

1971

## A Flexible plan for developing library research techniques needed by students in junior high schools

Ruth P. Harbour  
*University of Northern Iowa*

*Let us know how access to this document benefits you*

Copyright ©1971 Ruth P. Harbour

Follow this and additional works at: <https://scholarworks.uni.edu/grp>



Part of the [Information Literacy Commons](#)

---

### Recommended Citation

Harbour, Ruth P., "A Flexible plan for developing library research techniques needed by students in junior high schools" (1971). *Graduate Research Papers*. 2972.

<https://scholarworks.uni.edu/grp/2972>

This Open Access Graduate Research Paper is brought to you for free and open access by the Student Work at UNI ScholarWorks. It has been accepted for inclusion in Graduate Research Papers by an authorized administrator of UNI ScholarWorks. For more information, please contact [scholarworks@uni.edu](mailto:scholarworks@uni.edu).

**Offensive Materials Statement:** Materials located in UNI ScholarWorks come from a broad range of sources and time periods. Some of these materials may contain offensive stereotypes, ideas, visuals, or language.

---

## A Flexible plan for developing library research techniques needed by students in junior high schools

### Find Additional Related Research in UNI ScholarWorks

To find related research in UNI ScholarWorks, go to the collection of [School Library Studies Graduate Research Papers](#) written by students in the [Division of School Library Studies](#), Department of Curriculum and Instruction, College of Education, at the University of Northern Iowa.

### Abstract

What instruction in the use of library research techniques is needed for junior high school students to succeed in classroom assignments involving investigative activities, and how can this instruction be planned to provide more opportunities for flexibility in group and individualized situations?

A FLEXIBLE PLAN FOR DEVELOPING  
LIBRARY RESEARCH TECHNIQUES  
NEEDED BY STUDENTS IN  
JUNIOR HIGH SCHOOLS

---

A Paper  
Presented to  
the Faculty of the Graduate School  
University of Northern Iowa

---

in Partial Fulfillment  
of the Requirements for the Degree  
Master of Arts

---

by  
Ruth P. Harbour  
January 1971

## TABLE OF CONTENTS

	Page
APPROVAL SHEET . . . . .	iv
ACKNOWLEDGMENTS . . . . .	v
LIST OF TABLES . . . . .	vi
Chapter	
I. INTRODUCTION. . . . .	1
Statement of the Problem. . . . .	3
Assumptions underlying the Hypotheses . . . . .	3
Limitations of the Investigation. . . . .	4
Hypotheses and Deduced Consequences . . . . .	5
Definition of Terms . . . . .	7
Design of the Investigation . . . . .	8
II. REVIEW OF LITERATURE. . . . .	12
Related Studies . . . . .	12
Need for Instruction. . . . .	15
Elements of Effective Instruction . . . . .	19
Suggested Methods for Teaching Techniques . . . . .	23
III. ANALYSIS OF TEACHERS' ASSIGNMENTS THE KEY TO THE LIBRARY PROGRAM. . . . .	27
IV. DEVELOPING A FLEXIBLE PLAN FOR TEACHING LIBRARY RESEARCH TECHNIQUES. . . . .	40
Basic Considerations . . . . .	40
Selection of Techniques. . . . .	41
Grouping for Instruction . . . . .	43

	Page
Advantages of the Flexible Plan. . . . .	.45
BIBLIOGRAPHY . . . . .	.47
APPENDIX . . . . .	.52

Accepted 1-15-1971 - C. L. Greve, Head, Library Science

## ACKNOWLEDGMENTS

I should like to express my sincere appreciation to all the cooperating teachers and librarians of the Cedar Rapids Junior High Schools; to Mr. Robert Foley, Director of Media and Materials, for his help in extending this investigation to all the libraries of the junior high schools; and to Dr. George Ross, Director of Research, whose cooperation made the survey of Cedar Rapids Junior High Schools possible.

Ruth Harbour  
January, 1971

## LIST OF TABLES

Table	Page
1. Number of Teacher Respondents by Subject. . . .	27
2. Library Tools Needed for Completion of Assignments and Degree of Use by Grade and Subject . . . . .	29
3. Library Tools Needed for Completion of Assignments and Degree of Use by Subject Areas . . . . .	30
4. Typical Assignments Ranked According to Degree of Use by Teachers . . . . .	32
5. Teacher Acceptance of Ways to Provide Media Instruction in the Junior High School . . . . .	34

## Chapter 1

### INTRODUCTION

The task of instructing students in the use of the school library was simple in village schools where the library collection consisted of a set of encyclopedias, an unabridged dictionary, some unbound National Geographics, and a few hundred uncatalogued books that may have been odd lots acquired from itinerant salesmen. Often the "library" was a corner of the study hall, while a teacher whose day was fully scheduled was called the "librarian." Some interest in books and reports or in "looking things up" might be enough to qualify one for this title. Instruction in library use was simple in many schools because educational programs placed a high premium on the single textbook and mastery of its contents, and the considerable costs involved in hiring a librarian and providing the facilities and materials were often considered frills.

In the modern school, however, the library and the school media program have been placed at the hub of the learning process. A flood of print and non-print materials has become available, and with the help of federal funding programs, extensive library collections have been built in schools and area resource centers. Technological developments have made individualization of instruction feasible, and educators have recognized some of the contributions



that trained media specialists can make to the learning process. A primary element of the media program, according to the 1969 Standards for School Media Programs, is instruction to improve learning through the use of printed and audio-visual resources.<sup>1</sup> To accomplish this,

. . . the professional media staff must assume responsibility for providing instruction in the use of the media center and its resources that is correlated with the curriculum and that is educationally sound.<sup>2</sup>

A major obstacle to planning effective instruction has been the lack of agreement among librarians and teachers as to the constituents that should make up the curriculum of library instruction. As Rossoff points out, formal units of library instruction are almost meaningless unless they grow out of an immediate situation in the classroom.<sup>3</sup> If the librarian, who traditionally has been delegated responsibility for selecting or developing appropriate units to provide instruction in the techniques of research, is to develop truly functional instruction, he must seek situations that occur as a part of classroom activities; analyze the kinds of library research techniques which would facilitate, enrich, or complement the student's capabilities of achieving success, and develop appropriate instruction for build-

---

<sup>1</sup>American Library Association and National Education Association, Standards for School Media Programs, (Chicago: A.L.A. and N.E.A., 1969), p. 4.

<sup>2</sup>Ibid., p. 8.

<sup>3</sup>Martin Rossoff, The Library in High School Teaching (New York: H. W. Wilson, 1961), pp. 80-82.

ing the needed skills.<sup>4</sup>

Before a librarian can design functional instruction, he must obtain evidence of the needs of students, the opinions of teachers and other librarians concerning the library research techniques needed to complete those assignments that require use of the library, and the relative effectiveness of various kinds of instructional methods. This study will seek to obtain evidence through a review of literature dealing with instruction in the use of libraries and through a survey of teachers' opinions and practices in regard to the use of the school library.

#### Statement of the Problem

What instruction in the use of library research techniques is needed for junior high school students to succeed in classroom assignments involving investigative activities, and how can this instruction be planned to provide more opportunities for flexibility in group and individualized situations?

#### Assumptions underlying the Hypotheses

Most teachers make use of problem-solving assignments which require the student to use independent judgment and skill to analyze problems, seek solutions, and present a solution together with some explanation of the process he has followed. Many other assignments are made which require the student to use basic library tools.

---

<sup>4</sup>Lucile F. Fargo, The Library in the School, 4th ed. (Chicago: A.L.A., 1947), pp. 84-85.

Students need varying amounts and kinds of instruction in the use of library search techniques. To provide for students' needs, a planned continuum of instruction is preferable to an unplanned or incidental learning program based on the individual student's requests for help in the library.

The junior high school should have a library meeting at least the minimum standards for state approval. This includes basic print and non-print materials, adequate equipment and space, and a qualified professional librarian working with teachers, classes, and individual students.

A sampling of teachers' assignments in Cedar Rapids schools will be representative of assignments made in the same subject areas in other junior high schools; the Cedar Rapids librarians' recommendations for sources to complete assignments will be representative of those made by other school librarians; a program based on Cedar Rapids teachers' assignments and recommendations might have implications for other junior high schools with similar student populations, curricula, and library facilities.

