	131	1.90	27	115	2.17	24
50. Plans with the teacher to rectify problems with materials (e.g., purchasing more or better materials, modifying existing materials, etc.).	108	2.19	56	99	2.31	23	22	2.18	28	123	1.96	23	110	2.00	39
15. Plans with teachers to correct students' problems in finding and utilizing resource materials through classroom or individualized instruction.	114	2.61	25	106	2.30	24	25	2.16	31	108	1.88	28	98	2.07	31
36. Assists teachers in producing their own audiovisual and printed materials by providing instruction and facilities.	100	2.62	23	92	2.28	25	21	2.24	25	130	2.04	22	118	2.19	21

TABLE 11. SERVICES TO TEACHERS IN INDIANA SENIOR HIGH SCHOOLS: MEAN RESPONSES AND RANKINGS BY ALL MEDIA STAFFS AND TEACHERS ARRANGED BY THE FREQUENCY RANKING IN 40 SCHOOLS

Service number and description	Importance of service as perceived by media staffs in 40 schools			Frequency of services given (received)									Satisfaction rating of teachers in 9 schools		
				By the media staffs in 40 schools			By the media staffs in 9 schools			By the teachers in 9 schools					
	N	\bar{X}	Rank	N	\bar{X}	Rank	N	\bar{X}	Rank	N	\bar{X}	Rank	N	\bar{X}	Rank
42. Provides teachers with reviews of audiovisual materials to assist in the selection process.	102	2.57	29	92	2.28	26	23	2.17	30	126	1.87	29	105	2.30	17
31. Provides enough materials in a variety of formats to allow teachers to meet large group, small group or individualized instruction needs.	106	2.67	19	99	2.26	27	21	2.29	21	116	1.86	31	102	2.05	34
43. Provides teachers with critical reviews of books to assist in the selection process.	104	2.51	33	99	2.25	28	23	2.13	33	106	1.58	49	88	1.93	47
35. Produces printed materials for teachers (ditto, mimeograph, etc).	96	2.53	32	99	2.24	29	22	2.27	23	122	1.63	48	95	1.98	43
40. Helps teachers become proficient in selecting and evaluating media (print and nonprint).	111	2.58	28	104	2.19	30	24	2.21	26	114	1.54	51	104	2.15	26
45. Evaluates and selects audiovisual equipment such as projectors and tape recorders in consultation with teachers.	94	2.46	43	76	2.18	31	18	2.28	22	116	1.85	32	105	2.08	30
28. Prepares lists of materials for specific units of instruction.	107	2.55	30	101	2.18	32	22	2.09	36	110	1.83	35	92	1.96	46

TABLE 11. SERVICES TO TEACHERS IN INDIANA SENIOR HIGH SCHOOLS: MEAN RESPONSES AND RANKINGS BY ALL MEDIA STAFFS AND TEACHERS ARRANGED BY THE FREQUENCY RANKING IN 40 SCHOOLS

Service number and description	Importance of service as perceived by media staffs in 40 schools			Frequency of services given (received)									Satisfaction rating of teachers in 9 schools		
				By the media staffs in 40 schools			By the media staffs in 9 schools			By the teachers in 9 schools					
	N	\bar{X}	Rank	N	\bar{X}	Rank	N	\bar{X}	Rank	N	\bar{X}	Rank	N	\bar{X}	Rank
60. Provides formal or informal memos or bulletins concerning items of professional interest (e.g., Have you seen this report, article, article, etc.?).	111	2.50	37	109	2.14	33	24	2.12	34	132	1.86	30	122	2.10	29
20. Provides information about services and materials available to teachers from other libraries and media centers in the area.	109	2.36	52	101	2.12	34	24	1.96	46	118	1.72	41	113	1.93	49
25. Determines the instructional setting (space requirements, furniture, and equipment, etc.) that will be needed for media utilization.	111	2.50	35	101	2.08	35	24	2.04	38	95	1.82	36	82	2.12	28
9. Assists teachers in developing smooth and effective presentation skills when using audiovisual materials.	106	2.48	41	92	2.07	36	21	2.10	35	121	1.79	38	105	2.07	32
62. Provides access to educational journal indexes (i.e., Education Index and Current Index to Journals in Education "CIJE") and backfiles of professional journals for teacher use.	95	2.38	49	88	2.06	37	19	1.79	48	92	2.12	19	80	2.31	16
58. Makes presentations upon invitation in in-service educational programs for teachers.	106	2.49	39	98	2.05	38	23	2.18	29	109	2.30	14	101	2.44	9

TABLE 11. SERVICES TO TEACHERS IN INDIANA SENIOR HIGH SCHOOLS: MEAN RESPONSES AND RANKINGS BY ALL MEDIA STAFFS AND TEACHERS ARRANGED BY THE FREQUENCY RANKING IN 40 SCHOOLS

Service number and description	Importance of service as perceived by media staffs in 40 schools			Frequency of services given (received)									Satisfaction rating of teachers in 9 schools		
				By the media staffs in 40 schools			By the media staffs in 9 schools			By the teachers in 9 schools					
	N	\bar{X}	Rank	N	\bar{X}	Rank	N	\bar{X}	Rank	N	\bar{X}	Rank	N	\bar{X}	Rank
12. Orients teachers to the versatility and limitations of instructional materials in achieving instructional goals.	104	2.51	34	96	2.04	39	23	2.09	37	122	1.57	50	107	1.82	54
11. Demonstrates the versatility and limitations of audiovisual equipment in achieving instructional goals.	101	2.53	31	88	2.03	40	20	2.15	32	128	1.33	57	110	1.85	53
37. Adapts commercially produced materials to fit instructional needs (e.g., utilizing parts of filmstrips, films, media kits, etc. in conjunction with other materials).	101	2.35	53	86	2.01	41	20	1.85	43	109	1.83	34	97	2.13	27
10. Demonstrates how audiovisual and print materials can be integrated into the instructional process.	108	2.45	44	101	1.98	42	24	2.00	40	132	1.28	60	119	1.87	52
23. Plans and discusses units of instruction with teachers in advance of presentation to determine media needs.	112	2.59	26	106	1.94	43	23	1.69	50	111	1.37	55	91	1.79	55
63. Makes professional journals and research reports available on request even when these materials are not maintained in the individual school.	92	2.37	51	84	1.94	44	18	1.83	45	85	1.76	39	77	2.06	33

TABLE 11. SERVICES TO TEACHERS IN INDIANA SENIOR HIGH SCHOOLS: MEAN RESPONSES AND RANKINGS BY ALL MEDIA STAFFS AND TEACHERS ARRANGED BY THE FREQUENCY RANKING IN 40 SCHOOLS

Service number and description	Importance of service as perceived by media staffs in 40 schools			Frequency of services given (received)									Satisfaction rating of teachers in 9 schools		
				By the media staffs in 40 schools			By the media staffs in 9 schools			By the teachers in 9 schools					
	N	\bar{X}	Rank	N	\bar{X}	Rank	N	\bar{X}	Rank	N	\bar{X}	Rank	N	\bar{X}	Rank
38. Makes arrangements for the production of instructional materials which must be done outside the individual school media center.	83	2.37	50	77	1.88	45	18	2.00	39	79	1.70	42	65	2.03	37
51. Evaluates the results of special media center projects (e.g., reports, listening and viewing projects, class visits to the media center, etc.) to assist teachers in planning future media-oriented assignments.	98	2.42	45	90	1.88	46	20	1.85	41	85	1.64	46	75	1.96	45
57. Initiates and conducts in-service educational programs for teachers concerning media center programs and services.	103	2.48	42	93	1.86	47	22	1.91	47	130	1.72	40	117	1.98	40
26. Determines what type of media will increase learning for a particular objective.	105	2.38	48	99	1.77	48	23	1.78	49	93	1.65	45	78	1.87	51
27. Designs (draws plans for) materials to be produced locally (e.g., slides, tapes, charts, etc.).	86	2.63	22	84	1.76	49	19	1.84	44	94	1.67	44	82	1.88	50
33. Participates as a consultant to teaching teams about instructional materials.	90	2.49	40	81	1.74	50	18	1.89	42	76	1.84	33	71	1.98	41

TABLE 11. SERVICES TO TEACHERS IN INDIANA SENIOR HIGH SCHOOLS: MEAN RESPONSES AND RANKINGS BY ALL MEDIA STAFFS AND TEACHERS ARRANGED BY THE FREQUENCY RANKING IN 40 SCHOOLS

Service number and description	Importance of service as perceived by media staffs in 40 schools			Frequency of services given (received)									Satisfaction rating of teachers in 9 schools		
				By the media staffs in 40 schools			By the media staffs in 9 schools			By the teachers in 9 schools					
	N	\bar{X}	Rank	N	\bar{X}	Rank	N	\bar{X}	Rank	N	\bar{X}	Rank	N	\bar{X}	Rank
32. Assists teachers in planning and preparing individualized instructional units.	97	2.38	47	89	1.63	51	22	1.68	51	107	1.49	52	85	1.93	48
21. Participates in curriculum planning as a member of a curriculum committee.	97	2.59	27	90	1.62	52	22	1.68	52	64	2.08	21	70	2.04	35
22. Recommends curriculum innovations when participating in curriculum planning and revision.	94	2.50	36	77	1.56	53	18	1.56	55	68	1.79	37	59	1.97	44
46. Provides information about community resources for education (human resources, museum, field trips, etc.).	90	2.19	57	85	1.54	54	19	1.47	58	116	1.40	54	94	1.60	61
48. Evaluates learning outcomes of audio-visual and print materials after classroom or individual use.	97	2.26	54	87	1.54	55	20	1.50	57	96	1.30	59	71	1.63	59
49. Collects teacher evaluations of audio-visual and print materials previously used and makes them available on request	96	2.21	55	87	1.54	56	22	1.59	53	103	1.43	53	85	1.65	56
24. Participates in formulating specific behavioral objectives when media (print and nonprint) are utilized in instruction.	96	2.16	59	91	1.49	57	22	1.45	60	89	1.35	56	72	1.63	60

TABLE 11. SERVICES TO TEACHERS IN INDIANA SENIOR HIGH SCHOOLS & MEAN RESPONSES AND RANKINGS BY ALL MEDIA STAFFS AND TEACHERS ARRANGED BY THE FREQUENCY RANKING IN 40 SCHOOLS

Service number and description	Importance of service as perceived by media staffs in 40 schools			Frequency of services given (received)									Satisfaction rating of teachers in 9 schools		
				By the media staffs in 40 schools			By the media staffs in 9 schools			By the teachers in 9 schools					
	N	\bar{X}	Rank	N	\bar{X}	Rank	N	\bar{X}	Rank	N	\bar{X}	Rank	N	\bar{X}	Rank
29. Helps plan classroom integration of lecture, discussion, and media to promote increased learning.	90	2.17	58	86	1.38	58	21	1.38	61	96	1.32	58	65	1.65	57
30. Develops a suggested sequence of instruction to make the best use of media in the classroom.	95	2.15	60	88	1.34	59	20	1.35	62	100	1.20	61	68	1.50	62
53. Visits classrooms to assess the extent to which media center materials and services are contributing to classroom instruction.	96	2.10	61	91	1.33	60	23	1.57	54	114	1.17	62	85	1.64	58
56. Makes information available about in-service workshops, institutes and educational courses.	107	2.02	62	70	1.21	61	22	1.56	56	79	1.11	64	52	1.37	63
55. Presents alternative strategies for instruction based on results of the tests developed.	77	2.39	46	70	1.21	62	19	1.47	59	125	1.68	43	106	1.98	42
61. Provides access to the <u>Research in Education</u> (ERIC) index and access to the desired microfiche documents to enable teachers to keep abreast of current research in education.	77	2.01	63	71	1.21	63	16	1.13	64	57	1.63	47	49	2.04	36
54. Develops tests or measures to rate the effectiveness of educational media (e.g. Does a locally produced slide set teach what it was designed to teach?).	88	1.97	64	81	1.17	64	19	1.21	63	85	1.14	63	62	1.32	64

During the analysis of Table 11, the investigator will discuss the services in the 40 schools compared to the teachers' responses in the nine schools. This is not to be construed to mean that a faulty generalization is being made, especially since the nine schools were not selected at random from the population. The media staff means on the frequency scale for the nine schools were correlated with responses of the other 31 media staffs to look for differences. The Pearson product-moment coefficient of correlation was .96; i.e., 92 per cent of the variance was accounted for. Therefore, in the following discussion the 40 school mean will be used in the comparison statements. If the reader has difficulty locating service item numbers in Table 11, Appendix B has been prepared with the service statements arranged by item number.

The Services Provided Most Often. Since the media staff's mean frequency rating of all services in the list was 2.13, the first block of services of interest was those offered most often (those more than one standard deviation above the mean -- 2.61 - 3.00). This block included the first 13 services in Table 11 (services 4, 1, 17, 2, 14, 7, 6, 16, 39, 18, 5, 8, and 44). Six of the seven accessibility services were in this block. Other services provided included the acquisition of new materials, lists of new materials, the provision of reserve collections, and assistance in the location of materials. Across all rating scale responses, these services received the most important, the most frequently received, and the highest satisfaction ratings.

This block of services might be referred to as "basic" or "foundation" services -- the ordinary "garden variety" services of a school media

program. Their importance cannot be minimized, for failure to provide them might eliminate all chances to work closely with teachers in more specialized ways.

As high as all the ratings were in this accessibility and dissemination block of services, there were still signs that improvement was needed. For example, item 18: "Informs and reminds teachers about services offered by the media center," was given to teachers regularly (2.64) but received by them only occasionally (2.21). In an interview with one librarian, he said, "I put notices in the daily bulletin about this and that service I will do for teachers, but no one seems to read them." An audiovisual coordinator said, "In teachers' meetings every fall, I show teachers some of the audiovisual materials I will produce for them, but few take advantage of this service." These media specialists feel that they inform teachers regularly, but their methods of communication leave much to be desired.

Teachers' comments concerning these basic services show that media specialists need to be much more flexible. One teacher wrote: "Our library is thought to be the property of the head librarian. He would be much happier if it were a museum with 'DO NOT TOUCH' and 'DO NOT TALK' signs." A second teacher said, "I feel I fight a constant battle to use any media!" Another teacher commented, "Our greatest criticism has been that audiovisual equipment has been of poor quality and in poor repair." Lack of staff to provide even the basic services was a concern of many teachers. For example: "Our audiovisual media center is becoming well equipped. I believe our main problem here is that they are understaffed. They do not have a full-time audiovisual

specialist here. We need one in order to utilize our material and equipment successfully."

The services offered least often. The services receiving mean frequency ratings lower than one standard deviation below the mean (1.65 - 1.00) included items 32, 21, 22, 46, 48, 49, 24, 29, 30, 53, 56, 55, 61, and 54. Six of these services were in the area of instructional design; five were evaluation services; two were professional services; and one was an acquisition service. These items clustered around the media staff's direct involvement in the instructional program of the school. For example: (item 29) "Helps plan classroom integration of lecture, discussion, and media to promote increased learning."; (item 53) "Visits classrooms to assess the extent to which media center materials and services are contributing to classroom instruction."

Generally, these services were considered only "of some importance" by the media staff and also received the lowest teacher satisfaction ratings. In other words, the instructional developer-evaluator concept has yet to gain a foothold both in the importance attached to this role and as a part of the service program in Indiana secondary school media centers.

This type of service also posed a threat to some teachers who filled out the questionnaire. To them, the media specialist was trying to take over their prized and independent role as the learning agent and diagnostician. In one teacher's words: "Some of your questions imply that librarians or A-V directors have duties which in my opinion do not belong to them If a librarian visited my classroom to

"assess" something, I would consider him an intruder." A second teacher wrote, "I feel that many of the questions asked are outlandish when evaluating a high school system. To do all the things asked about would cost more money, time, personnel, and effort than they would be worth." A third teacher commented, "I didn't even think it was anyone else's job to help with these services. It would help me to be a better teacher if more of these facilities and materials were made known to me, but I think the media center needs more personnel."

One service in the "least offered" group was symptomatic of many of the media staff's most pressing problems: (item 21) "Participates in curriculum planning as a member of a curriculum committee." Only four media specialists out of 40 claimed to be members of this important committee! A few media specialists claimed that they were involved occasionally. Most rated curriculum committee membership as of great importance (a mean of 2.59).

It is extremely difficult for a media staff to build relevancy into a materials collection when there is no involvement in the curriculum building process. The materials collection for new courses of study may be inadequate for several years because advance notice is not given to the media staff. Consequently, frustration develops for teachers, students, and the media staff.

One media specialist with a large media staff reported that he had heard of plans to reorient the entire social studies program toward a more individualized approach the week after:

1. The principal and the department head had worked with the architect on plans for a social studies resource center.

2. A special budget for the acquisition of materials for the center was allotted by the superintendent to the social studies department head.

Another media specialist said that he had learned one week before summer vacation that the English department had scheduled a half-semester course for that Fall entitled "Library Studies," but he hadn't the faintest idea what they intended to teach.

The services offered occasionally. The bulk of the 64 service items rated in the "occasionally offered" category had frequency means ranging from 1.74 - 2.58.

Six of the eight utilization services were claimed as occasional services with means close to 2.00. These services, items 9, 10, 11, 12, 13, and 15, centered around assisting teachers to use the materials and equipment of the media center in an efficient manner during the teaching process. The teachers rated receiving these services toward the "rarely or never" end of the scale. Satisfaction ratings, however, clustered from 1.80 - 2.00 meaning "usually satisfactory with occasional problems." As a group, the media staff ranked utilization services in the 30's and 40's in order of importance, with means close to 2.50. Here is an age-old dilemma for the media specialist. He realizes that he should be concerned with how the materials and equipment are used in the classrooms and, daily, he is aware of poor utilization, but he rarely does anything about it (see items 57 and 58). This is not to say that utilization techniques of teachers have not improved in schools over the years. In fact, one of the introductory questions to all members of the media staff when they were asked by the investigator to participate in the study was:

As you observe teachers utilizing audiovisual materials, are teachers integrating these materials into the instructional process, or are they still considered as supplementary?

The most common answer was that teachers are integrating audiovisual materials into their teaching more than ever before, but that skills vary widely from individual to individual.

The claims for increased learning through the use of educational technology are based upon properly planned utilization of materials and equipment in the learning process. A lack of services in this area may be due to a number of factors:

1. Administrators and teachers may rely upon teacher-training institutions to give adequate experience in the utilization of materials and equipment.
2. The media staff may lack the support and know-how to conduct effective in-service training in utilization techniques.
3. The media staff may not know how to encourage proper utilization methods on an informal basis.
4. There may be too little time in the media staff's busy schedule to provide this type of assistance

Whatever the reasons, utilization services were receiving very little emphasis in the schools studied.

Seven of the 13 services in the instructional design section of the questionnaire were rated as occasionally provided (items 23, 25, 26, 27, 38, 31, and 33). These services incorporated planning, designing, and organizing materials for use in instruction.

Item number 23: "Plans and discusses units of instruction with teachers in advance of presentation to determine media needs" was rated by media staff members as 26th in importance (a mean of 2.59). This service was given only occasionally (1.94) and was received by teachers

rarely or never (1.37). Teacher satisfaction ranked 55th with a mean of 1.79. These figures were extremely surprising considering the emphasis which has been placed upon cooperative planning by library and audiovisual educators.

Lack of success in cooperative pre-planning of an instructional unit on the part of teachers and the media specialists was indicative of the provision of other instructional design services. Bibliographies of materials for teaching units were prepared only upon occasion and collections of materials suitable for instructional needs were judged only occasionally adequate (2.26 by the media staff, 1.86 by the teachers). Little advanced planning of physical facilities for media utilization was acknowledged. Plans for audiovisual materials to be produced locally and the selection of the appropriate medium for a specific learning objective were the exception in the 40 schools rather than the rule (items 26 and 27).

Local production of audiovisual and print materials not available commercially (items 34 and 37) was given only occasionally to the teachers in the 40 schools. Part-time audiovisual personnel were usually engaged only in equipment distribution and maintenance.

The frequency with which teachers were involved in the acquisitions of media collections was in variance to that suggested by the library profession. Selection aids and catalogs of new materials were provided regularly (item 29) but the evaluation of proposed purchases through the use of reviewing media was limited (items 40, 41, 42, 43, and 45 with means clustering around 2.20). There was no measure whether

the media specialist was checking proposed purchases against reviewing sources but teachers certainly were not involved in that process very often (see item 40). The use of district production centers and inter-library loan services to bolster limited collections was utilized only on special occasions (items 38 and 47).

Most of the services dealing with evaluating the quality of instructional materials and their use were given rarely or never, but three of the eight services were rated in the "occasional" group (items 50, 51, and 52). Services 50 and 51 involved the teacher-media specialist evaluation of the media collection and the media center visit at the conclusion of a project or instructional unit. Both services rated relatively low in importance and were given on an occasional basis. In each case the investigator asked the head of the media center in the followup interview about evaluation services. The question was posed: "Suppose a teacher brings in her class for a media center project. At the conclusion of the visit, do you ever say to the teacher: 'Were your students able to find what they needed?'; or, 'How good were the written reports from your students after their media center project last week? Did we have enough of the right kinds of materials?' And suppose the teacher answers "no" to either question, Do you make plans to order more materials if the teacher wishes to teach the same unit again next year?" In every case, the media specialists confirmed the finding that evaluation is done only on an occasional basis.

Services directed to stimulating teachers' growth as professional educators and as subject specialists were rated as given occasionally by the media staff (items 57, 58, 59, 60, 62, 63, and 64). The

provision of current professional books and materials (item 64) was rated 2.49 by the media staff, but teachers reported the frequency as 2.12 (both ratings in the occasional range). Backfiles of professional journals and indexes were the exception rather than the rule (item 62). The media staff's involvement in in-service programs was minimal (items 57 and 58). Item 60: "Provides formal or informal memos or bulletins concerning items of professional interest (e.g., Have you seen this report, article, etc.?)" was provided only occasionally (2.14), yet is one that would pay large public relations dividends to the media staff.

Generally, the services given only occasionally were those considered by the library and instructional technology professions as some of the most vital areas for concentration. These are the services, which if implemented on a regular basis, would move the media center from a peripheral place in the educational program of the school to the very center of that program.

Responses to the "How Satisfactory" scale. The final question asked in the analysis of the services program in the nine case study schools was: What services provided by the media center staff are most satisfying to teachers? least satisfying? The responses to the satisfactory scale have already received some discussion in the previous section, but a few comments are necessary here.

The mean response by all teachers on the satisfaction scale was 2.07 with a standard deviation of .29. The terms "most satisfying" and "least satisfying" were defined as those services one standard deviation above and below the mean.

The services rated as most satisfying included items 1, 2, 4, 6, 8, 14, 16, 17, 39, and 58. These services centered around the accessibility of materials and equipment (items 1, 2, 4, 6, and 14). Teachers found information about new acquisitions helpful (items 16 and 17) and appreciated assistance in the location of materials they needed (item 8). They expressed satisfaction in participating in the selection process (item 39) even though the quality of that participation was in question (items 40, 41, 42, and 43). Teachers indicated high satisfaction (2.44) with the media staff's presentations in in-service programs (item 58). Therefore, media specialists need not be hesitant about providing this type of service.

The services receiving least satisfactory ratings included those where the media staff was directly involved in the instructional program (items 24, 29, 30, 53, and 54). For example: (item 29) "Helps plan classroom integration of lecture, discussion, and media to promote increased learning." received a mean rating of 1.65. Teachers also gave "unsatisfactory; needs improvement" ratings to the provision of community resource files and information about in-service workshops and education courses (items 46 and 56). They also wished improvement in the collection of evaluations of audiovisual and print materials (item 49).

Consensus Among the Media Staff

One of the major differences between the present study and other studies concerned with media center services was that the present study asked each media staff member to give his or her perception of the service program to

teachers. It was argued that a consensus rating on the frequency of a given service would, in general, be more accurate than a single rating by the head of the media center.

The bases for this argument were:

1. When a member of the media staff knew that other staff members would be rating the frequency of each item, the person would be more precise in his or her ratings.
2. In schools where the library and audiovisual departments were separated, the investigator would gain a composite view of the total media program by having all media staff members respond to the questionnaire.
3. In some instances, a staff member other than the head of the media center might have a more accurate view of the total service program.

The hypothesis to be tested was: There will be a consensus among the media staff in reporting the frequency of media center services to teachers. This hypothesis could be tested only when the size of the media staff was larger than one. Out of the 40 schools in the original population, three schools had only one person on the staff, and the responses from three other schools were not usable. Therefore, the data from 34 schools were used to test this hypothesis.

The statistical measure employed was a Measure of Ordinal Consensus developed by Robert K. Leik, Professor of Sociology, Institute for Social Research at the University of Washington.⁷ This measure provides an agreement or consensus score among a number of raters on a single item. The consensus score ranges from 0.00 to 1.00. A score of 0.00 indicates total disagreement (dissensus), a score of 1.00

⁷Leik, Robert K., "A Measure of Ordinal Consensus," Pacific Sociological Review 9:85-90, Fall, 1966.

indicates total agreement (consensus),

For example, if six media staff members rated the frequency of a service as follows:

<u>Regularly</u>	<u>Occasionally</u>	<u>Rarely; or Never</u>
6	0	0

the Leik consensus score would be 1.00 or perfect consensus. If, however, the six staff members responded:

<u>Regularly</u>	<u>Occasionally</u>	<u>Rarely; or Never</u>
3	0	3

the Leik consensus score would be 0.00 or total dissensus.

The statistic is based on the following definitions:

1. Consensus means all responses agreeing on a given rating.
2. Dissensus means that the respondents rating are polarized in two opposite categories.

The formula used to compute the consensus score for an even number of raters was:

$$C = 1 - \frac{2\sum d_i}{(m - 1)}$$

where C = the consensus score

d_k = the difference between scores as defined by Leik⁸

m = the number of categories (three in this study - "x" was not computed as a part of the scale)

When there was an odd number of raters, the Leik formula did not produce a span of consensus scores ranging from 0.00 to 1.00. The range for three raters was 0.34 - 1.00, for 9 raters: 0.22 - 1.00, for

⁸ Ibid., p. 86.

15 raters: 0.10 - 1.00, etc. Therefore a mathematical transformation was made of the formula for an odd number of raters to produce a range equal to 0.00 - 1.00. The new formula (used only when an odd number of raters responded to a specific item) was:

$$C = 1 - \frac{2n \sum d_i}{(n-1)(m-1)}$$

where n = the number of raters.

A consensus score was computed for each of the 64 items on the questionnaire in each of the 34 schools. Then, for each school, the 64 consensus scores were combined to produce a mean consensus score for that media staff. The justification for computing a mean was obtained by correspondence from Dr. Leik who assured the investigator that the statistic is a percentage and hence has ratio properties.⁹

The result of a mean consensus score for each of the 34 schools is presented in Table 12.