#### Limitations of the Investigation

The investigation will include all secondary classroom teachers and school librarians employed in the six junior high schools in the Cedar Rapids, Iowa, Community School District for the first semester of the 1970-1971 school year. It will not include paraprofessional, elementary, or special education personnel that may be assigned to the six schools.

Each of the six schools has a fairly large and adequate print and non-print collection housed in a central library administered by a school librarian. There is no uniform program of instruction in the use of library research techniques for the school district. This investigation will not attempt to measure or evaluate the instruction in the use of the library in the different schools.

To comply with Cedar Rapids policy, the questionnaire and procedures have been submitted for approval to the Cedar Rapids Director of Research, Dr. George Ross, and the Director of Media, Mr. Robert Foley.

#### Hypotheses and Deduced Consequences

Can instruction in the use of the library be improved by (1) determining the kinds of investigative assignments made by classroom teachers, (2) analyzing the library research techniques needed by students to attain success in these assignments, and (3) developing a systematic plan whereby these techniques are presented, applied, and evaluated in natural learning situations that allow for different groupings and for individualized instruction?

A survey would show that most classroom teachers and school librarians consider planned instruction essential to improving junior high school students' use of library research techniques. Most teachers and librarians would find incidental instruction given only as the student needs it in the library unacceptable. A cooperative sharing of responsibility for instruction rather than responsibility for a single person--either the classroom teacher or the

librarian--would be acceptable to most educators.

An analysis of assignments given by teachers will reflect varying degrees of use of the library. The differences may be attributable to the kinds of physical skills, manipulative skills, investigative skills, or talents that subjects develop. Cooperative planning between teachers and librarian may be needed to find relationships between the assignments made and the assignments that could be made to utilize investigative activities. Some teachers may be unaware of the library research techniques which completion of their assignments demands; this lack of awareness and the failure to provide instruction in techniques may contribute to a student's inability to complete assignments satisfactorily. Determination of assignments and analysis of the kinds of instruction needed should provide the basis of any program for improved instruction.

Because of individual differences and needs, a plan for instructional improvement must provide practical and educationally sound ways of teaching all students the basic skills involved in lifelong use of libraries and still permit individualized instruction for those whose abilities or interests indicate this need.

The pattern of response from classroom teachers of all subject areas and grade levels should suggest both the content and grade placement of content in the program of instruction. Review and reinforcement for most-used skills should be built into the program. To eliminate needless repetition, a series of pretests and post-tests should be

considered that would provide evidence both of mastery and the need for further instruction.

The opinions and recommendations of authorities as stated in published form can provide useful suggestions that would enable a school librarian to develop a systematic plan of instruction satisfactory for his individual school when combined with the information gathered from the school itself concerning assignments, curriculum, and preferred methods and groupings for instruction.

### Definition of Terms

Library research techniques - those skills concerned with the use of library tools or resources to locate information for the solution of problems growing out of classroom assignments.

Junior high school - a secondary school which places grades seven, eight, and nine in a separate instructional unit.

School librarian - an individual with broad professional preparation in library science and education who is certificated as a full-time school librarian.

Investigative assignment - any assignment which, for successful completion, requires a student to use library research techniques related to gathering, organizing, and reporting information.

Individualized instruction - instruction planned for teaching on a one-to-one basis, often using programmed or audio-visual materials, with or without the presence of a teacher.

Large group instruction - instruction presented to a class or several combined classes, often through the use of projected media, lecture, or a combination. This instruction might be carried on in a classroom, an auditorium, or a library.

### DESIGN OF THE INVESTIGATION

Before a librarian can plan for functional instruction, he should know the kinds of assignments teachers make, the techniques students will need to use to complete these assignments, something about methods and practices that other librarians have found useful, and the methods which teachers in the school itself will accept favorably. A school survey questionnaire is the method chosen for obtaining the data gathered for this study. Prior to developing the questionnaire, a review of curriculum guides used in five districts was made. These included Davenport, Iowa; Detroit, Michigan; El Paso, Texas; Elk Grove Township, Illinois; and Orange Unified School District, Orange, California. Other guides to instruction reviewed included the Beck and Pace series, Guidebooks for Teaching Library Skills, Volumes 1-4; the Scott Foresman language arts textbook series Guide to Modern English, Books 7, 8, and 9; and sections dealing with library instruction in books by Elsa Berner, Ruth Ann Davies, Jeanne Lowrie, and Martin Rossoff. These sources were useful as guides to selecting techniques that should be included in the questionnaire. Because these sources unanimously agreed that instruction in the use of the card catalog, the Dewey Decimal System, and general

encyclopedias is basic to all instruction, it was decided not to include items for these resources.

To obtain the opinions of teachers and librarians, a sampling was made by mailing a questionnaire to all the 279 junior high school teachers in the six Cedar Rapids, Iowa, junior high schools. All subject areas were included: art, foreign language, home and family, industrial arts, language arts and speech, mathematics, music, physical education and health, science, and social studies.

The questionnaire asked teachers to indicate the degree of use made of each of 19 assignments that require students to use one or more library search techniques for successful completion. Respondents were required to check the degree of use with the terms "Never," "Occasionally," "Every week," or "Daily" in a closed form. They were given an opportunity to list other assignments used in an open-ended Item 20.

Teachers were asked to indicate their degree of acceptance of five items relating to the need for instruction in the use of library research techniques, who should be responsible for instruction, and the kinds of groupings and situations preferred. An open-ended item provided an opportunity to list other suggestions concerning the provisions for instruction.

A pretest questionnaire was submitted to a representative random sub-sample from the six schools. Minor changes in format were made. Since the pretest did not reveal misunderstandings or difficulties, the questionnaire was then



sent to all included in the sampling. The sub-sample to whom the pretest was presented directly was also asked to make comments as to the extent the test items adequately included the kinds of library research techniques needed by junior high school students. Comments were favorable.

A letter of explanation was enclosed with the questionnaire, clarifying the method of return of the questionnaire, clarifying the method of return of the questionnaire, and suggesting the possibilities for developing a curriculum writing project based on this district-wide cooperative survey. The questionnaire and letter were sent through school mail November 4, having been approved by the District Director of Research and the District Director of Media. The project was approved by all school principals.

The questionnaire asked respondents to identify the subjects and grades they taught. A label bearing the name of teacher and school was affixed to each questionnaire; it might be removed if the teacher preferred. Ten days later, 144 teachers had responded. A follow-up letter was mailed November 16 to those who had not responded or who had not identified themselves. One week later, the six school librarians made personal follow-up contacts with the teachers who had not responded in their schools, in an effort to attain 70% response.

The same questionnaire was submitted to the six junior high school librarians, who were asked to indicate (1) the degree of use of the assignments they observed in their libraries, (2) the degree of acceptance for the six

items concerned with presenting instruction, and (3) the library sources they would use to guide students completing the assignments.

Data obtained from 184 teacher respondents was tabulated by computer. Totals and percentages were compiled by categories: (1) the ten subject areas represented by the respondents, (2) the grade level or combination of levels taught by the respondents, and (3) the composite for all categories.

Relationships between Items 1-19 measuring use of assignments were shown by placing the items in rank order according to the degree of use.

Relationships between the six questionnaire items sampling acceptance of the need for instruction, who should present instruction, and the kinds of grouping preferred were shown by compiling totals and percentages for comparison.

Reference sources librarians recommended to complete assignments were listed for each item.

Together with the survey of literature, the data obtained through the survey of Cedar Rapids teachers and librarians was evaluated to form the basis of recommendations for a flexible program of instruction in library research techniques for junior high school students in the Cedar Rapids, Iowa, Community School District.

## Chapter 2

### REVIEW OF LITERATURE

#### Related Studies

Many teachers and librarians have emphasized the need for improved instruction in the use of library resources, but few studies have been published that bring together the kinds of assignments teachers in all subject areas make or that relate these to a flexible plan of instruction. One well-organized program is described by Elsa Berner in her book Integrating Library Instruction at Plainview Junior School, based on her practical experience as a school librarian working with teachers. Written in 1958, this program is closely structured and very detailed. Although there is a wealth of suggestions for the curriculum team writing a school program in library instruction, the prescribed time allotments and units lack the flexibility required in schools of the 1970's. Another useful contribution to the field of library instruction because it proposes practical ways to provide instruction in many subject areas with considerable flexibility is Martin Rossoff's The Library in High School Teaching.