To assist in the interpretation of the consensus scores, the investigator arbitrarily categorized the possible consensus scores into four categories:

High agreement	.75 - 1.00
Moderate agreement	.50 - .74
Low agreement	.25 - .49
Dissensus	.00 - .24

From Table 12, five school media staffs received high agreement scores, 27 media staffs received moderate agreement scores, and two received low agreement scores. Since most of the media staffs rated

⁹Personal letter written by Robert K. Leik to the author on May 22, 1973.

TABLE 12. LEIK'S MEASURE OF ORDINAL CONSENSUS AMONG THE MEDIA STAFF MEMBERS OF 34 SCHOOLS

School Identification Number	Raw Number of Media Staff	Leik's Consensus Score	School Identification Number	Raw Number of Media Staff	Leik's Consensus Score
2	3	.68	31	4	.69
3	3	.61	32	4	.56
4	4	.61	33	3	.75
5	6	.68	34	3	.55
8	4	.67	35	3	.68
9	2	.72	36	4	.68
10	2	.80	37	4	.58
11	2	.75	38	3	.48
12	3	.85	39	3	.67
13	3	.53	40	2	.73
14	3	.67			
15	3	.63			
17	3	.75			
18	4	.70			
19	4	.65			
21	7	.62			
22	3	.66			
23	3	.53			
24	3	.65			
26	3	.74			
27	11	.61			
28	5	.64			
29	7	.56			
30	2	.70			

between .50 and .74 and the mean for all schools was .66, several examples are needed in order to visualize what "moderate agreement" means in a practical sense:

Three staff members ratings of 3,3,2 = .50 consensus
 Four staff members ratings of 3,3,3,2 = .75 consensus
 Six staff members ratings of 2,2,2,2,3,3 = .66 consensus

As the examples above show, "moderate agreement" consists of the majority of staff members agreeing on an item with only one or two staff members rating differently.

Since 34 out of the 36 media staffs scored "moderate agreement" or high agreement," the hypothesis that: There will be a consensus among the media staff in reporting the frequency of media services to teachers, was accepted.

Because of this finding, it might be argued that there was no need to include all media staff members in the study; that a response from the head of the media center as done in previous studies, would have been adequate. This might be true in cases where a large number of schools are being used, since a poor perception of a service program in some instances would not significantly affect an overall finding. Yet, the present study did not investigate how much more realistic the heads of the media centers were in their ratings because they knew that other staff members were rating the same service program. This question would have to be answered before a final conclusion could be made.

In studying a small number of schools or in probing the depth of program, the investigator would not recommend relying on a single person's rating of the frequency of media center services even though

there might be moderate agreement among the media staff members. To say that a media staff moderately agrees on the number and frequency of services says little about specific services on which they agree or disagree. In order to show the value of such an analysis, the ratings and consensus scores for school number 32 are presented in Table 13.

Table 13 shows that the mean consensus among the four media staff members in school 32 was .56. This was below the average of .66 for all 32 schools, yet falls within the "moderate agreement" range (.50 - .75). An analysis of the various items shows that the staff had perfect consensus (1.00) on 11 items, high agreement (.75) on 7 items, moderate agreement (.50) on 39 items, and dissensus (0.00) on 7 items. Since there was at least partial disagreement on all but 11 items, the question arose: Is the source of disagreement coming from a professional staff member or from the clerical staff? A further probe of the ratings showed that clerk number two differed 25 times from the other staff members, consistently marking lower on the scale than the other raters. Noting this pattern of response, an investigator might interview clerk number two to determine the reason for the differences in ratings. Possible reasons might include:

1. Some staff members might not be aware of the range and frequency of services given by other staff members because of poor intra-staff communication.
2. Personality conflicts among staff members might affect ratings.
3. Differing interpretations of the terms "regular," "occasional," and "rarely; or never" might affect ratings.

TABLE 13. THE RATINGS AND LEIK'S CONSENSUS SCORE ON 64 SERVICE STATEMENTS BY THE FOUR MEDIA STAFF MEMBERS IN SCHOOL NUMBER 32

Service item	Individual ratings				Leik's Consensus score	Service item	Individual ratings				Leik's Consensus score	
	Professional		Clerk				Professional		Clerk			
	1	2	1	2			1	2	1	2		
1	3	3	3	3	1.00	40	3	3	x	1	0.00	
2	3	3	3	3	1.00	41	3	3	3	2	.75	
3	3	3	3	3	1.00	42	3	2	3	x	.50	
4	3	3	3	3	1.00	43	3	2	3	x	.50	
5	3	2	3	2	.50	44	3	2	3	3	.75	
6	3	3	3	2	.75	45	3	3	x	x	1.00	
7	3	3	3	3	1.00	46	1	2	1	1	.75	
8	3	2	3	3	.75	47	3	2	1	3	.50	
9	2	3	x	2	.50	48	2	2	x	1	.50	
10	2	3	x	2	.50	49	3	2	2	1	.50	
11	2	3	x	2	.50	50	3	2	x	1	0.00	
12	2	2	x	2	1.00	51	3	2	x	1	0.00	
13	3	2	2	1	.50	52	3	2	3	1	.50	
14	3	3	3	3	1.00	53	2	2	x	1	.50	
15	2	3	2	1	.50	54	2	2	x	1	.50	
16	2	3	3	2	.50	55	2	2	x	1	.50	
17	3	2	3	2	.50	56	2	2	x	1	.50	
18	3	2	2	2	.75	57	3	3	x	2	.50	
19	2	3	2	2	.75	58	3	3	x	3	1.00	
20	2	2	2	2	1.00	59	3	2	x	2	.50	
21	1	2	x	1	.50	60	3	2	2	1	.50	
22	1	2	x	1	.50	61	2	1	1	x	.50	
23	3	2	x	1	0.00	62	2	2	1	x	.50	
24	3	2	x	x	.50	63	2	2	1	x	.50	
25	3	3	x	1	0.00	64	3	2	1	x	0.00	
26	3	2	x	x	.50							
27	2	2	x	1	.50							
28	2	2	x	1	.50							
29	2	2	x	1	.50							
30	3	2	3	2	.50							
31	3	2	3	2	.50							
32	2	2	1	1	.50							
33	3	2	x	2	.50							
34	3	2	x	2	.50							
35	2	2	x	1	.50							
36	3	3	x	2	.50							
37	3	3	x	1	0.00							
38	2	2	x	x	1.00							
39	3	2	3	2	.50							
							Mean Consensus Score					.56

4. Various items on the questionnaire might be misinterpreted.

When all media staff members are included in an analysis of the service program, an investigator can probe much more than intra-staff communication. The areas of program emphasis or deemphasis are easily identified because they are the items upon which the media staff agree. From Table 13, items on which all media staff in school 32 agreed were: 1, 2, 3, 4, 7, 12, 14, 20, 38, 45, and 58. If the ratings of the clerk who marked consistently low were eliminated from the evaluation for some sound reason, then the rest of the staff agreed on 18 additional items: 6, 25, 27, 28, 29, 30, 32, 36, 37, 40, 41, 48, 53, 54, 55, 56, and 57. Categorizing these services according to frequency ratings and areas of service, the following was obtained:

Of the 15 services offered "regularly:"
 6 were accessibility services
 1 was a utilization service
 1 was an instructional design service
 2 were production services
 3 were acquisition services
 2 were professional services

Of the 14 services offered "occasionally:"
 1 was a utilization service
 1 was an awareness service
 5 were instructional design services
 1 was a production service
 1 was an acquisition service
 4 were evaluation services
 1 was a professional service

The services given emphasis by this media staff become apparent and the list provides the basis for further evaluative efforts and questions that might be posed to members of the media staff.

During the initial interview with the heads of the media centers, a few media specialists expressed concern that some of their

clerical staff would not be aware of the services performed by the professional staff. In the sample school analyzed in Table 13, one clerical person was consistently low on her frequency ratings. However, this was not indicative of a common pattern across schools. The investigator compared the frequency ratings of all heads of media centers with all other professional staff members and with all clerical staff members in the 34 schools. The results of this comparison are shown in Table 14.

TABLE 14. A COMPARISON OF THE RATINGS OF THE HEADS OF MEDIA CENTERS WITH THE OTHER PROFESSIONAL STAFF AND WITH CLERICAL STAFF ACROSS 64 ITEMS

Raters	Number	Possible number ratings (N x 64)	Actual number of ratings	Number of "x's" marked	Mean rating
Heads of media centers	36	2,304	2,078	226	2.13
Other professional staff	44	2,816	2,345	471	2.13
Clerical staff	41	1,544	2,624	1,080	2.44

A T-test was computed on the mean ratings shown in Table 14.

There was no significant difference between the heads of the media centers and the other professional staff members, but the mean ratings of the heads of the media centers was significantly different at the .05 level from the clerical ratings. The large number of "x" or "don't know" responses (1,080) by the clericals showed that they were being

very selective in the items they marked as the investigator had requested. The clericals were responding to the most obvious services which were those given the most frequently. Thus, one would expect a higher mean response. This finding does not nullify the acceptance of the hypothesis concerning media staff agreement since the Leik measure of ordinal consensus score measured the agreement of the media staff item by item disregarding all "x" responses; i.e., on items where the clerical staff felt competent to rate, they were in "moderate agreement" with the remainder of the media staff.

Subject Area Teachers and Their Use
of Media Center Services

As reported earlier in this study, a study done by the N.E.A. in 1958¹⁰ reported that the dominant users of library services were English, social studies and science teachers. Based upon that study, the hypothesis formulated for replication in the present investigation was: English, social studies and science teachers will report more services provided by the media center than will other teachers.

In order to test this hypothesis, teachers asked to participate in the nine case study schools were selected at random so that generalizations could be made about media services to the various departments. The teachers selected were grouped into 10 subject areas and the percentage of teachers marking on each point of the scale was computed as shown in Table 15.

¹⁰ National Education Association of the United States, Research Division, The Secondary School Teacher and Library Services, p. 5.

TABLE 15. NUMBER OF MEDIA CENTER SERVICES REPORTED BY TEACHERS IN 10 SUBJECT DEPARTMENTS

Subject or department	Per cent of services received regularly	Per cent of services received occasionally	Total services offered	Per cent of services received rarely or never	Per cent of items checked don't know	N
English	25.24	26.27	51.51	30.22	18.26	32
Social studies	22.78	22.30	45.07	40.68	14.24	26
Science	21.97	23.34	45.31	28.34	25.98	16
Fine arts	21.65	20.54	42.19	20.54	37.27	7
Business	23.00	21.31	44.42	30.47	25.22	14
Foreign language	23.78	22.57	46.35	32.29	21.35	9
Industrial arts	20.14	36.28	56.42	32.64	10.94	9
Home economics	26.09	16.25	42.34	31.72	25.94	10
Mathematics	23.58	20.74	44.32	21.73	33.95	11
Physical education and health	46.35	19.01	65.36	16.41	18.23	6

Contrary to the results of the N.E.A. study, Table 15 shows that all departments except physical education and health reported a similar number of services. The number of regular services was in a very narrow range from 20.14 per cent to 26.09 per cent (excluding physical education and health which will be treated separately). English, social

studies and science teachers were neither at the top nor bottom of this range. A similar range is repeated when considering total services -- from 42.19 per cent to 56.42 per cent of the 64 services. Table 15 shows that all departments reported a variety of services available, but this does not mean that an equal amount of material was being utilized by the various instructors in the nine schools. Nevertheless, the result shows definite progress toward an even diffusion of media center services to all areas of the curriculum in the various departments of the school and the hypothesis was rejected. Admittedly, the sample is small and replication of the finding would be highly desirable; yet, there are implications for educators and media specialists relative to this finding.

1. Library and audiovisual educators should not slight any areas of the curriculum in their training programs in preference to the traditional few.
2. Graduate education programs for media specialists should continue to require broad undergraduate degrees so that prospective media specialists will have a working knowledge of the many disciplines that they will be required to serve each day.
3. Materials collections in the schools should include all subject areas -- not just literature, social studies, and science.

The nine physical education and health teachers reported a much higher percentage of services than did the teachers in other areas. Since the investigator was not able to interview any of the teachers, he can only conjecture the reasons for the difference:

1. These particular teachers may, indeed, have required a broad range of services for their particular needs.
2. Emphasis on drug and sex education in recent years may have made this department much more reliant upon the services and materials of the media center.

3. These teachers may have clearly overestimated the services to their department.

Since the teachers in the nine schools claimed a similar frequency of services to their subject departments, it was of interest to test the agreement of teachers within each of the 10 subject areas. Utilizing the Leik measure of ordinal consensus, a consensus score was computed on each of the 64 items for each of the 10 subject area groups. A mean consensus score was then computed for each group and the results are given in Table 16.

TABLE 16. THE MEAN LEIK'S CONSENSUS SCORE ON 64 SERVICE STATEMENTS BY SUBJECT AREA TEACHERS IN NINE SCHOOLS

Subject department	Number	Leik's measure of ordinal consensus
Home economics	10	.57
Physical education and health	6	.55
Social studies	26	.53
Business	14	.49
English	32	.49
Industrial arts	9	.48
Fine arts	7	.47
Science	16	.47
Foreign language	9	.47
Mathematics	11	.45

Table 16 shows a mean consensus range of .57 - .45. This was lower than the mean consensus score of .66 for the media staffs and ranged from moderate agreement to low agreement in the various departments.