Because she realized the importance of teaching what students really need to know, Ada P. Kane determined what 25 colleges expected freshmen to know before planning a high school program. She then designed a test on library tools

that would prepare students for the colleges' requirements and administered this test to junior and senior high school students. Students in the 10th, 12th, and 7th grades performed best in the test. Mrs. Kane's experiment indicated that students in various grades can profit from library instruction, and it provides a reminder that the techniques taught should be based on a need of the student.<sup>5</sup>

Public librarians have contributed research studies that have implications for school programs. Margery C. Petty and Lucille A. Reid, conducting a study in 1963, made personal interviews in four public libraries where records were kept determining reasons why students use public libraries. Their investigation showed that 48.88% were using reference materials; 28.7%, assigned work checkout, and another 5.9%, doing homework. Many of the students expressed a preference for the public library reference collections, but 59% had failed to check their school library first. The investigators concluded that school librarians must find new ways of informing teachers and students of materials they have available if maximum use of the school library is to be realized. Their findings point out the high priority given to the use of references in school assignments and the need for instruction the school must try to satisfy.<sup>6</sup>

---

<sup>5</sup>Ada P. Kane, "Test on Library Instruction," Wilson Library Bulletin, Vol. 25 (January, 1951), p. 393.

<sup>6</sup>Margery C. Petty and Lucille A. Reid, "Student Use of Public Libraries," Illinois Libraries, Vol. 45 (April, 1963), pp. 211-216.

Lack of agreement on the form and content of instruction has resulted in haphazard library programs that are never evaluated. In an effort to analyze the value of systematic instruction in the use of reference works, a large San Francisco high school conducted an experiment placing four matched tenth grade English classes on different library programs. The first group engaged in systematic work aimed at acquainting students with a variety of references for one full period a week without writing special reports. The second group made reports and completed assignments. The two control groups used the library only occasionally. While the experimental groups made statistically significant gains over their initial scores in total language skills and spelling, the control groups failed to make significant gains.<sup>7</sup> One conclusion that may be drawn is that systematic instruction integrated with a subject area assignment creates a better learning situation, one with measurable results. If a similar experiment were to use the scores students achieved in the study skills section of the Iowa Tests of Educational Development prior to and following a year of planned instruction, it might be possible to evaluate the effectiveness of different combinations of content and groupings. The need for additional research is clearly evident. Few reports of studies involving both teachers and librarians have been published recently.

---

<sup>7</sup>Dorothy M. H. Hastings and Daniel Turner, Journal of Experimental Education, Vol. 31 (Summer, 1963), pp. 401-405.

## Need for Instruction

During the past 20 years a tremendous explosion of knowledge has occurred. Broader funding through government programs for schools and libraries has made dissemination greater, while new conveyors have increased both the quantity and quality of media available to classrooms. At the same time, much of the body of knowledge formerly taught in college and high school has been pushed downward, so that the junior high school library has become increasingly important as the place where students learn to use audiovisual media and practice using all but the most advanced library research techniques. Louis Coburn emphasizes the important role scientific research plays in planning for instruction, stating, "Library instruction involves the teaching of skills in all subject matter and with no subject matter peculiarly its own. . . . there is a need for further scientific evidence of the relative value of different techniques in library instruction."<sup>8</sup> This implies comparative testing of new methods using technology, new curricular patterns, and grouping practices, rather than using them indiscriminately, and testing the traditional methods and content as well. Educators will agree with Coburn that the growth of investigative assignments has created a new kind of homework--one that must often be completed in the library and that may involve the librarian.

---

<sup>8</sup>Louis Coburn, "The Educational Challenges of Librarianship," Elementary English, Vol. 43 (April, 1966), p. 398.

Individualized learning gives every student a greater opportunity for growth, and Coburn would include library skills as "one of the building blocks of all learning."<sup>9</sup>

Carolyn I. Whitenack, Chairman of the Department of Educational Media at Purdue University, has summarized the task before librarians effectively:

There are four great challenges related to students' use of school libraries: the expanding populations, the explosion of knowledge, the increase of new technology and new media in education, and the organization of lifelong learning resources in school libraries. . . so that the student will be served. Increasingly great numbers of students may call for drastic changes in technique; special attention and planning for teaching library use is required.<sup>10</sup>

Stating that ". . . the greatest potential source of education for today's youth, the library, is being wasted," Ralph Perkins would require the junior high school to provide needed training so that students will learn to use the resources of the school library and carry this use into the public library system.<sup>11</sup> And, agreeing with other authorities that there is great need for better instruction in the use of library research techniques, John B. Wilkins speaks for administrators when he suggests that students must be taught the basic skills to use any library, because

---

<sup>9</sup>Coburn, op. cit., p. 398.

<sup>10</sup>Carolyn I. Whitenack, "The Changing Role of the Librarian," Wilson Library Bulletin, Vol. 43 (January, 1964), pp. 317-318.

<sup>11</sup>Ralph Perkins, The Prospective Teacher's Knowledge of Library Fundamentals (New York: Scarecrow Press, 1965), p. 199.

this is knowledge which will serve a lifetime of use.<sup>12</sup>

In a recent survey, the importance they attached to teaching the use of the library was evident as librarians ranked instruction as the most critical area for research. Both library leaders and practicing school librarians were questioned, Mary Woodworth reports, ranking the most important areas for research as Instruction, Services, Publicity, Accessibility and Use, and Budget.<sup>13</sup>

As "textbook courses" disappear, the ability to use the multiple sources of the library becomes increasingly important. If students are to make use of the information available today, doubling every ten years, they must develop a pattern of study habits that will lead them to useful sources of information. Proper structuring of library search techniques into the curriculum will help young people meet the rapid changes in our culture.<sup>14</sup> At the same time, large numbers of disadvantaged students are being required to work independently in libraries; these students will need special help if they are to establish habits for lifelong learning in the library.<sup>15</sup>

---

<sup>12</sup>John B. Wilkins, "Library Instruction--Curriculum Must," National Association of Secondary Schools Principals' Bulletin, Vol. 53 (November, 1959), pp. 130-131.

<sup>13</sup>Mary Lorrain Woodworth, "School Librarians' Opinions on Research," Dissertation Abstracts, Vol. 28 (April-June, 1968), p. 3819A.

<sup>14</sup>Jack McClellan, "New Roles for School Libraries," Elementary English, Vol. 42 (October, 1965), p. 650.

<sup>15</sup>Coburn, op. cit., pp. 398-399.



The effect of federal funding on the growth of school library collections and area media centers has been noted. Estella Reed points out that with these benefits have come responsibilities:

Federal commitment to education has provided resources to learning centers. Introducing learners to the wealth of materials now available is the salient problem facing teachers. . . . Pupils lack sufficient library training to make them comfortable in the public or college library. These succeeding institutions regard themselves as service agencies rather than training agencies. Adequate library skills must be assured in secondary schools. . . . There are curricular implications attendant to Title II of the Elementary-Secondary Education Act that should be faced.<sup>16</sup>

If schools continue to be funded with increasing proportions of state and federal funds, the time will surely come when they will be held accountable for student progress. A library program which does not consider evaluation important is unrealistic.

Frederick R. Cyphert makes a forceful case for improving library instruction, saying, "The time has long since passed when we should alter our instructional program to place increasing emphasis upon problem solving, research, and investigative skills."<sup>17</sup> Contending that the best equipment the school can give modern youth is the skill to solve problems rather than a set of preconceived answers about a world that is rapidly changing, Cyphert advocates teaching

---

<sup>16</sup>Estella Reed, "Building Library Skills at the Secondary School Level," Education, Vol. 88 (April, 1968), p. 355.

<sup>17</sup>Frederick R. Cyphert, "The Junior High School Library Develops Investigative Skills," Clearing House, Vol. 33 (October, 1958), p. 107.

techniques as they are needed. The importance of faculty acceptance of the need for having students develop these skills, faculty involvement in the identification of skills, close communication between teachers and librarian in the cooperative development of programs, selection of relevant library materials which are appropriate for students' needs and abilities, flexibility of library scheduling, and use of concrete situations which need to be explored are topics Cyphert discusses in detail.<sup>18</sup>

It is apparent that teachers, administrators, and librarians agree that students have an immediate need for improved library instruction that would develop lifelong library use skills, and that supplying this instruction is a top priority in modern education.

### Elements of Effective Instruction

Rossoff points out that general agreement is lacking both as to how to teach skills, whether by the formal unit or by the unit of integrated instruction, and as to what to teach. Authorities are agreed, however, that the actual method is not so important as the immediacy and purposefulness of instruction that grows out of classroom situations requiring a search of many sources.<sup>19</sup>

Speaking of valuable learning experiences in the central elementary school library, where formal instruction and

---

<sup>18</sup>Ibid., pp. 107-109.

<sup>19</sup>Martin Rossoff, Library Journal, Vol. 18 (October, 1966), p. 5126.

integrated instruction are begun early in the first and second grades, Martha Dell Bishop concludes with this statement that applies to all instruction at all levels:

Two critical elements affect the value of library experiences: (a) the librarian's willingness to help children, locating library materials, and their efforts toward helping the children to learn efficient library usage, (b) the availability, accessibility, utility, and organization of materials and equipment.<sup>20</sup>

Improved funding and staffing can provide for the second critical element, but only a librarian with the characteristics of a good teacher can supply the first. Comparing their perceptions of the role of the librarian, most teachers, principals and librarians agree that the position is similar to that of a classroom teacher. Like the classroom teacher, the librarian must include these basic elements of instruction: (1) motivation that grows out of the student's need to use library resources to accomplish a task, (2) a favorable learning environment including well-organized materials and equipment, (3) a school librarian with interest and teaching skills, and (4) cooperative planning of a program involving teachers, principals, and librarians. Research can give direction to the development of the program so that more effective instruction can be tailored to the particular students in a given school.

#### Library Research Techniques Recommended

Specific recommendations focus on three major areas:  
(1) teaching the use of dictionaries, general encyclopedias,

---

<sup>20</sup>Martha Dell Bishop, "Identification of Valuable Learning Experiences in Centralized Elementary School Libraries," Dissertation Abstracts, Vol. 22 (January-March, 1961), p. 2010.

the card catalog, and the Dewey Decimal System; (2) teaching the gathering, analyzing, and organizing techniques associated with preparing a report; and (3) teaching the use of various specialized references used with assignments made most often in connection with the specialized subject area. There is strong agreement that the instruction in the first category should be started early in the elementary school and reinforced at all levels. McClellan's statement, written for elementary teachers, substantiates the need for these basics and the reporting skills:

Having a school program carries with it the responsibility of teaching beginning library skills. . . . Secondary schools must continue to teach and expand library study skills. Pupils must learn to select from a variety of types of books and periodicals specific titles for a given assignment or program, to take notes, to write summary sentences and outlines, and to prepare bibliographies. There is also need to help students to become independent library users of the card catalog and Readers' Guide and to locate books and periodicals on the shelves. . . . These include subject field references as well as standard references.<sup>21</sup>

Related to the gathering techniques is the important ability to use and evaluate multiple sources. Helen M. Carpenter suggests that this can be accomplished by focusing instruction on (1) using a library, (2) knowing the kinds of sources to consult, and (3) learning the arrangement of materials within a specific reference, as a textbook, a periodical index, or an almanac. This kind of instruction would teach the student a method of attack for any new reference, and it is similar to the approach taught in advanced reference classes. Carpenter identifies two basic

---

<sup>21</sup> McClellan, op. cit., pp. 648-650.

skills that underlie gathering information: (1) alphabetical order and (2) analysis to determine key words. Although she feels these skills should become functional during the elementary years, Carpenter cautions that many junior high school students will need continued practice.<sup>22</sup>

Repeating the importance of developing study skills in realistic learning situations and motivating students to feel the importance of study skills, Guy Wagner and Max Hosier list four basic categories to be taught: (1) understanding the learning source--table of contents, index, glossary, appendix; (2) using the library--selection of appropriate reference for topic (card catalog, vertical file, bibliography, periodicals index); (3) development and use of reading skills--locating information, selecting and evaluating information, comprehension, organizing, and using information; and (4) observation and notation--use of notes and outline.<sup>23</sup> Emphasizing the importance of what he calls "basic skills for pursuit of curriculum," Frederic R. Hartz would develop for the secondary schools a six-year continuing program that would make use of specialized tools and would include the study of authorities and their contributions as an important part of the junior high program in advanced reference.<sup>24</sup>

---

<sup>22</sup>Helen M. Carpenter, "Study Skills," Instructor, Vol. 72 (January, 1965), pp. 27-28.

<sup>23</sup>Guy Wagner and Max Hosier, "Library Skills," Instructor, Vol. 76 (April, 1967), p. 74.

<sup>24</sup>Frederic R. Hartz, "Library Instruction in the Secondary Schools," Journal of Secondary Education, Vol. 41 (May, 1966), p. 202.

Careful analysis of many articles written about the need for instruction in the use of the library indicates that, contrary to Rossoff's statement that agreement is lacking as to what to teach, most teachers and librarians writing on the subject do agree that a core of instruction should be taught including a basic pattern of research; experiences in using general encyclopedias and dictionaries, the card catalog, and the Dewey Decimal System; and a system for using whatever specialized tools the student might need. Several writers also mention the importance of teaching students to use non-print media along with print; if the library and audio-visual departments are unified and have a single catalog, there should be no special instruction needed other than practice that would include these materials. If a basic pattern for reference and a basic procedure for attacking new reference books were taught, students would be prepared to handle new problems and new tools as they presented themselves. Teachers in subject areas could be assured that students would have thorough grounding in the fundamentals of library research techniques and might be best qualified to introduce students to the specialized tools uniquely appropriate to their area.

#### Suggested Methods for Teaching Techniques

Teachers and librarians agree that methods and programs of the past must be updated to provide better programs for larger enrollments. At the same time, the pressure of increased enrollments means that more students will have to work independently and at a higher level of skill.

Hartz sees individualized research as a sensible continuation of secondary school curriculum practices now in use and feels that the objective of instruction should be to develop the ability to use the multiple services of the library with competency, growing in skills so that he can make maximum use of the public library and continue his individual learning experiences. He points out that formal instruction can acquaint students with the physical arrangement of the library, rules and regulations, and general location of major resources. Systematic instruction integrated with classroom assignments would be used to teach the basic core of skills. Filmstrips, films, television programs, video-taping, and demonstration materials are suggested as other alternatives to the teacher lecture which most students find difficult to assimilate and apply.<sup>25</sup>

William E. Turner describes an individualized plan for providing for a wide range of needs while it gives purpose to the student's use of the processes of inquiry. As students at Osburn Elementary School search for information in social studies classes, they receive help in limiting fields of inquiry, locating and evaluating information, and in making inferences, with teacher and librarian sharing responsibility.<sup>26</sup>

Technology can make even the traditional lecture more meaningful, according to Juanita M. Landman, who de-

---

<sup>25</sup>Hartz, op. cit., pp. 201-205.

<sup>26</sup>William E. Turner, "Ungraded Social Studies Through a Library Approach," Elementary School Journal, Vol. 68 (October, 1967), pp. 26-30.

scribes a locally produced slide set developed to present orientation and other lessons. This large group presentation can be followed by class or small group activities in the library. One advantage claimed for the large group instruction presented in this way is that "library techniques and basic principles remain uniform and constant in quality and quantity."<sup>27</sup> A second plan for using color slides and taped narration for library orientation is described by Paladugu Rao, who uses transparencies, tapes, and slides for a multimedia program of presentation, review, and inservice. The use of slides permits additions and revisions of materials at any time.<sup>28</sup>

Another method that has proved a successful solution for teaching the skills needed in independent research is used in Pasadena, California. Regular weekly visits are made by groups who search for answers to questions made up by teachers, students, and librarians. New references are introduced through carefully planned questions that guide students to a specialized reference other than an encyclopedia. Long range research papers using ten sources are developed after students have progressed through many kinds of science references.<sup>29</sup>

---

<sup>27</sup>Juanita Mathie Landman, Educational Screen and Audiovisual Guide, Vol. 42 (October, 1963), pp. 569-570.