In the past, one might have predicted the amount of use by the various teachers in a school by knowing the teacher's subject area, but in the schools of the present study, moderate to low consensus scores showed that there was a definite variety among users within each subject department. Some of the reasons for this change might include:

1. The proliferation of audiovisual materials available for all subject areas in the past ten years has changed the utilization possibilities for every subject department in the school.
2. Larger budgets for building collections of media and equipment from Federal and local funds have made it possible to procure materials for many departments served inadequately in the past. For example, the National Defense Education Act Title III provided funds for materials in mathematics, the sciences, and modern foreign languages.
3. The increased attention given to the possibilities of instructional technology by professional education literature, national associations and conferences, teacher training institutions, and numerous demonstration schools and projects have had an impact on the increased use of all types of media in classroom teaching.

CHAPTER IV

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Good school media centers have more than collections of materials and equipment, more than centrally located and carpeted facilities, more than personnel available to check materials in and out. Good school media centers have competent staff members who utilize resources, facilities, and people in the formulation of programs which have an impact on the educational goals of the community and school personnel. This emphasis on program is pictured by James W. Liesener¹ as the "Media Program Model:"

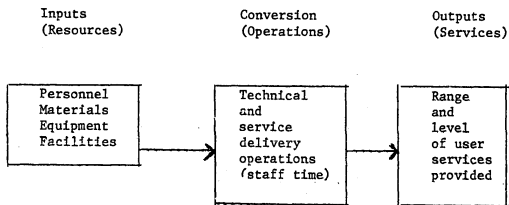


Figure 2. Liesener's Media Program Model

The model would be more complete if it included the results or the impact of the resources, operations, and services upon the educational program:

¹Liesener, James W., "The Development of a Planning Process for Media Programs," School Media Quarterly 1:281, Summer, 1973.

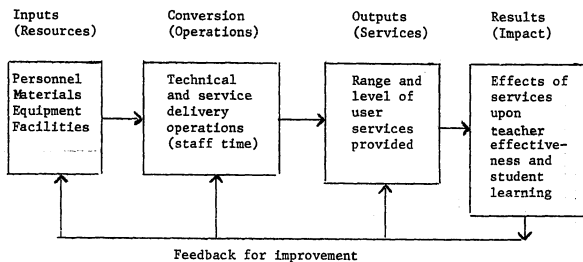


Figure 3. Revised Media Program Model

But before the real impact of the media center program can be measured, each of the parts of the model must be evaluated. There are numerous ways to compile inventories of resources and to measure their conversion through circulation and utilization counts, but precise methods of measuring outputs in terms of services are only in the developmental stage. These service outputs are the connecting link to the educational impact of the media center program.

The present study sought to explore and assess part of the services output (services to teachers) in 40 Indiana senior high schools during the school year 1972-1973. The purpose was not only to note progress in a particular state, but also to employ a variant technique of analysis which might lead to more precision in program assessment.

In the first phase of the study, each member of the media staff rated the importance and the frequency of 64 services to teachers covering eight program areas: accessibility services, utilization services,

awareness services, instructional design services, production services, acquisition services, evaluation services, and professional services.

During the second phase of the study, a judgmental sample of nine "typical" schools was selected from the 40 Indiana secondary schools for more intensive research. These schools were selected to represent large and small media staffs plus high, moderate, and low number of services. A random sample of one-third of the teaching faculty in these schools was asked to rate the frequency and their satisfaction with the same 64 services. The purpose for involving teachers was to test for agreement concerning service frequency and to explore the diffusion of services among the various subject departments.

The questions investigated in the study were:

1. What types of services to teachers do the media staff members consider as important? unimportant?
2. What services do members of the media staff give to teachers most often? least often?
3. What services do the teachers report they receive most often? least often?
4. What services provided by the media center staff are most satisfying to teachers? least satisfying?

The hypotheses investigated in the study were:

1. There will be a consensus among the media staff members in reporting the frequency of media center services to teachers.
2. There will be a positive correlation between the frequency of media center services and the importance given to these services by the media center staff.
3. There will be a positive correlation between the size of the media staff and the number of services to teachers reported by the media staff.

4. There will be a negative correlation between the media staff-to-teacher ratio and the number of services to teachers reported by the media staff.
5. There will be a consensus between the teachers and the media staff in reporting the frequency of services provided by the media center.
6. The greater the number of services to teachers reported by the media staff, the higher teachers will rate their satisfaction with those services.
7. There will be a positive correlation between the size of the media staff and teachers' satisfaction.
8. There will be a negative correlation between the media staff-to-teacher ratio and the teachers' satisfaction rating.
9. English, social studies, and science teachers will report more services provided by the media center than will other teachers.

Summary of Findings

Increasing the size of the media staff in the individual school has been of concern to the library and audiovisual professions for many years. Progress was evident in the 40 schools which participated in the present study. The number of full-time-equivalent media staff ranged from 1.00 - 10.50 with a mean of 2.97 staff. Some schools were approaching the staff size recommended in the 1960 Standards for School Library Programs,² but none approached the recommended staff size in the 1969 Standards for School Media Programs.³

²American Association of School Librarians, Standards for School Library Programs, pp. 53-56.

³Joint Committee of the American Association of School Librarians and the Department of Audiovisual Instruction of the National Education Association, Standards for School Media Programs, p. 12.

The present study involved several hypotheses dealing with media staff size and its relationship with other variables in the media center program. One of the hypotheses was concerned with the agreement among media staff members on the frequency of media center services, and was tested by utilizing 34 of the 40 schools in the population which had media staffs larger than one person. Leik's Measure of Ordinal Consensus,⁴ modified by the investigator for the present study, produced a consensus score of .66 which was categorized as moderate agreement. Therefore, the hypothesis that there will be a consensus among the media staff in reporting the frequency of media center services was upheld.

Two other hypotheses were concerned with the relationship between media staff size and the teachers' satisfaction with media center services. They were: (1) There will be a positive correlation between the size of the media staff and the teachers' satisfaction, and (2) There will be a negative correlation between the media staff-to-teacher ratio and the teachers' satisfaction rating. Technically, both hypotheses were accepted since the Pearson Product-moment correlation coefficients were moderately high (.46 and -.35 respectively), yet they did not achieve significance at the .05 level so the results were judged inconclusive.

The media staffs in the study rated the frequency of each service offered as being provided regularly, occasionally, rarely or never, or don't know. In the 40 schools, out of 64 possible services, the number of services which teachers reported as being offered regularly ranged from 10-43 with a mean of 24.65 services. The number of services offered

⁴Leik, Robert K., "A Measure of Ordinal Consensus," Pacific Sociological Review 9:85-90, Fall, 1966.

occasionally ranged from 11-38 with a mean of 23.25 services. The hypotheses to be tested were: (1) There will be a positive correlation between the size of the media staff and the number of services to teachers reported by the media staff, and (2) There will be a negative correlation between the media staff-to-teacher ratio and the number of services to teachers reported by the media staff.

The analysis of these two hypotheses involved adding the services offered regularly and occasionally for a total services output and then computing a Pearson product-moment correlation coefficient utilizing media staff size figures. The total number of services offered correlated significantly with the size of the media staff and with the media staff-to-teacher ratio (.60 and .47 respectively). As in Gaver's study entitled Services in Secondary School Media Centers: Evaluation and Development,⁵ the general concept of an association between the size of the media staff and the number of services was upheld. This is not to say that a causal relationship existed, for there may have been other rival hypotheses which explained services frequency. These rival hypotheses have already been outlined in Chapter III.

Coupled with the rating of service frequency, the media staff members were asked to rate each service statement as very important, of some importance, of little or no importance, or don't know. The hypothesis to be tested was: There will be a positive correlation between the frequency of media center services and the importance given

⁵Gaver, M. V., Services in Secondary School Media Centers: Evaluation and Development, pp. 38-40.

to these services by the media center staff. The grand mean response on the importance scale for each of the 64 services was correlated with the grand mean response on the frequency scale. The Pearson product-moment coefficient was .911 which was significant at the .05 level. Therefore, the hypothesis was upheld.

The ratings of service importance and frequency by the media staffs and the teacher ratings of service frequency and satisfaction were utilized in the previous hypotheses without a reference to the substance of the service program. This area of concern was covered by the formulation of four questions:

1. What types of services to teachers do members of the media staff consider as important? unimportant?
2. What services do the media staff give to teachers most often? least often?
3. What services do the teachers report they receive most often? least often?
4. What services provided by the media center staff are most satisfying to teachers? least satisfying?

The mean responses of both teachers and the media staff for each of the 64 services in the questionnaire were computed and ranked to produce Table 11 in Chapter III. This table can have considerable utilitarian value to media specialists, library and instructional technology educators, media center evaluative teams, administrators, school library supervisors, and school district audiovisual coordinators as outlined in Chapter III. In order to summarize the findings from Table 11 and the discussion that followed, the number of items which satisfied each of the above four questions was categorized according to the eight areas of service covered by the 64 items on the question-

naire. Services falling into the categories of least . . . or most . . . were designated as those items one standard deviation above or below the grand mean for all the services in the list. For example, a service was considered as "most" satisfying to teachers if its mean rating by all the teachers was higher than 2.36 (the grand mean of 2.07 for all 64 services on the 3-point satisfaction scale plus the standard deviation of .29). The results of this analysis are presented in Table 17.

TABLE 17. THE NUMBER OF SERVICES ONE STANDARD DEVIATION ABOVE AND BELOW THE GRAND MEANS ON THREE RATING SCALES CATEGORIZED BY SERVICE TYPE

Services	Accessibility services N = 7	Utilization services N = 8	Awareness services N = 5	Production services N = 4	Acquisition services N = 10	Instructional design N = 13	Evaluation services N = 8	Professional services N = 9
Rated most important by the media staff	4	1	4	0	1	0	0	0
Rated least important by the media staff	0	0	0	0	1	3	5	2
Given most frequently to teachers	6	2	3	0	2	0	0	0
Given least frequently to teachers	0	0	0	0	1	6	5	2
Received most frequently by teachers	3	0	0	0	0	0	0	0
Received least frequently by teachers	0	3	0	1	3	5	5	2
Rated most satisfying by teachers	4	2	2	0	1	0	0	1
Rated least satisfying by teachers	0	0	0	0	0	3	2	0

A careful analysis of Table 17 and the specific services listed in Table 11 shows that the media staffs of the 40 schools gave priority to supply/distribution-type services. Purchasing materials and equipment, making their location known to teachers, and distributing them as needed were the services considered most important, given the most frequently, and rated as the most satisfactory.

The services which bear directly upon the actual instructional program of the school, the instructional developer-evaluator concept, and the building of professional skills have not gained a foothold in these schools - either in importance considerations or in implementation.

Three instructional design services and two evaluation services received the lowest satisfaction ratings by teachers. Some teachers indicated resistance to a partnership role with the media specialist in the instructional program preferring the traditional support/supply role.

The data from Table 17 indicate that there was a discrepancy between the services given by the media staff most frequently and the services received most frequently by teachers. This was the subject of one of the hypotheses: There will be a consensus between the teachers and the media staff in reporting the frequency of services provided by the media center. Three methods of analysis were utilized to test this hypothesis.

The first method counted and compared services in order to determine the number of agreements, overestimations, and underestimations by the media staff of its services to teachers. The result of this method was a classification of the nine school media staffs into four groups:

1. The "overestimating" media staffs - those overestimating their services 50 per cent of the time.
2. The "typical" media staffs - those overestimating their services 30-40 per cent of the time.
3. The "modest" media staffs - those more nearly balanced between overestimations and underestimations of services.
4. The "humble" media staff - one staff which underestimated service 35 per cent of the time.

The second method of analyzing the consensus between the media staff and teachers involved the graphing of frequency ratings by both groups (See Figure 1). This method was deceptive in showing service trends among different schools, but it did show a discrepancy between teachers and media staff members in their interpretation of the words, "regular," "occasional," and "rarely or never."

The third method was an item-by-item analysis between the heads of the nine media centers and the investigator of the responses by the media staff compared to the responses of the teachers.

Several service patterns emerged in these interviews:

1. The staff worked so well as a team and had such good rapport with teachers generally that there was excellent diffusion throughout all subject departments of media center services.
2. The staff worked with teachers in so many informal ways that a sense of "program" or priorities was almost nonexistent.
3. The staff had improved services noticeably over those provided by previous media staffs which seemed to cause teachers to give "benefit of the doubt" ratings in order to communicate approval of the present service program.
4. The staff served a block of teachers very well, but there was a large group of teachers from varying subject departments who were not getting or taking advantage of the services which the media center was willing to provide.

5. The staff had rigid rules for some services which disturbed teachers and caused them to ignore other media center services whenever possible.
6. The staff had serious difficulties in communicating their intended service program to teachers.

All three methods showed a definite discrepancy between the media staff and the teachers concerning the frequency of media center services. Therefore the hypothesis was rejected.

The final hypothesis of the study was: English, social studies, and science teachers will report more services provided by the media center than will other teachers. Contrary to the results of previous studies, the teachers from 9 of 10 subject departments reported a similar number of services. Utilizing the modified Leik Measure of Ordinal Consensus,⁶ mean consensus scores for the teachers of each subject department were computed. The results were lower than the media staffs' mean consensus score of .66 and ranged from .57-.45. These scores were judged as moderate to low consensus, i.e., there was a variety of service reception within each subject department, therefore, the hypothesis was rejected.

Conclusions

The following conclusions were generalized to the senior high school media centers in the State of Indiana which included grades 10-12 during the 1972-1973 school year. In areas where teachers were involved in the study, the conclusions apply only to the nine schools which participated in the second phase of the study.

1. There was moderate agreement among the media staff members concerning the frequency of media center services to teachers.

⁶Leik, op. cit.

However, the investigator did not conclude that participation of media staff members other than the head of the media center was unnecessary. Quite to the contrary, differences of perceptions gave a much clearer picture of media center service patterns when dealing with specific areas of service.

2. Media specialists have yet to assume a partnership role with the teachers in the instructional program of the school. Acquisition, accessibility, awareness, and distribution services are still preferred and implemented as opposed to instructional development, evaluation and utilization, and professional services.
3. There was a significant correlation between the size of the media staff and the number of services given to teachers.
4. The size of the media staff may be related to teacher satisfaction with media center services, but the results of the present study were inconclusive.
5. A definite discrepancy existed between the perception of the media staff and the teachers concerning the frequency of media center services.
6. The expansion of the frequency rating scale from a simple checking of services given regularly to a classification of regularity did provide much valuable information in determining service patterns and service priorities. The technique was judged superior in spite of differing interpretations of the rating scale terms by teachers and media staff members.
7. In the nine schools studied, individual differences among teachers accounted for as much variation in their utilization patterns of media center services as did membership in a particular subject department.

Recommendations for Further Study

Based upon the findings and conclusions made in this study, the following recommendations for further study are made:

1. Another study might investigate how much more precise the heads of the media center are in their ratings because they know that other staff members are rating the same service program.
2. More precise ways of measuring media center service frequency need to be developed and tested.
3. School administrators might be a part of a replication of the present study.
4. Replication of the present study from time to time in Indiana would document progress or retrogression in the service programs of senior high school media centers and would provide a yardstick for statewide efforts by the State Department of Public Instruction, the professional associations of librarians and instructional technologists, and the library science and instructional technology educators in the State.
5. Replication of the study utilizing different populations and/or different educational levels would assist in theory formulation.

BIBLIOGRAPHY

BIBLIOGRAPHY

- American Library Association. Committee on Post-War Planning, School Libraries for Today and Tomorrow, American Library Association, Chicago, 1945, 43 pp.
- Association for Educational Communications and Technology, Jobs in Instructional Media, The Association, Washington, D. C., 1970, 304 pp.
- Bruning, James L., and Kintz, B. L., Computational Handbook of Statistics, Scott, Foresman and Company, Glenview, Illinois, 1968, 269 pp.
- Claver, Mary Peter, Student and Faculty Use of the Library in Three Secondary Schools, Unpublished doctor's thesis, School of Library Service, Columbia University, New York, 1960, 279 pp., typed.
- Cooperative Study of Secondary School Standards, Evaluative Criteria, 1940 ed., The Committee, Washington, D. C., 1939, 175 pp.
- Cooperative Study of Secondary School Standards, Evaluative Criteria, The Committee, Washington, D. C., 1950, 305 pp.
- Darling, Richard, "Accountability: Notes Toward a Definition," Library Journal 96:3805-3808, November 15, 1971.
- Dralle, Wayne Roger, The Status of Senior High School Audiovisual Programs in Indiana in 1963-1964 with Recommendations for Improvement, Unpublished doctor's thesis, School of Education, Indiana University, Bloomington, September, 1964, 332 pp.
- Fite, Robert Edward, The State of Audiovisual Services for the 1966-1967 School Year as Rendered by Fifteen Full-Time Audio-Visual Building Coordinators on Long Island, New York, Unpublished doctor's thesis, School of Education, Indiana University, Bloomington, December, 1968, 164 pp.
- Fulton, W. R., and King, Kenneth L., Evaluative Checklist: An Instrument for Self-Evaluating an Educational Media Program in School Systems, Association for Educational Communications and Technology, Washington, D. C., 1970, 13 pp.
- Gaver, Mary Virginia, and Jones, Milbrey L., "Secondary Library Services: A Search for Essentials," Teachers College Record 68:200-210, December, 1966.
- Gaver, Mary Virginia, Services of Secondary School Media Centers: Evaluation and Development, American Library Association, Chicago, 1971, 131 pp.

- Hardman, Robert Richard, Philosophy of Role and Identification of Critical Tasks Performed by Educational Media Specialists in Elementary and Secondary Schools of Iowa, Unpublished doctor's thesis, School of Education, Indiana University, 1971, 197 pp., typed.
- Hargrevs, Dale G., Media Manpower Job Inventory, Unpublished questionnaire, School of Education, Oregon State University, Monmouth, 1971, 29 pp.
- Henne, Frances; Ersted, Ruth; and Lohrer, Alice, A Planning Guide for the High School Library Program, American Library Association, Chicago, 1951, 140 pp.
- Interactive Statistical Instruction System, Florida State University, Tallahassee, 1971, computer program.
- Joint Committee of the American Association of School Librarians and the Department of Audiovisual Instruction of the National Education Association, Standards for School Media Programs, American Library Association, Chicago, 1969, 66 pp.
- Kerlinger, Fred N., Foundations of Behavioral Research: Educational and Psychological Inquiry, Holt, Rinehart and Winston, New York, 1964, 739 pp.
- Lane, Margaret Elizabeth Bergman, A Study of School Library Resources in Oregon as Compared to State and National Standards, Unpublished doctor's thesis, School of Education, University of Washington, Seattle, July, 1966, 268 pp.
- Leik, Robert K., "A Measure of Ordinal Consensus," Pacific Sociological Review 9:85-90, Fall, 1966.
- Library Literature 1921-1932, American Library Association, Chicago, 1934, 430 pp.
- Liesener, James W., "The Development of a Planning Process for Media Programs," School Media Quarterly 1:278-287, Summer, 1973.
- Questionnaire for Survey of School Library/Media Center Services, School of Library and Information Services, University of Maryland, College Park, Maryland, 1972, 29 pp.
- National Education Association of the United States, Department of Secondary Education, Committee on Library Organization and Equipment, C. C. Certain, Chairman, Standard Library Organization and Equipment for Secondary Schools; Report of a Committee of the National Education Association on Library Organization and Equipment, University of the State of New York, Albany, 1920, 39 pp.

National Education Association of the United States, Research Division, School Library Personnel Task Analysis Survey: A Report Prepared in Phase I of the School Library Manpower Project, American Association of School Librarians, Chicago, 1969, 91 pp.

The Secondary-School Teacher and Library Services, The Association, Washington, D. C., 1958, 37 pp.

National Study of Secondary School Evaluation, Evaluative Criteria, The Committee, Washington, D. C., 1960, 376 pp.

Evaluative Criteria for the Evaluation of Secondary Schools, 4th ed., The Committee, Washington, D. C., 1969, 356 pp.

Newcomb, Ruth Becker, Role Expectations of the County School Library Supervisor and Their Perceived Fulfillment, Unpublished doctor's thesis, College of Education, Florida State University, December, 1968, 182 pp., typed.

North Central Association of Colleges and Secondary Schools, Commission on Secondary Schools, Complete List of Accredited High Schools [in Indiana for School Year 1972-1973], Unpublished list of the Association, Bloomington, Indiana, 1973, 17 pp.

Olson, Edwin E., Survey of User Service Policies in Indiana Libraries and Information Centers, Indiana Library Studies, Bloomington, 1970, 287 pp.

Siegel, Sidney, Nonparametric Statistics for the Behavioral Sciences, McGraw-Hill, New York, 1956, 312 pp.

A Survey of the Educational Media Services of Calgary Public Schools, Conducted on Behalf of the Calgary School Board by Mary V. Gaver [and others], School of Library Science, University of Alberta, Edmonton, 1971, 137 pp.

Voisard, Boyer Warren, Librarian Participation in High School Programs of Curriculum Improvement, Unpublished doctor's thesis, School of Education, University of Southern California, Los Angeles, June, 1955, 296 pp., typed.

Wert, Lucille M., "Illinois School Library Media Survey," Illinois Libraries 54:553-644, September, 1972.

APPENDIX

Appendix A

Questionnaires for the Media Staffs and Teachers

Research Survey Of Media Services To Teachers Questionnaire

Dear Media Staff Member,

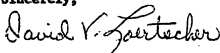
The following questionnaire is part of a research study designed to investigate the services offered to classroom teachers by the staff members of the media center (the library and audiovisual departments or instructional materials center). Your Center is one of 45 school media centers in the State of Indiana which has been selected to participate. State and national school library leaders have expressed their interest in the results of such a study as a follow-up to other school media research. Your candid judgments will be most helpful and can assist in the education of new staff members of school media centers.

Each member of the media staff (professional, technical, and clerical) is asked to fill out the same questionnaire. Please do so independently without conferring with any other member of the staff. Faculty members in some schools participating in this study will also be asked to respond to the questionnaire.

The questionnaire asks for your name and a description of your position. This is necessary to categorize the data correctly and to know who has responded, but no names will be identified in the reporting of the data. The head of the media center may obtain a copy of group results by enclosing a request with the questionnaire.

Thank you very much for your participation!

Sincerely,



David V. Loertscher

Your name _____

School _____

Which of the following categories best describes your position in this school media center? ___Professional ___Technical ___Clerical

Please describe your duties in the media center very briefly:

How much time do you work in this school media center each week?

___Full time ___Part time (no. of hours per week)___

How many years have you worked in this school media center? (Do not count this year.)___

Definitions

1. Media - Printed and audiovisual forms of communication and their accompanying technology.
2. Media center - The place or places in the school where the full range of media, equipment, and services is available to students and teachers. Includes the library and audiovisual departments, the instructional materials center, the learning center, and resource centers.
3. Media staff - The total paid personnel of the media center including professionals, technicians, and clericals.

DIRECTIONS

Below, you will find a number of possible services that the media center staff might decide to offer to the teaching staff of the school. Consider each service carefully.

Decide how important you think it is for your media center with its strengths and limitations to offer the service to the teachers in your school. Use the scale: 3 - Very important

- 2 - Of some importance
- 1 - Of little or no importance
- X - Don't know

Circle your choice in the column to the left of the service statement.

Next, rate how often you and other members of the media staff provide the service to the teachers in your school. Refer back to the past school year as well as the first few weeks of this school year for your response.

Use the scale: 3 - Regularly as the need arises

- 2 - Occasionally
- 1 - Rarely; or never
- X - Don't know

Circle your choice in the column to the right of the service statement.

You may wish to use one scale first and then reread the statements to mark the other scale.

When you have finished, please return the questionnaire to the researcher in the envelope that has been provided.

SAMPLE

③ 2 1 X Visits classrooms to assess the extent to which media center materials and services are contributing to classroom instruction. 3 ② 1 X

(Here the rater feels that the service is a very important one, but since some one or more media staff members do not have an established program of regular visits, the frequency is marked as a 2, or occasionally.)

SCALE FOR RESPONSE

HOW IMPORTANT OR
UNIMPORTANT FOR
YOUR CENTER TO
PROVIDE?

- 3 - Very important
2 - Of some importance
1 - Of little or no importance
X - Don't know

SCALE FOR RESPONSE

HOW OFTEN
DOES YOUR CENTER
PROVIDE?

- 3 - Regularly as the
need arises
2 - Occasionally
1 - Rarely or never
X - Don't know; Doesn't
apply

MAKING MEDIA (PRINT AND NONPRINT) AND EQUIPMENT ACCESSIBLE TO TEACHERS

- | | | |
|---------|---|---------|
| 3 2 1 X | Makes equipment readily accessible to teachers including scheduling, delivery and pickup. | 3 2 1 X |
| 3 2 1 X | Provides assistance when equipment emergencies occur. | 3 2 1 X |
| 3 2 1 X | Provides the assistance of trained equipment operators when needed. | 3 2 1 X |
| 3 2 1 X | Establishes loan policies (i.e. checkout procedures, due dates, etc.) sufficiently flexible to meet teachers' needs. | 3 2 1 X |
| 3 2 1 X | Provides reserve and special collections (e.g. in classrooms, subcenters, etc.) which meet teachers' needs. | 3 2 1 X |
| 3 2 1 X | Provides access to the media center before and after regular class hours so that teachers can use facilities and materials. | 3 2 1 X |
| 3 2 1 X | Keeps materials and equipment in repair and operating condition. | 3 2 1 X |

ASSISTING TEACHERS TO DEVELOP SKILL IN THE
UTILIZATION OF INSTRUCTIONAL MEDIA AND EQUIPMENT

- | | | |
|---------|---|---------|
| 3 2 1 X | Helps teachers develop skill in locating media center materials (e.g. use of bibliographic tools, card catalog, special reference books, indexing systems, etc.). | 3 2 1 X |
| 3 2 1 X | Assists teachers in developing smooth and effective presentation skills when using audiovisual materials. | 3 2 1 X |
| 3 2 1 X | Demonstrates how audiovisual and print materials can be integrated into the instructional process. | 3 2 1 X |

- | | | |
|---------|--|---------|
| 3 2 1 X | Demonstrates the versatility and limitations of <u>audio-visual equipment</u> in achieving instructional goals. | 3 2 1 X |
| 3 2 1 X | Orients teachers to the versatility and limitations of <u>instructional materials</u> in achieving instructional goals. | 3 2 1 X |
| 3 2 1 X | Suggests materials of appropriate level and diversity to meet specific teaching needs. | 3 2 1 X |
| 3 2 1 X | Makes media center facilities readily accessible to groups or individual students upon teacher request. | 3 2 1 X |
| 3 2 1 X | Plans with teachers to correct students' problems in finding and utilizing resource materials through classroom or individualized instruction. | 3 2 1 X |

MAKING TEACHERS AWARE OF SERVICES AND MATERIALS

- | | | |
|---------|---|---------|
| 3 2 1 X | Informs teachers about new <u>equipment</u> acquired by the media center. | 3 2 1 X |
| 3 2 1 X | Informs teachers about new <u>materials</u> acquired by the media center. | 3 2 1 X |
| 3 2 1 X | Informs and reminds teachers about services offered by the media center. | 3 2 1 X |
| 3 2 1 X | Orients new teachers to media center services. | 3 2 1 X |
| 3 2 1 X | Provides information about services and materials available to teachers from other libraries and media centers in the area. | 3 2 1 X |

PLANNING, DESIGNING AND ORGANIZING MATERIALS AND INSTRUCTION

- | | | |
|---------|---|---------|
| 3 2 1 X | Participates in curriculum planning as a member of a curriculum committee. | 3 2 1 X |
| 3 2 1 X | Recommends curriculum innovations when participating in curriculum planning and revision. | 3 2 1 X |

SCALE FOR RESPONSE

HOW IMPORTANT OR
UNIMPORTANT FOR
YOUR CENTER TO
PROVIDE?