<sup>28</sup>Robert R. Carter and Margarete S. McLellan, "Library Use Program," Science Teacher, Vol. 36 (January, 1969), pp. 66-67.

<sup>29</sup>Elizabeth McCorkle, "The Modern Library," Texas Outlook, Vol. 51 (April, 1967), pp. 24-26.



Reports of new instructional practices coming from teachers and librarians do not suggest that there is one best way of teaching library research techniques. Rather, through experimentation with new media, adaptation of methods to make the best use of the students' and teachers' time, and cooperative instruction in the library itself, librarians and teachers are producing pragmatic instructional patterns that are a workable compromise for large group-small group- individualized study situations found in most schools today.

### Chapter 3

#### ANALYSIS OF TEACHERS' ASSIGNMENTS

##### THE KEY TO THE LIBRARY PROGRAM

The review of literature shows that teachers in the subject areas of language arts, social studies, and science make many assignments that require students to use the techniques of gathering, organizing, and reporting data. In addition, some areas require the use of many specialized references, while there are other areas that make little or no use of any except the most basic library materials such as general encyclopedias or dictionaries. Remembering this background information about teachers' traditional use of library-oriented assignments, the response of Cedar Rapids teachers by subject area, as shown in Table 1, indicates that library users may account for differences in response.

TABLE 1.--NUMBER OF TEACHER RESPONDENTS BY SUBJECT

Subject Area	Total number of teachers	Number of responses	Percent of response
1	2	3	4
Art	12	4	33%
Foreign language	14	8	57
Home and family	13	8	61
Industrial arts	17	11	65
Language arts and speech	53	44	83
Mathematics	44	27	61
Music	20	11	55
Physical education and health	29	14	48
Science	33	20	61
Social studies	44	37	84
All areas - Total	279	184	66%

Numerous articles described projects and activities initiated by social studies, language arts, and science teachers in cooperation with librarians; the high percentage of response from these three areas (84%, 83%, and 61%) in Cedar Rapids schools is predictable. Two areas mentioned infrequently in the literature responded with the lowest percentages, 33% and 48%, in the areas of art and physical education and health. The Cedar Rapids curriculum itself may be a factor in the low rate of response in the areas of art, foreign language, music, and physical education, for it stresses performance--manipulation, verbalization, vocal skill, and physical skills--to the minimization of investigative skills. Excluding these four areas, the over-all response would have been 72%. The percent of response might be considered an informal gauge of the degree of interest Cedar Rapids junior high school teachers feel toward library use and instruction.

One of the primary goals of the questionnaire was the determination of the kinds of assignments teachers really make that lead students to the library and to the use of library research techniques. A key problem in identifying the assignments accurately is the teacher's own failure to analyze his assignment in terms of what it requires the student to do. Within the limitations of space imposed by a brief questionnaire, it is difficult to motivate the responding teacher to do this necessary thinking through assignments. The 19 specific assignments listed began with an action verb so that teachers would think of the behavior he

expected of his students, consider the frequency with which he used the assignment, and check the frequency code letter. Table 2 shows the percentage of teachers who indicated that they made some use of the assignment, keyed here to library tools most commonly associated with the assignments.

TABLE 2.--LIBRARY TOOLS NEEDED FOR COMPLETION OF ASSIGNMENTS AND DEGREE OF USE BY GRADE AND SUBJECT

Kind of Assignment and tool needed	All teach- ers	7th Gr.	8th Gr.	9th Gr.	LA	SS	Sci- ence
1	2	3	4	5	6	7	8
1. Index of book	75%	87%	75%	85%	95%	97%	75%
2. English language dictionary	74.5	82	85	82	95	92	65
3. Specialized dictionary	69.5	77	79	76	93	88	60
4. Atlas, geographical reference	59.8	77	63	67	95	95	35
5. Biographical reference	75.5	71	82	85	97	98	55
6. <u>Guide to Periodical Literature</u>	72.3	77	75	82	89	90	75
7. Index to Drama, Short Story, etc.	30.4	29	38	40	89	19	5
8. Poetry Indexes	29.3	35	32	37	89	11	5
9. Books of Quotations	32.6	37	44	55	69	46	20
10. Index to Paintings	26.1	34	38	13	34	46	5
11. Almanacs and yearbooks	70.7	85	72	88	91	92	60
12. Literature of vocations	51.6	52	48	49	52	64	30
13. Mathematics or science tables	32.6	35	38	46	12	25	80
14. Film or prints guide, catalog	60.9	64	85	70	62	73	70
15. Tape, recording guide, catalog	72.3	74	72	82	100	95	60
16. Information from two sources	72.8	85	85	85	91	100	70
17. Organize outline	69	74	75	82	88	98	65
18. Credit sources	52.2	53	63	67	78	76	40
19. Bibliography	55.4	66	66	70	78	84	50

To complete the presentation of information about the degree of use given to library-oriented assignments by teachers in the other subject areas other than language arts, social studies, and science, shown in Table 2, p. 29, statistics for the other seven subject areas surveyed are given in Table 3.

TABLE 3.--LIBRARY TOOLS NEEDED FOR COMPLETION OF ASSIGNMENTS AND DEGREE OF USE BY SUBJECT AREAS

Kind of Assignment and tool needed	Math	Art	Home and Family	Foreign lang- uage	Ind. arts	Music	P.E. and Health
1	2	3	4	5	6	7	8
1. Index of book	62%	50%	87%	62%	45%	45%	14%
2. English language dictionary	58	50	97	48	45	64	14
3. Specialized dictionary	60	25	25	63	64	90	14
4. Atlas, geographical reference	26	-	12	100	27	27	14
5. Biographical reference	52	100	50	62	36	90	43
6. <u>Guide to Periodical Literature</u>	33	75	100	50	63	36	57
7. Index to Drama, Short Story	4	-	12	12	-	-	14
8. Poetry Index	7	25	12	12	-	9	7
9. Books of quotations	7	-	-	12	-	9	14
10. Index to Paintings	-	100	12	12	-	36	7
11. Almanacs and yearbooks	74	-	62	37	54	46	50
12. Literature of vocations	40	50	100	37	64	46	50
13. Mathematics or science	83	-	25	-	9	-	14
14. Film, prints guide, catalog	33	75	62	37	64	45	57
15. Tape, recording guide, catalog	40	25	50	87	35	82	35
16. Information from two sources	40	75	100	25	35	45	50
17. Organize outline	26	75	87	37	36	63	42
18. Credit sources	15	25	50	37	-	45	28
19. Bibliography	15	25	62	-	18	27	35

Because so few respondents made suggestions that added any new assignments, no tabulation was made other than the percentage of those responding, 7.7% or 14 persons, for Item 20, the open-ended question.

The information shown in Tables 2 and 3 is valuable for at least four reasons. First, it shows that in every subject area, some assignments are made that require the use of the library and that in the majority of subject areas, several skills receive very heavy emphasis. Second, it shows the concentration of the use of research skills in the areas of language arts and social studies and to a lesser degree, in science, home and family, and physical education and health, scattered quite uniformly over every kind of assignment and tool. Third, it shows the grade levels at which certain kinds of skills are most used. Finally, the tables are an indication of the areas and grade levels where specialized tools are used and where instruction should be concentrated in those tools. It would be unwise to plan a program based on the percentage of use indicated by all teachers, but when the complete tabulation is considered, one can begin to see the comparative importance of the various elements of instruction. To present the various assignments (now identified by the name of the tool that one would expect to use to complete the assignment) in order according to degree of use, Table 4 shows the rank-order of the 19 assignments. The difference in degree of use between the item ranked first was only 6.5% more than the item ranked eighth, indicating a similar degree of use of the first eight items.

TABLE 4.--TYPICAL ASSIGNMENTS RANKED ACCORDING TO  
DEGREE OF USE BY TEACHERS

---

1. Biographical references	11. Atlas, geographical reference
2. Index of book	12. Bibliography
3. English language dictionary	13. Credit sources
4. Information from two sources	14. Literature of vocations
5. <u>Guide to Periodical Literature</u>	15. Mathematics, science tables
6. Tape, recording guide or catalog	16. Books of quotations
7. Almanacs and yearbooks	17. <u>Short Story Index</u>
8. Specialized dictionary	18. Poetry indexes
9. Organize outline	19. Index to Paintings
10. Film, prints guide, catalog	20. Other assignments indicated

---

The percentage of teachers responding that they used Items 1-9 ranged from 75.5% who used biographical references down to 69% who used techniques of organizing an outline. Because the rating scale consisted of the descriptive phrases "Never," "Occasionally," "Every week," and "Daily,"---words which may not carry the same measurement meaning to all people--the relative positions of the first nine items in Table 4 cannot be considered very significant, but the fact that 69% of all teachers use these assignments to some degree is an indication that instruction must be provided in the use of resources that students need to complete the assignments.

The percentage of teachers who indicated that they used Items 10-14 ranged from 60.9% using Item 10 to 51.6% using Item 14. Items 15-19, which might be classified as specialized references peculiar to a subject more than to all subjects, ranged from 32.6% for Item 15 to 26.1% for

Item 19, an index to paintings. Since Items 10-14 are used by more than 50% of the teachers, they should be given strong consideration for the basic instruction, along with Items 1-9. Although Items 15-19 rate lower in use with all teachers in the survey, study of Tables 2 and 3 will show that 80% of the science teachers and 83% of the mathematics teachers report using Item 15; 69% of language arts teachers use Item 16; 89% of language arts teachers report using both the Short Story Index and poetry indexes; and 100% of the art teachers make assignments using indexes to paintings. We must conclude that specialized reference works play a significant part in helping students complete assignments in these subject fields, and it must be remembered that there are many highly specialized references which were not included in the survey but which students might profit from using.

The items related to gathering and organizing materials for a report received high ratings from all teachers. These skills were mentioned repeatedly by teachers and librarians writing about library instruction. The use of the book index and the English language dictionary, which are basic to locating information and to comprehension, must be re-emphasized in the junior high school. The fact that 72.3% and 60.9% of all teachers reported some use of tape and recordings guides and catalogs, and film and prints catalogs, should make librarians aware of the growing use of non-print media in the classroom and library and of the need for students to have instruction in locating this kind of media.



The second part of the questionnaire, Items 21-25, requested teachers to indicate their acceptance of several statements about instruction in the use of media. They were to circle the letter that indicated their degree of acceptance according to the following scale: a. Very acceptable b. Acceptable in most cases c. Not acceptable.

Table 5 shows the degree of acceptance of five ways of providing instruction, expressed in percentage of the total number of respondents.

TABLE 5.--TEACHER ACCEPTANCE OF WAYS TO PROVIDE MEDIA INSTRUCTION IN THE JUNIOR HIGH SCHOOL				
Item	a. Very acceptable	b. Acceptable in most cases	c. Not acceptable	d. No response
1	2	3	4	5
21. Classroom teacher should provide all instruction	2.2%	35.3%	56.5%	6.0%
22. Librarian should provide large group instruction	36.4	46.7	12.0	4.9
23. Teacher and librarian should share responsibility	55.4	36.4	4.3	3.8
24. Instruction should only be given as student needs it in the library	5.4	35.3	56.5	2.7
25. No formal instruction is needed in junior high school	1.6	4.3	89.7	4.3

An analysis of the acceptance of five ways of providing instruction in library research techniques, primarily ways of affixing responsibility for instruction, shows that Cedar Rapids teachers overwhelmingly reject Item 25, "No formal instruction is needed in junior high school," while

accepting to various degrees the other proposals for fixing responsibility for instruction. Sharing of responsibility by teacher and librarian (55.4% very acceptable, 36.4% acceptable in most cases) was indicated as the best choice of the ways to provide media, while second choice was provision of large group instruction by the librarian. More than half of the classroom teachers found it not acceptable for the classroom teacher to provide all instruction. Although 35.3% of the respondents felt that it would be most acceptable in most cases for individuals to receive instruction in the library as they need it, it should be pointed out that in most cases, this is acceptance of the librarian's responsibility to provide reference help in the library.

The computerized tabulations of data reveal other interesting information. No language arts teachers found it "Very acceptable" for classroom teachers to provide all instruction, and two-thirds found it "Not acceptable." Since in the past, the language arts area often was expected to teach a unit on use of the library, and modern texts such as the Scott Foresman series still include such units of instruction, the very negative attitudes of language arts teachers toward providing instruction only in classrooms are significant. Ninety-three percent favored the librarian's presenting large group instruction, and 98% favored shared responsibility.

Social studies teachers were unanimous in rejecting "No formal instruction needed," and at the same time, no

social studies teachers found it "Very acceptable" for classroom teachers to provide all instruction. Shared responsibility found favor with 56.8% as "Very acceptable," and 43.2% as "Acceptable in most cases."

Of the three major subject areas where teachers indicated heavy use of assignments requiring library research techniques, only the science teachers showed lack of unanimity. Seventy percent found it unacceptable for classroom teachers to provide all instruction; 25%, not acceptable for librarian to provide large group instruction; and 20%, not acceptable for instructional responsibility to be shared. In this subject area, 70% of the respondents indicated in Item 24 that it would be either "Very acceptable" or "Acceptable in most cases" for students to have instruction only as it is needed in the library. In view of the enthusiastic reports of investigation projects found in the review of the literature, one must draw the conclusion that the respondents (1) are relying exclusively on laboratory experimentation, or (2) have not had sufficient experience with use of the library to form a valid opinion of its values in the field of science. The fact that there is a good deal of variation among science teachers concerning who should or should not be responsible for instruction also indicates that librarians need to keep in touch with science teachers, the kinds of assignments that are made, and the extent to which these actually involve use of library research techniques. Data should be collected to show the extent to which science students are using library materials for research, as well

as the kinds of questions with which science students have difficulty when doing research independently.

Conclusions that can be drawn from the data in Table 5, then, are that 89.7% of all junior high school teachers believe students need instruction in library research techniques; about 37.5% would accept the responsibility in most cases; 83.1% would delegate responsibility for instruction to the librarian; and 91.8% would find a shared responsibility with the librarian acceptable. About 40% of all teachers would find giving instruction only as it is needed in the library acceptable.

A compilation of the observations of the six librarians was made to ascertain the frequency with which students were observed working at the various kinds of assignments in the libraries. Librarians reported daily use of (1) book indexes, (2) English language dictionaries, (3) specialized dictionaries, (4) atlases and other geographical references, (5) biographical references, (6) Guide to Periodical Literature, (11) almanacs and yearbooks, (14) guide or card catalog to find film or study-print, (15) guide or catalog to find tape or recording, and (16) use of two or more sources to find and compare information. They reported use every week or occasionally of (7) Short Story Index or drama indexes, (8) poetry indexes, (9) books of quotations, and the study skills of (17) organizing an outline, (18) giving credit by footnotes or internal credit, and (19) preparing a bibliography of sources used in making a report. One librarian reported that she had never observed Item 17 or 18.

Fewer observations were made of (10) index to paintings, (12) vocational literature, and (13) mathematics and science tables than of other items, with librarians indicating "Occasionally" or "Never" observed.

There appears to be a close relationship between the assignments teachers indicate that they give and the sources librarians see students using in the library.

Librarians were unanimous in agreeing that it was not acceptable for classroom teachers to provide all instruction in use of the library, for instruction to be given only as the individual needs it in the library, or that no formal instruction be given in junior high school. Five found it acceptable for the librarian to be responsible for large group instruction or for teacher and librarian to share responsibility. One did not respond to these two questions. These responses find the librarians are substantially in agreement with classroom teachers concerning the need for instruction, who should be responsible for instruction, and some ways it could be given.