- 3 - Very important
- 2 - Of some importance
- 1 - Of little or no importance
- X - Don't know

SCALE FOR RESPONSE

HOW OFTEN
DOES YOUR CENTER
PROVIDE?

- 3 - Regularly as the
need arises
- 2 - Occasionally
- 1 - Rarely or never
- X - Don't know

3 2 1 X	Plans and discusses units of instruction with teachers <u>in advance</u> of presentation to determine media needs.	3 2 1 X
3 2 1 X	Participates in formulating specific behavioral objectives when media (print and nonprint) are utilized in instruction.	3 2 1 X
3 2 1 X	Determines the instructional setting (space requirements, furniture, and equipment, etc.) that will be needed for media utilization.	3 2 1 X
3 2 1 X	Determines what type of media will increase learning for a particular objective.	3 2 1 X
3 2 1 X	Designs (draws plans for) materials to be produced locally (e.g. slides, tapes, charts, etc.).	3 2 1 X
3 2 1 X	Prepares lists of materials for specific units of instruction.	3 2 1 X
3 2 1 X	Helps plan classroom integration of lecture, discussion, and media to promote increased learning.	3 2 1 X
3 2 1 X	Develops a suggested sequence of instruction to make the best use of media in the classroom.	3 2 1 X
3 2 1 X	Provides enough materials in a variety of formats to allow teachers to meet large group, small group or individualized instruction needs.	3 2 1 X
3 2 1 X	Assists teachers in planning and preparing individualized instructional units.	3 2 1 X
3 2 1 X	Participates as a consultant to teaching teams about instructional materials.	3 2 1 X

PRODUCING OR ADAPTING INSTRUCTIONAL MATERIALS

- | | | |
|---------|--|---------|
| 3 2 1 X | Produces audiovisual materials for teachers (slides, transparencies, tapes, graphics, TV programs, etc.). | 3 2 1 X |
| 3 2 1 X | Produces printed materials for teachers (ditto, mimeograph, etc.). | 3 2 1 X |
| 3 2 1 X | Assists teachers in producing their own audiovisual and printed materials by providing instruction and facilities. | 3 2 1 X |
| 3 2 1 X | Adapts commercially produced materials to fit instructional needs (e.g. utilizing parts of filmstrips, films, media kits, etc. in conjunction with other materials). | 3 2 1 X |

ACQUIRING INSTRUCTIONAL MATERIALS THROUGH PURCHASE, BORROWING, OR RENTAL

- | | | |
|---------|---|---------|
| 3 2 1 X | Makes arrangements for the production of instructional materials which must be done outside the individual school media center. | 3 2 1 X |
| 3 2 1 X | Furnishes selection aids for locating new materials (e.g. recommended lists, catalogs, etc.). | 3 2 1 X |
| 3 2 1 X | Helps teachers become proficient in selecting and evaluating media (print and nonprint). | 3 2 1 X |
| 3 2 1 X | Obtains commercial products for preview by teachers and media center staff. | 3 2 1 X |
| 3 2 1 X | Provides teachers with reviews of audiovisual materials to assist in the selection process. | 3 2 1 X |
| 3 2 1 X | Provides teachers with critical reviews of books to assist in the selection process. | 3 2 1 X |
| 3 2 1 X | Procures materials (books, filmstrips, etc.) in a reasonable amount of time after recommendation for purchase by teachers. | 3 2 1 X |

SCALE FOR RESPONSE

HOW IMPORTANT OR

UNIMPORTANT FOR

YOUR CENTER TO

PROVIDE?

- 3 - Very important
 2 - Of some importance
 1 - Of little or no importance
 X - Don't know

SCALE FOR RESPONSE

HOW OFTEN

DOES YOUR CENTER

PROVIDE?

- 3 - Regularly as the
 need arises
 2 - Occasionally
 1 - Rarely or never
 X - Don't know

- | | | |
|---------|--|---------|
| 3 2 1 X | Evaluates and selects audiovisual equipment such as projectors and tape recorders in consultation with teachers. | 3 2 1 X |
| 3 2 1 X | Provides information about community resources for education (human resources, museums, field trips, etc.). | 3 2 1 X |
| 3 2 1 X | Obtains instructional media from other sources upon request of teachers (interlibrary loan, from district center, etc.). | 3 2 1 X |

EVALUATING THE QUALITY OF INSTRUCTIONAL MATERIALS AND THEIR USE

- | | | |
|---------|---|---------|
| 3 2 1 X | Evaluates learning outcomes of audiovisual and print materials after classroom or individual use. | 3 2 1 X |
| 3 2 1 X | Collects teacher evaluations of audiovisual and print materials previously used and makes them available on request. | 3 2 1 X |
| 3 2 1 X | Plans with the teacher to rectify problems with materials (e.g. purchasing more or better materials, modifying existing materials, etc.). | 3 2 1 X |
| 3 2 1 X | Evaluates the results of special media center projects (e.g. reports, listening and viewing projects, class visits to the media center, etc.) to assist teachers in planning future media-oriented assignments. | 3 2 1 X |

- | | | |
|---------|--|---------|
| 3 2 1 X | Informs teachers concerning student skills in locating media center materials (e.g. using periodical indexes, card catalog, reference skills, etc.). | 3 2 1 X |
| 3 2 1 X | Visits classrooms to assess the extent to which media center materials and services are contributing to classroom instruction. | 3 2 1 X |
| 3 2 1 X | Develops tests or measures to rate the effectiveness of educational media (e.g. Does a locally produced slide set teach what it was designed to teach?). | 3 2 1 X |
| 3 2 1 X | Presents alternative strategies for instruction based on results of the tests developed. | 3 2 1 X |

STIMULATING TEACHERS' GROWTH AS PROFESSIONAL
EDUCATORS AND AS SUBJECT SPECIALISTS

- | | | |
|---------|--|---------|
| 3 2 1 X | Makes information available about in-service workshops, institutes and educational courses. | 3 2 1 X |
| 3 2 1 X | Initiates and conducts in-service educational programs for teachers concerning media center programs and services. | 3 2 1 X |
| 3 2 1 X | Makes presentations upon invitation in in-service educational programs for teachers. | 3 2 1 X |
| 3 2 1 X | Makes available materials and information on recent developments in the teacher's subject area. | 3 2 1 X |
| 3 2 1 X | Provides formal or informal memos or bulletins concerning items of professional interest (e.g. Have you seen this report, article, etc.?). | 3 2 1 X |

over

SCALE FOR RESPONSE

HOW IMPORTANT OR

UNIMPORTANT FOR

YOUR CENTER TO

PROVIDE?

- 3 - Very important
- 2 - Of some importance
- 1 - Of little or no importance
- X - Don't know

SCALE FOR RESPONSE

HOW OFTEN

DOES YOUR CENTER

PROVIDE?

- 3 - Regularly as the need arises
- 2 - Occasionally
- 1 - Rarely or never
- X - Don't know

- | | | |
|---------|---|---------|
| 3 2 1 X | Provides the <u>Research in Education</u> (ERIC) index and access to the desired microfiche documents to enable teachers to keep abreast of current research and publications. | 3 2 1 X |
| 3 2 1 X | Provides access to educational journal indexes (i.e. <u>Education Index</u> and <u>Current Index to Journals in Education</u> "CIJE") and backfiles of professional journals for teacher use. | 3 2 1 X |
| 3 2 1 X | Makes professional journals and research reports available on request even when these materials are not maintained in the individual school. | 3 2 1 X |
| 3 2 1 X | Provides current books and other materials about professional education. | 3 2 1 X |

Other Comments (optional)

Research Survey Of

Media Services To Teachers

Questionnaire

Dear Faculty member,

The following questionnaire is part of a research study designed to investigate the services offered to the classroom teacher in each department of the school by the media center (the library and audiovisual departments; or the instructional materials center).

You have been selected to represent your department in rating how often your department receives certain services and how satisfactorily these services are provided.

You can be of great help not only in communicating your feelings about the services of your media center, but also to assist in the education of librarians and audiovisual personnel.

The questionnaire should take no more than 20-30 minutes and has been approved by your Superintendent and Principal.

The questionnaire asks for your name and department (the subject area in which you do the majority of your teaching). This is necessary to categorize the data correctly and draw conclusions about services to the various departments across schools but will be kept confidential. Your school can obtain a report of group results by having your Principal request one. (Mention it to him if you are interested.)

Your participation will be sincerely appreciated!



David V. Loertscher
Graduate Library School
Indiana University
Bloomington, Indiana 47401

CONFIDENTIAL

Your name _____

School _____

Your department (the subject area in which you do the majority of your teaching) _____

(If you serve equal time in two or more, choose one department)

Other subjects you teach and the number of classes _____

How many years have you worked in this school? (Do not count this year.)

CONFIDENTIAL

DEFINITIONS

1. Media - Printed and audiovisual forms of communication and their accompanying technology.
2. Media center - The place or places in the school where the full range of media, equipment, and services are available to students and teachers; the library and audiovisual departments; the instructional materials center.
3. Media staff - The total paid personnel of the media center including professionals, technicians, and clericals.

DIRECTIONS

Below, you will find a number of possible services that the media center staff might decide to offer to the teaching staff of the school.

Read each service carefully.

Rate how often the media center provided the service to the teacher(s) in your department during the past school year and this year. Use the scale:

- 3 - Regularly; as the need arises
- 2 - Occasionally
- 1 - Rarely; or never
- X - Don't know

Circle your choice in the column to the left of the service statement.

Next, rate how satisfactorily the service is provided to the teachers in your department when it is offered. Use the scale:

- 3 - Entirely satisfactory
- 2 - Usually satisfactory with occasional problems
- 1 - Unsatisfactory; needs improvement
- X - Doesn't apply; cannot evaluate fairly

Circle your choice in the column to the right of the service statement.

You may wish to use one scale first and then reread the statements to mark the other scale.

When you have finished, please seal your questionnaire in the envelope provided and return it to the researcher.

SAMPLE

② 1 X Visits classrooms to assess the extent to which media center materials and services are contributing to classroom instruction. ③ 2 1 X

(Here the teacher feels that the media staff only visits the classrooms in his or her department occasionally, but when those visits have occurred, they have been profitable and so entirely satisfactory.)

SCALE FOR RESPONSE

HOW OFTEN DOES YOUR
CENTER PROVIDE THIS
SERVICE TO YOUR
DEPARTMENT?

- 3 - Regularly; as the need arises
2 - Occasionally
1 - Rarely; or never
X - Don't know

SCALE FOR RESPONSE

WHEN THIS SERVICE IS PROVIDED
TO YOUR DEPARTMENT, HOW
SATISFACTORILY IS IT GIVEN?

- 3 - Entirely satisfactory
2 - Usually satisfactory with
occasional problems
1 - Unsatisfactory; needs
improvement
X - Doesn't apply; cannot
evaluate fairly

MAKING MEDIA (PRINT AND NONPRINT) AND EQUIPMENT ACCESSIBLE TO TEACHERS

- | | | |
|---------|--|---------|
| 3 2 1 X | Makes equipment readily accessible to teachers including scheduling, delivery and pickup. | 3 2 1 X |
| 3 2 1 X | Provides assistance when equipment emergencies occur. | 3 2 1 X |
| 3 2 1 X | Provides the assistance of trained equipment operators when needed. | 3 2 1 X |
| 3 2 1 X | Establishes loan policies (i.e., checkout procedures, due dates, etc.) sufficiently flexible to meet teachers' needs. | 3 2 1 X |
| 3 2 1 X | Provides reserve and special collections (e.g., in classrooms, subcenters, etc.) which meet teachers' needs. | 3 2 1 X |
| 3 2 1 X | Provides access to the media center before and after regular class hours so that teachers can use facilities and materials | 3 2 1 X |
| 3 2 1 X | Keeps materials and equipment in repair and operating condition. | 3 2 1 X |

ASSISTING TEACHERS TO DEVELOP SKILL IN THE
UTILIZATION OF INSTRUCTIONAL MEDIA AND EQUIPMENT

- | | | |
|---------|---|---------|
| 3 2 1 X | Helps teachers develop skill in locating media center materials (e.g., use of bibliographic tools, card catalog, special reference books, indexing systems, etc.) | 3 2 1 X |
| 3 2 1 X | Assists teachers in developing smooth and effective presentation skills when using audiovisual materials. | 3 2 1 X |

- 3 2 1 X Participates as a consultant to teaching teams about instructional materials. 3 2 1 X

PRODUCING OR ADAPTING INSTRUCTIONAL MATERIALS

- 3 2 1 X Produces audiovisual materials for teachers (slides, transparencies, tapes, graphics, TV programs, etc.). 3 2 1 X
- 3 2 1 X Produces printed materials for teachers (ditto, mimeograph, etc.). 3 2 1 X
- 3 2 1 X Assists teachers in producing their own audiovisual and printed materials by providing instruction and facilities. 3 2 1 X
- 3 2 1 X Adapts commercially produced materials to fit instructional needs (e.g., utilizing parts of filmstrips, films, media kits, etc. in conjunction with other materials). 3 2 1 X

ACQUIRING INSTRUCTIONAL MATERIALS THROUGH PURCHASE, BORROWING, OR RENTAL

- 3 2 1 X Makes arrangements for the production of instructional materials which must be done outside the individual school media center. 3 2 1 X
- 3 2 1 X Furnishes selection aids for locating new materials (e.g., recommended lists, catalogs, etc.). 3 2 1 X
- 3 2 1 X Helps teachers become proficient in selecting and evaluating media (print and nonprint). 3 2 1 X
- 3 2 1 X Obtains commercial products for preview by teachers and media center staff. 3 2 1 X
- 3 2 1 X Provides teachers with reviews of audiovisual materials to assist in the selection process. 3 2 1 X
- 3 2 1 X Provides teachers with critical reviews of books to assist in the selection process. 3 2 1 X
- 3 2 1 X Procures materials (books, filmstrips, etc.) in a reasonable amount of time after recommendation for purchase by teachers. 3 2 1 X

SCALE FOR RESPONSE
HOW OFTEN DOES YOUR
CENTER PROVIDE THIS
SERVICE TO YOUR
DEPARTMENT?

- 3 - Regularly; as the need arises
 2 - Occasionally
 1 - Rarely; or never
 X - Don't know

SCALE FOR RESPONSE
WHEN THIS SERVICE IS PROVIDED
TO YOUR DEPARTMENT, HOW
SATISFACTORILY IS IT GIVEN?

- 3 - Entirely satisfactory
 2 - Usually satisfactory with
 occasional problems
 1 - Unsatisfactory; needs
 improvement
 X - Doesn't apply; cannot
 evaluate fairly

3 2 1 X	Plans and discusses units of instruction with teachers in advance of presentation to determine media needs.	3 2 1 X
3 2 1 X	Participates in formulating specific behavioral objectives when media (print and nonprint) are utilized in instruction.	3 2 1 X
3 2 1 X	Determines the instructional setting (space requirements, furniture and equipment, etc.) that will be needed for media utilization.	3 2 1 X
3 2 1 X	Determines what type of media will increase learning for a particular objective.	3 2 1 X
3 2 1 X	Designs (draws plans for) materials to be produced locally (e.g., slides, tapes, charts, etc.).	3 2 1 X
3 2 1 X	Prepares lists of materials for specific units of instruction.	3 2 1 X
3 2 1 X	Helps plan classroom integration of lecture, discussion, and media to promote increased learning.	3 2 1 X
3 2 1 X	Develops a suggested sequence of instruction to make the best use of media in the classroom.	3 2 1 X
3 2 1 X	Provides enough materials in a variety of formats to allow teachers to meet large group, small group, or individualized instruction needs.	3 2 1 X
3 2 1 X	Assists teachers in planning and preparing individualized instructional units.	3 2 1 X

- | | | |
|---------|--|---------|
| 3 2 1 X | Demonstrates how audiovisual and print materials can be integrated into the instructional process. | 3 2 1 X |
| 3 2 1 X | Demonstrates the versatility and limitations of <u>audio-visual equipment</u> in achieving instructional goals. | 3 2 1 X |
| 3 2 1 X | Orients teachers to the versatility and limitations of <u>instructional materials</u> in achieving instructional goals. | 3 2 1 X |
| 3 2 1 X | Suggests materials of appropriate level and diversity to meet specific teaching needs. | 3 2 1 X |
| 3 2 1 X | Makes media center facilities readily accessible to groups or individual students upon teacher request. | 3 2 1 X |
| 3 2 1 X | Plans with teachers to correct students' problems in finding and utilizing resource materials through classroom or individualized instruction. | 3 2 1 X |

MAKING TEACHERS AWARE OF SERVICES AND MATERIALS

- | | | |
|---------|---|---------|
| 3 2 1 X | Informs teachers about new <u>equipment</u> acquired by the media center. | 3 2 1 X |
| 3 2 1 X | Informs teachers about new <u>materials</u> acquired by the media center. | 3 2 1 X |
| 3 2 1 X | Informs and reminds teachers about services offered by the media center. | 3 2 1 X |
| 3 2 1 X | Orients new teachers to media center services. | 3 2 1 X |
| 3 2 1 X | Provides information about services and materials available to teachers from other libraries and media centers in the area. | 3 2 1 X |

PLANNING, DESIGNING AND ORGANIZING MATERIALS AND INSTRUCTION

- | | | |
|---------|---|---------|
| 3 2 1 X | Participates in curriculum planning as a member of a curriculum committee. | 3 2 1 X |
| 3 2 1 X | Recommends curriculum innovations when participating in curriculum planning and revision. | 3 2 1 X |

SCALE FOR RESPONSE
 HOW OFTEN DOES YOUR
 CENTER PROVIDE THIS
 SERVICE TO YOUR
 DEPARTMENT?

- 3 - Regularly; as the need arises
 2 - Occasionally
 1 - Rarely; or never
 X - Don't know

SCALE FOR RESPONSE
 WHEN THIS SERVICE IS PROVIDED
 TO YOUR DEPARTMENT, HOW
 SATISFACTORILY IS IT GIVEN?

- 3 - Entirely satisfactory
 2 - Usually satisfactory with
 occasional problems
 1 - Unsatisfactory; needs
 improvement
 X - Doesn't apply; cannot
 evaluate fairly

- | | | |
|---------|--|---------|
| 3 2 1 X | Evaluates and selects audiovisual equipment, such as projectors and tape recorders in consultation with teachers. | 3 2 1 X |
| 3 2 1 X | Provides information about community resources for education (human resources, museums, field trips, etc.). | 3 2 1 X |
| 3 2 1 X | Obtains instructional media from other sources upon request of teachers (interlibrary loan, from district center, etc.). | 3 2 1 X |

EVALUATING THE QUALITY OF INSTRUCTIONAL MATERIALS AND THEIR USE

- | | | |
|---------|--|---------|
| 3 2 1 X | Evaluates learning outcomes of audiovisual and print materials after classroom or individual use. | 3 2 1 X |
| 3 2 1 X | Collects teacher evaluations of audiovisual and print materials previously used and makes them available on request. | 3 2 1 X |
| 3 2 1 X | Plans with the teacher to rectify problems with materials (e.g., purchasing more or better materials, modifying existing materials, etc.). | 3 2 1 X |
| 3 2 1 X | Evaluates the results of special media center projects (e.g., reports, listening and viewing projects, class visits to the media center, etc.) to assist teachers in planning future media-oriented assignments. | 3 2 1 X |

- | | | |
|---------|---|---------|
| 3 2 1 X | Informs teachers concerning student skills in locating media center materials (e.g., using periodicals indexes, card catalog, reference skills, etc.). | 3 2 1 X |
| 3 2 1 X | Visits classrooms to assess the extent to which media center materials and services are contributing to classroom instruction. | 3 2 1 X |
| 3 2 1 X | Develops tests or measures to rate the effectiveness of educational media (e.g., Does a locally produced slide set teach what it was designed to teach?). | 3 2 1 X |
| 3 2 1 X | Presents alternative strategies for instruction based on results of the tests developed. | 3 2 1 X |

STIMULATING TEACHERS' GROWTH AS PROFESSIONAL
EDUCATORS AND AS SUBJECT SPECIALISTS

- | | | |
|---------|---|---------|
| 3 2 1 X | Makes information available about in-service workshops, institutes, and educational courses. | 3 2 1 X |
| 3 2 1 X | Initiates and conducts in-service educational programs for teachers concerning media center programs and services. | 3 2 1 X |
| 3 2 1 X | Makes presentations upon invitation in in-service educational programs for teachers. | 3 2 1 X |
| 3 2 1 X | Makes available materials and information on recent developments in the teacher's subject area. | 3 2 1 X |
| 3 2 1 X | Provides formal or informal memos or bulletins concerning items of professional interest (e.g., Have you seen this report, article, etc.?). | 3 2 1 X |

SCALE FOR RESPONSE
 HOW OFTEN DOES YOUR
 CENTER PROVIDE THIS
 SERVICE TO YOUR
 DEPARTMENT?

- 3 - Regularly; as the need arises
 2 - Occasionally
 1 - Rarely; or never
 X - Don't know

SCALE FOR RESPONSE
 WHEN THIS SERVICE IS
 PROVIDED TO YOUR DEPARTMENT,
 HOW SATISFACTORILY IS IT
 GIVEN?

- 3 - Entirely satisfactory
 2 - Usually satisfactory with
 occasional problems
 1 - Unsatisfactory; needs
 improvement
 X - Doesn't apply; cannot
 evaluate fairly

- | | | |
|---------|--|---------|
| 3 2 1 X | Provides the <u>Research in Education</u> (ERIC) index and access to the desired microfiche documents to enable teachers to keep abreast of current research and publications. | 3 2 1 X |
| 3 2 1 X | Provides access to educational journal indexes (i.e., <u>Education Index</u> and <u>Current Index to Journals in Education</u> "CIJE") and backfiles of professional journals for teacher use. | 3 2 1 X |
| 3 2 1 X | Makes professional journals and research reports available on request even when these materials are not maintained in the individual school. | 3 2 1 X |
| 3 2 1 X | Provides current books and other materials about professional education. | 3 2 1 X |

OTHER COMMENTS (Optional)

Appendix B

Services to Teachers in Indiana Senior High Schools:
Mean Responses and Rankings by all Media Staffs
and Teachers Arranged by Item Number

SERVICES TO TEACHERS IN INDIANA SENIOR HIGH SCHOOLS: MEAN RESPONSES AND RANKINGS BY ALL MEDIA STAFFS AND TEACHERS ARRANGED BY ITEM NUMBER

Service number and description	Importance of services as perceived by media staffs in 40 schools		Frequency of services given (received)						Satisfaction rating of the teachers in 9 schools	
			By the media staffs in 40 schools		By the media staffs in 9 schools		By the teachers in 9 schools			
	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank
MAKING MEDIA (PRINT AND NONPRINT) AND EQUIPMENT ACCESSIBLE TO TEACHERS										
1. Makes equipment readily accessible to teachers including scheduling, delivery and pickup.	2.97	2	2.97	2	3.00	2	2.84	1	2.47	6
2. Provides assistance when equipment emergencies occur.	2.96	3	2.38	4	2.92	4	2.57	4	2.38	10
3. Provides the assistance of trained equipment operators when needed.	2.74	15	2.53	15	2.36	18	2.13	17	2.20	19
4. Establishes loan policies (i.e., checkout procedures, due dates, etc.) sufficiently flexible to meet teachers' needs.	2.95	4	2.97	1	3.00	1	2.77	2	2.56	2
5. Provides reserve and special collections (e.g., in classrooms, subcenters, etc.) which meet teachers' needs.	2.71	16	2.64	11	2.73	11	2.35	12	2.33	14
6. Provides access to the media center before and after regular class hours so that teachers can use facilities and materials.	2.78	13	2.82	7	2.88	7	2.27	15	2.49	4
7. Keeps materials and equipment in repair and operating condition.	2.88	8	2.85	6	2.92	3	2.37	10	2.19	22

SERVICES TO TEACHERS IN INDIANA SENIOR HIGH SCHOOLS: MEAN RESPONSES AND RANKINGS BY ALL MEDIA STAFFS AND TEACHERS ARRANGED BY ITEM NUMBER

Service number and description	Importance of services as perceived by media staffs in 40 schools		Frequency of services given (received)						Satisfaction rating of the teachers in 9 schools	
			By the media staffs in 40 schools		By the media staffs in 9 schools		By the teachers in 9 schools			
	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank
ASSISTING TEACHERS TO DEVELOP SKILL IN THE UTILIZATION OF INSTRUCTIONAL MEDIA AND EQUIPMENT										
8. Helps teachers develop skill in locating media center materials (e.g., use of bibliographic tools, card catalog, special reference books, indexing systems, etc.).	2.81	11	2.63	12	2.77	10	2.39	9	2.47	7
9. Assists teachers in developing smooth an effective presentation skills when using audiovisual materials.	2.48	41	2.07	36	2.10	35	1.79	38	2.07	32
10. Demonstrates how audiovisual and print materials can be integrated into the instructional process.	2.45	44	1.98	42	2.00	40	1.28	60	1.87	52
11. Demonstrates the versatility and limitations of audiovisual equipment in achieving instructional goals.	2.53	31	2.03	40	2.15	32	1.33	57	1.85	53
12. Orients teachers to the versatility and limitations of instructional materials in achieving instructional goals.	2.51	34	2.04	39	2.09	37	1.57	50	1.82	54
13. Suggests materials of appropriate level and diversity to meet specific teaching needs.	2.75	14	2.51	16	2.42	17	2.08	20	2.02	38

SERVICES TO TEACHERS IN INDIANA SENIOR HIGH SCHOOLS: MEAN RESPONSES AND RANKINGS BY ALL MEDIA STAFFS AND TEACHERS ARRANGED BY ITEM NUMBER