The survey of classroom teachers and librarians is intended to be the foundation of a flexible program of library instruction in the school, and it serves the purpose of answering some of the problems when a staff seeks to develop a program: (1) Are the staff convinced of need for the development of these skills? (2) Have these skills and understandings been spelled out? (3) Is communication between teachers and librarian good? (4) Do teachers and librarian have some time and place to work together? (5) Are library

materials selected by librarian after an analysis of teacher and pupil needs and objectives? (6) Is library schedule flexible to allow students to visit as needed?<sup>30</sup> This survey has sought answers to the first, second, third, and fifth questions. Questions 5 and 6 will be considered on an individual basis in the separate junior high schools.

---

<sup>30</sup>Cyphert, op. cit., pp. 107-109.

Chapter 4  
DEVELOPING A FLEXIBLE PLAN  
FOR TEACHING LIBRARY  
RESEARCH TECHNIQUES

Basic Considerations

It has been pointed out that instruction in library research techniques must be integrated with classroom instruction if they are to be meaningful or functional. Motivation of junior high school students can be achieved best if the student has an immediate need for the skill he is expected to acquire. Cooperative planning between teachers, librarians, and students encourages well-motivated activities.

Although the library is often the ideal setting for instruction, a well-planned classroom or auditorium where all students can see a screen comfortably and where acoustics permit a speaker to use a natural conversational pitch often is better for large group instruction. The selection of environment is an important factor in planning for instruction.

The survey of classroom teachers disclosed a high degree of acceptance of the librarian as a person who is qualified to present large group instruction. Forty percent of all teachers would be willing for the student to receive all instruction as he needed it in the library, where

the librarian would be most likely to present it. This points up the need for every librarian to cultivate the competencies of a good teacher as well as those of a good librarian. Students appreciate having a librarian show genuine interest in their problems and progress; they resent having no identity of their own if they are always treated as one of a large group.

As indicated by 91.8% of the teachers surveyed, shared responsibility is the most acceptable way of providing a program of instruction. Cooperative planning involves selection of skills to be developed; planning the sequence for introduction, practice, and repeated work for those who need it; selection of instruments for assessing student progress and for grouping; planning for large group, small group, and individualized instruction; assigning instructional roles to teachers and librarian for different kinds of lessons; planning policies concerning a flexible schedule for the library and responsibilities for teacher and librarian during investigative activities in the library; selection and ordering of commercially prepared instructional materials, and writing original instructional materials. Plans for evaluation of the program should be a part of the cooperative planning phase.

#### Selection of Techniques

The survey of literature showed that most authorities recognize the need for basic instruction in the use of (1) English language dictionaries, (2) general encyclopedias, (3) card catalog, and (4) Dewey Decimal System. The survey



of classroom teachers confirmed these needs and placed high priorities on the basic techniques associated with gathering, analyzing, and organizing materials for reports.

Specialized references held high priorities in the subject areas where they are commonly used. These might be categorized as special indexes, encyclopedias, year-books, dictionaries, handbooks, biographical references, and geographical references. Each library should have enough sources to supply the need for this type of information, but in most cases there is a choice of desirable titles. The development of a pattern for using specialized reference books, similar to that taught in a college reference course, might include examination of authority, table of contents, illustrations and maps, illustrative materials such as charts, graphs, and tables, index, and appendix. This would provide sufficient instruction so that students could use a new reference independently, and some of the time-consuming repetitive questions would be answered.

A carefully developed plan of orientation to the particular library should be included in the instruction. The location of major areas of the collection, service areas, information concerning lending policies, and a brief statement of philosophy that will guide students' work habits and conduct are essential to the student patron. A slide-tape set would provide orientation at the beginning of the year and be available for orienting new enrollees at other times. In addition to this orientation, the sequence of instruction should provide for much of the

necessary review during the first two months of school.

Classroom teachers have long recognized the fact that students must be taught how to study. The experienced student has acquired all or part of steps that are included in this research pattern:

- (1) Do I need to define any words?
- (2) Do I need to identify the subject (key words)?
- (3) Does a specific tool come to mind, such as an atlas, dictionary, or encyclopedia?
- (4) Does a specific format or kind of media seem most appropriate, such as book, film, recording?
- (5) Is the question too recent to be included in published books? What is the copyright date? Should I use periodicals?
- (6) How does the information compare with other sources?
- (7) Does the answer I have written make sense?
- (8) Have I listed the source so that I may give credit or list it in a bibliography?

### Grouping for Instruction

The plan for instruction being discussed here is not a series of formal lessons or a unit. It is not tied to particular subject areas unless a need develops for instruction in those areas. Likewise, it is not intended to be teacher-centered large group instruction, except as that is needed to make the best provision for the most students. Large group instruction lacks some of the informal atmosphere and spontaneity that is possible when the group is

small enough for free participation by all members. But if there are 700-1200 students to be considered in a school, large group instruction is essential to make sure that all students have exposure to the basic library research techniques in equal quantity and quality. The content, number, and sequence of lessons should be decided in cooperative planning sessions. Allowance should be made for introduction of a technique at one grade level and perhaps for a brief review at the next, unless it is a complex skill that should have more emphasis. In the case of the gathering techniques for reports, for example, the seventh grade classes might be integrated with area social studies reports. The same class, as eighth graders, could review techniques while working on a science investigation. A year later, in ninth grade, the group might integrate these skills with a paper on a favored vocation.

The cooperative committee should also plan for activities best handled in small groups not exceeding ten to fifteen. These may be activities that closely follow the large group presentation, or they may be activities needed by committees in a class, or a small class enrollment. These activities may be carried on with the guidance of the librarian or teacher, or an audio-visual presentation may guide the students' work, much as it does for individualized study.

Librarians have often described reference work on a one-to-one basis as the most effective means of instruction. Realistically, it is difficult to teach more than

a fraction of the students on this basis, so some kind of compromise is needed. The technological developments of the past two decades have produced equipment and materials that will facilitate individualized study for those accelerated students with special needs, for new students who have missed blocks of instruction, and for slower learners who need to repeat lessons to attain mastery. Commercial filmstrips are inexpensive and easily available. Slide sets might be made for individual references used often in the classes of a particular school. Cassette tapes might provide person-to-person guidance for a student, just as a reference librarian supplies a running commentary of tips to the learner. Summaries of how to use references and how to locate materials may be made in poster form. Student manuals for using A-V equipment might be duplicated. Effective bulletin boards will remind students of tools that they might otherwise overlook.

One teacher devised a set of "honor questions" that covered the use of all basic tools and specialized references needed by her seventh grade class. A similar set might be compiled by a team of students, teacher, and librarian, to be available when students wished to increase their proficiency in library research techniques.

#### ADVANTAGES OF THE FLEXIBLE PLAN

No proposal for a "flexible" plan of instruction can do more than suggest the characteristics of the program of instruction, or it becomes a formal course of study. The philosophy and objectives of each school should be a

part of each school's library program, and even the basic considerations--motivation, environment, personnel, and cooperative planning--will vary according to the school. The flexible plan encourages individual programs, adaptations, and innovative practices. In the modern school, such flexibility implies a freedom with control.

The survey of Cedar Rapids teachers and librarians shows that they are in basic agreement as to the need for library instruction and the acceptable ways to achieve a workable program. They agree that all students need a broad and basic kind of instruction, along with training in the use of specialized references. By assigning priorities and planning a sequence of activities in cooperative endeavors, teachers and librarian can develop a continuum of instruction that will prepare all junior high school students to use the print and non-print resources of the library. Students who have learned a basic pattern of research will be able to attack new kinds of problems and to use many kinds of materials. They will develop in confidence as they succeed in completing their classroom assignments with the use of a broad range of multimedia. The best kind of instruction emphasizes the use of the library every day, capitalizing on student needs and interests and growing out of the vital life of the classroom. It involves all concerned--librarian, teacher, and student--in the most essential business of the school, helping each student to grow in skills and in the pursuit of lifelong learning.