Service number and description	Importance of services as perceived by media staffs in 40 schools		Frequency of services given (received)						Satisfaction rating of the teachers in 9 schools	
			By the media staffs in 40 schools		By the media staffs in 9 schools		By the teachers in 9 schools			
	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank
14. Makes media center facilities readily accessible to groups or individual students upon teacher request.	2.92	7	2.88	5	2.88	6	2.61	3	2.47	5
15. Plans with teachers to correct students' problems in finding and utilizing resource materials through classroom or individualized instruction.	2.61	25	2.30	24	2.16	31	1.88	28	2.07	31
<u>MAKING TEACHERS AWARE OF SERVICES AND MATERIALS</u>										
16. Informs teachers about new equipment acquired by the media center.	2.92	5	2.82	8	2.80	9	2.45	7	2.46	8
17. Informs teachers about new materials acquired by the media center.	2.98	1	2.88	3	2.88	5	2.55	5	2.57	1
18. Informs and reminds teachers about services offered by the media center.	2.82	10	2.64	10	2.58	13	2.21	16	2.33	13
19. Orients new teachers to media center services.	2.92	6	2.58	14	2.50	14	1.95	24	2.33	15
20. Provides information about services and materials available to teachers from other libraries and media centers in the area.	2.36	52	2.12	34	1.96	46	1.72	41	1.93	49

SERVICES TO TEACHERS IN INDIANA SENIOR HIGH SCHOOLS: MEAN RESPONSES AND RANKINGS BY ALL
MEDIA STAFFS AND TEACHERS ARRANGED BY ITEM NUMBER

Service number and description	Importance of services as perceived by media staffs in 40 schools		Frequency of services given (received)						Satisfaction rating of the teachers in 9 schools	
			By the media staffs in 40 schools		By the media staffs in 9 schools		By the teachers in 9 schools			
	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank
<u>PLANNING, DESIGNING AND ORGANIZING MATERIALS AND INSTRUCTION</u>										
21. Participates in curriculum planning as a member of a curriculum committee.	2.59	27	1.62	52	1.68	52	2.08	21	2.04	35
22. Recommends curriculum innovations when participating in curriculum planning and revision.	2.50	36	1.56	53	1.56	55	1.79	37	1.97	44
23. Plans and discusses units of instruction with teachers in advance of presentation to determine media needs.	2.59	26	1.94	43	1.69	50	1.37	55	1.79	55
24. Participates in formulating specific behavioral objectives when media (print and nonprint) are utilized in instruction.	2.16	59	1.49	57	1.45	60	1.35	56	1.63	60
25. Determines the instructional setting (space requirements, furniture, and equipment, etc.) that will be needed for media utilization.	2.50	35	2.08	35	2.04	38	1.82	36	2.12	28
26. Determines what type of media will increase learning for a particular objective.	2.38	48	1.77	48	1.78	49	1.65	45	1.87	51

SERVICES TO TEACHERS IN INDIANA SENIOR HIGH SCHOOLS: MEAN RESPONSES AND RANKINGS BY ALL MEDIA STAFFS AND TEACHERS ARRANGED BY ITEM NUMBER

Service number and description	Importance of services as perceived by media staffs in 40 schools		Frequency of services given (received)						Satisfaction rating of the teachers in 9 schools	
			By the media staffs in 40 schools		By the media staffs in 9 schools		By the teachers in 9 schools			
	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank
27. Designs (draws plans for) materials to be produced locally (e.g., slides, tapes, charts, etc.).	2.63	22	1.76	49	1.84	44	1.67	44	1.88	50
28. Prepares lists of materials for specific units of instruction.	2.55	30	2.18	32	2.09	36	1.83	35	1.96	46
29. Helps plan classroom integration of lecture, discussion, and media to promote increased learning.	2.17	58	1.38	58	1.38	61	1.32	58	1.65	57
30. Develops a suggested sequence of instruction to make the best use of media in the classroom.	2.15	60	1.34	59	1.35	62	1.20	61	1.50	62
31. Provides enough materials in a variety of formats to allow teachers to meet large group, small group or individualized instruction needs.	2.67	19	2.26	27	2.29	21	1.86	31	2.05	34
32. Assists teachers in planning and preparing individualized instructional units.	2.38	47	1.53	51	1.68	51	1.49	52	1.93	48
33. Participates as a consultant to teaching teams about instructional materials.	2.49	40	1.74	50	1.89	42	1.84	33	1.98	41

SERVICES TO TEACHERS IN INDIANA SENIOR HIGH SCHOOLS: MEAN RESPONSES AND RANKINGS BY ALL MEDIA STAFFS AND TEACHERS ARRANGED BY ITEM NUMBER

Service number and description	Importance of services as perceived by media staffs in 40 schools		Frequency of services given (received)						Satisfaction rating of the teachers in 9 schools	
			By the media staffs in 40 schools		By the media staffs in 9 schools		By the teachers in 9 schools			
	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank
<u>PRODUCING OR ADAPTING INSTRUCTIONAL MATERIALS</u>										
34. Produces audiovisual materials for teachers (slides, transparencies, tapes, graphics, TV programs, etc.).	2.70	17	2.32	22	2.29	20	1.90	27	2.17	24
35. Produces printed materials for teachers (ditto, mimeograph, etc.).	2.53	32	2.24	29	2.27	23	1.63	48	1.98	43
36. Assists teachers in producing their own audiovisual and printed materials by providing instruction and facilities.	2.62	23	2.28	25	2.24	25	2.04	22	2.19	21
37. Adapts commercially produced materials to fit instructional needs (e.g., utilizing parts of filmstrips, films, media kits, etc. in conjunction with other materials).	2.35	53	2.01	41	1.85	43	1.83	34	2.13	27
<u>ACQUIRING INSTRUCTIONAL MATERIALS THROUGH PURCHASE, BORROWING, OR RENTAL</u>										
38. Makes arrangements for the production of instructional materials which must be done outside the individual school media center.	2.37	50	1.88	45	2.00	39	1.70	42	2.03	37

SERVICES TO TEACHERS IN INDIANA SENIOR HIGH SCHOOLS: MEAN RESPONSES AND RANKINGS BY ALL MEDIA STAFFS AND TEACHERS ARRANGED BY ITEM NUMBER

Service number and description	Importance of services as perceived by media staffs in 40 schools		Frequency of services given (received)						Satisfaction rating of the teachers in 9 schools	
	Mean	Rank	By the media staffs in 40 schools		By the media staffs in 9 schools		By the teachers in 9 schools		Mean	Rank
			Mean	Rank	Mean	Rank	Mean	Rank		
39. Furnishes selection aids for locating new materials (e.g., recommended lists, catalogs, etc.).	2.86	9	2.70	9	2.72	12	2.53	6	2.49	3
40. Helps teachers become proficient in selecting and evaluating media (print and nonprint).	2.58	28	2.19	30	2.21	26	1.54	51	2.15	26
41. Obtains commercial products for preview by teachers and media center staff.	2.65	21	2.36	19	2.43	16	2.42	8	2.16	25
42. Provides teachers with reviews of audiovisual materials to assist in the selection process.	2.57	29	2.28	26	2.17	30	1.87	29	2.30	17
43. Provides teachers with critical reviews of books to assist in the selection process.	2.51	33	2.25	28	2.13	33	1.58	45	1.93	47
44. Procures materials (books, filmstrips, etc.) in a reasonable amount of time after recommendation for purchase by teachers.	2.81	12	2.61	13	2.80	8	2.37	11	2.35	11
45. Evaluates and selects audiovisual equipment such as projectors and tape recorders in consultation with teachers.	2.46	43	2.18	31	2.28	22	1.85	32	2.08	30

SERVICES TO TEACHERS IN INDIANA SENIOR HIGH SCHOOLS: MEAN RESPONSES AND RANKINGS BY ALL MEDIA STAFFS AND TEACHERS ARRANGED BY ITEM NUMBER

Service number and description	Importance of services as perceived by media staffs in 40 schools		Frequency of services given (received)						Satisfaction rating of the teachers in 9 schools	
			By the media staffs in 40 schools		By the media staffs in 9 schools		By the teachers in 9 schools			
	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank
46. Provides information about community resources for education (human resources, museum, field trips, etc.).	2.19	57	1.54	54	1.47	58	1.40	54	1.60	61
47. Obtains instructional media from other sources upon request of teachers (interlibrary loan, from district center, etc.).	2.61	24	2.42	18	2.24	24	2.33	13	2.35	12
<u>EVALUATING THE QUALITY OF INSTRUCTIONAL MATERIALS AND THEIR USE</u>										
48. Evaluates learning outcomes of audio-visual and print materials after classroom or individual use.	2.26	54	1.54	55	1.50	57	1.30	59	1.63	59
49. Collects teacher evaluations of audio-visual and print materials previously used and makes them available on request.	2.21	55	1.54	56	1.59	53	1.43	53	1.65	56
50. Plans with the teacher to rectify problems with materials (e.g., purchasing more or better materials, modifying existing materials, etc.).	2.19	56	2.31	23	2.18	28	1.96	23	2.00	39
51. Evaluates the results of special media center projects (e.g., reports, listening and viewing projects, class visits to the media center, etc.) to assist teachers in planning future media-oriented assignments.	2.42	45	1.88	46	1.85	41	1.64	46	1.96	45

SERVICES TO TEACHERS IN INDIANA SENIOR HIGH SCHOOLS: MEAN RESPONSES AND RANKINGS BY ALL MEDIA STAFFS AND TEACHERS ARRANGED BY ITEM NUMBER

Service number and description	Importance of services as perceived by media staffs in 40 schools		Frequency of services given (received)						Satisfaction rating of the teachers in 9 schools	
			By the media staffs in 40 schools		By the media staffs in 9 schools		By the teachers in 9 schools			
	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank
52. Informs teachers concerning student skills in locating media center materials (e.g., using periodical indexes, card catalog, reference skills, etc.).	2.50	38	2.34	21	2.18	27	1.95	25	2.24	18
53. Visits classrooms to assess the extent to which media center materials and services are contributing to classroom instruction.	2.10	61	1.33	60	1.57	54	1.17	62	1.64	58
54. Develops tests or measures to rate the effectiveness of educational media (e.g., Does a locally produced slide set teach what it was designed to teach?).	1.97	64	1.17	64	1.21	63	1.14	63	1.32	64
55. Presents alternative strategies for instruction based on results of the tests developed.	2.39	46	1.21	62	1.47	59	1.68	43	1.98	42
<u>STIMULATING TEACHERS' GROWTH AS PROFESSIONAL EDUCATORS AND AS SUBJECT SPECIALISTS</u>										
56. Makes information available about inservice workshops, institutes and educational courses.	2.02	62	1.21	61	1.56	56	1.11	64	1.37	63
57. Initiates and conducts in-service educational programs for teachers concerning media center programs and services.	2.48	42	1.86	47	1.91	47	1.72	40	1.98	40

SERVICES TO TEACHERS IN INDIANA SENIOR HIGH SCHOOLS: MEAN RESPONSES AND RANKINGS BY ALL MEDIA STAFFS AND TEACHERS ARRANGED BY ITEM NUMBER

Service number and description	Importance of services as perceived by media staffs in 40 schools		Frequency of services given (received)						Satisfaction rating of the teachers in 9 schools	
			By the media staffs in 40 schools		By the media staffs in 9 schools		By the teachers in 9 schools			
	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank
58. Makes presentations upon invitation in in-service educational programs for teachers.	2.49	39	2.05	38	2.18	29	2.30	14	2.44	9
59. Makes available materials and information on recent developments in the teacher's subject area.	2.67	20	2.34	20	2.35	19	1.95	26	2.18	23
60. Provides formal or informal memos or bulletins concerning items of professional interest (e.g., Have you seen this report, article, article, etc.?).	2.50	37	2.14	33	2.12	34	1.86	30	2.10	29
61. Provides access to the <u>Research in Education</u> (ERIC) index and access to the desired microfiche documents to enable teachers to keep abreast of current research in education.	2.01	63	1.21	63	1.13	64	1.63	47	2.04	36
62. Provides access to educational journal indexes (i.e., <u>Education Index</u> and <u>Current Index to Journals in Education</u> "CIJE") and backfiles of professional journals for teacher use.	2.38	49	2.06	37	1.79	48	2.12	19	2.31	16
63. Makes professional journals and research reports available on request even when these materials are not maintained in the individual school.	2.37	51	1.94	44	1.83	45	1.76	39	2.06	33
64. Provides current books and other materials about professional education.	2.69	18	2.49	17	2.48	15	2.13	18	2.20	20

VITA

David V. Loertscher was born August 22, 1940, in Park City, Utah. He was graduated in 1958 from Park City High School. He attended Brigham Young University from 1958-1960, served as an L.D.S. missionary from 1960-1962, and completed his Bachelor of Science degree from the University of Utah in 1964 majoring in history and minoring in library science. He served as central materials librarian at Southside Elementary School in Elko, Nevada from 1964-1967.

In the summer of 1967, he attended an N.D.E.A. institute for school librarians at the University of Washington and remained during the next academic year to complete a Master of Librarianship degree in 1968. During his stay in Seattle, he was an audiovisual cataloger for the Bellevue Public Schools and a reference pre-professional in the Seattle Public Library. After receiving his Master's degree, Mr. Loertscher was media specialist at Skyline Senior High School in Idaho Falls, Idaho for two years.

In 1970, Mr. Loertscher was awarded a U.S. Office of Education fellowship to pursue doctoral studies in the Graduate Library School at Indiana University. His major area of concentration was school media centers and his minor field was higher education.

Upon completion of the doctorate in 1973, Mr. Loertscher accepted a position as Assistant Professor of Media Sciences at Purdue University.