## BIBLIOGRAPHY

1. American Library Association and National Education Association. Standards for School Media Programs. Chicago: A.L.A. and N.E.A., 1969.
2. Beck, Margaret V. and Vera M. Pace. A Guidebook for Teaching Library Skills, Books I, II, III, IV. Minneapolis: Denison, 1965.
3. Berner, Elsa R. Integrating Library Instruction with Classroom Teaching at Plainview Junior High School. Chicago: A.L.A., 1958.
4. Bishop, Martha Dell. "Identification of Valuable Learning Experiences in Centralized Elementary School Libraries," Dissertation Abstracts, 22:3010, January-March, 1961.
5. Carpenter, Helen M. "Study Skills," Instructor, 72:27-8, January, 1965.
6. Carter, Robert R., and Margarete S. McLellan. "Library Use Program," Science Teacher, 36:66-7, January, 1969.
7. Cyphert, Frederick R. "The Junior High School Library Develops Investigative Skills," Clearing House, 33:107-9, October, 1968.
8. Coburn, Louis. "The Educational Challenges of Librarianship," Elementary English, 43:398-9, October, 1966.
9. Davenport, Iowa, Public Schools. Library Handbook for the Davenport Elementary Schools. Davenport: Board of Education, 1967.
10. Davies, Ruth Ann. The School Library: a Force for School Excellence. New York: R.R. Bowker, 1969.
11. Detroit Public Schools. The Junior High School Library: a Curriculum Guide for the School Librarian in the Junior High School. Detroit: Board of Education, 1961.
12. Egan, Mary Joan. "Using Television to Serve the Library Program," The Instructor, 74:74-5, November, 1964.
13. El Paso Public Schools. Library Handbook Policies and Procedures. El Paso: Board of Education, 1967.
14. Elk Grove Township, Illinois, Schools. Curriculum Guide for Library Skills. Elk Grove: Board of Education, 1968.

15. Fargo, Lucile F. The Library in the School, 4th ed. Chicago: A.L.A., 1947.
16. Fortney, Nancy D. "The Library Is for Learning," Clearing House, 42:116-8, October, 1967.
17. Hardy, Bernard P., and others. "Teachers Look at the Library," California Journal of Secondary Education, 35:323-8, May, 1960.
18. Hartz, Frederic R. "Library Instruction in the Secondary School," Journal of Secondary Education, 41:201-5, May, 1966.
19. Hastings, Dorthy M. H., and Daniel Turner. Journal of Experimental Education, 31:401-5, May, 1966.
20. "Introducing the Library Through Film," Wilson Library Bulletin, 41:197-9, October, 1966.
21. Iowa Department of Public Instruction. Media Skills Instruction: a Bibliography. Des Moines: Department of Public Instruction, 1969.
22. Joyce, William D. "A Study of Academic Achievement and Performance on a Test of Library Understandings," Journal of Educational Research, 54, January, 1961.
23. Kane, Ada P. "Test on Library Instruction," Wilson Library Bulletin, 25:393, January, 1951.
24. Kent, Nelda. "Sliding into the High School Library," Educational Screen Audiovisual Guide, 43:700, December, 1964.
25. Landman, Juanita Mathie. Educational Screen and Audiovisual Guide, 42:569-70, October, 1963.
26. "Library Skills: What Pupils Need Grade by Grade," Grade Teacher, 84:126-8, November, 1969.
27. Liveritte, Rudy H. "Suggestions for Teaching Library and Bibliographic Skills in Elementary and Secondary Schools," Idaho State Department of Education, 1967.
28. Mahoney, Sally. "Basic Study Skills and Tools," Elementary English, 42:911-3, December, 1965.
29. Martin, Lowell A. "School and Public Library Relationships," National Association of Secondary School Principals Bulletin, 53:173-4, November, 1959.



30. McClellan, Jack. "New Roles for School Libraries," Elementary English, 42:646-50, October, 1965.
31. McCorkle, Elizabeth. "The Modern Library," Texas Outlook, 51:24-6, April, 1967.
32. Olson, Lowell Ellis. "Teachers', Principals', and Librarians' Perception of the School Librarian's Role," Dissertation Abstracts, 27:1846, October-December, 1966.
33. Orange Unified School District. Guide to the Library in the Schools, Grades 4-6. Orange, California: Orange Unified School District, n.d.
34. Palovic, Lora, and Elizabeth Goodman. The Elementary Library in Action. West Nyack: Parker, 1968.
35. Perkins, Ralph. The Prospective Teacher's Knowledge of Library Fundamentals. New York: Scarecrow Press, 1965.
36. Petty, Margery C., and Lucille A. Reid. "Student Use of Public Libraries," Illinois Libraries, 45:211-6, April, 1963.
37. Rao, Paladugu V. "Library Orientation: a Multimedia Approach at Eastern," Audiovisual Instruction, 15:83-4, May, 1970.
38. Reed, Estella. "Building Library Skills at the Secondary School Level," Education, 88:353-6, April, 1968.
39. Robbins, Marilyn. "Teaching Library Skills to Junior High Honor Students," Science Teacher, 32:48, February, 1965.
40. Rossoff, Martin. "Blueprint for Library Teaching," Wilson Library Bulletin, 27:70-73, September, 1952.
41. Rossoff, Martin. "The Forgotten Key," Library Journal, 91:5126-8, October 15, 1966.
42. Rossoff, Martin. The Library in High School Teaching. 2d ed. New York: Wilson, 1961.
43. Rupp, Bette H. "The Effectiveness of Card Catalog Skills," Contemporary Education, 41:79-81, November, 1969.
44. Schwartz, Eleanor E., and Edward T. Schofield. "Here's How the Garfield School Teaches Research," Educational Screen and Audiovisual Guide, 44:14-5, June, 1965.

45. Scott, Foresman and Company. Guide to Modern English Series. Chicago: Scott, Foresman, 1965.
46. Squire, James R. "Importance of New Kinds of Scheduling Practices," Wilson Library Bulletin, 43:764-72, July, 1968.
47. Steenrod, Margaret B. "They Teach Library Skills with TV," Grade Teacher, 84:108-9, November, 1966.
48. Stoddard, Edith M. "Library and Classroom Cooperation in Junior High School," Wilson Library Bulletin, 13:182-3, November, 1938.
49. Swanker, Mrs. Esther M. "Maximum Use of Library," American School Board Journal, 151:26-7, November, 1965.
50. Turner, William E. "Ungraded Social Studies Through a Library Approach," Elementary School Journal, 68:26-30, October, 1967.
51. Wagner, Guy, and Max Hosier. "Library Skills," The Instructor, 76:74, April, 1967.
52. Whitenack, Carolyn I. "The Changing Role of the Librarian," Wilson Library Bulletin, 38:397-400, January, 1964.
53. Wilkins, John B. "Library Instruction--Curriculum Must," National Association of Secondary Principals Bulletin, 53:130-1, November, 1959.
54. Wofford, Azile. The School Library at Work. New York: H. W. Wilson, 1959.
55. Woodworth, Mary Lorrain. "School Librarians' Opinions on Research and Research Needs in School Librarianship," Dissertation Abstracts, 28:3819A, April-June, 1968.

## APPENDIX

**Taft Junior High School**  
CEDAR RAPIDS, IOWA

53

OFFICE OF THE PRINCIPAL

November 4, 1970

Dear Fellow Teachers,

I would like to ask for your help on a project that I feel can be very useful to you and your students. As the librarian at Taft, I have worked with classroom teachers to plan lessons teaching students how to use print and non-print resources so that they may complete assignments successfully. The recommendations made by our classroom teachers have been invaluable in making this kind of instruction relevant to student needs. The questionnaire accompanying this letter will provide additional feedback from all junior high school teachers in Cedar Rapids. The resulting compilation of information can then be used as junior high school librarians work together to develop resource units for teaching library search techniques. Mr. Robert Foley, Cedar Rapids Director of Media and Materials, and Dr. George Ross, Director of Research, have given their approval to the project and distribution of the questionnaire.

The objectives of this study are

- 1) To identify the different kinds of assignments given junior high school students requiring the use of library search techniques,
- 2) To develop a list of the library search techniques which teachers and librarians believe junior high school students need in order to complete these assignments successfully, and
- 3) To sample teachers' and librarians' opinions concerning effective methods of providing instruction in library search techniques.

Directions for completion of the questionnaire:

- 1) A name sticker has been placed on the upper left corner. You may remove this if you do not wish to identify yourself.
- 2) Please fill in subjects taught and grade level at upper right.
- 3) Return the questionnaire to Dr. George Ross, E.S.C., by November 6.

Thank you for your cooperation. The compiled information will be made available to all junior high school teachers.

Yours truly,

*Ruth Harbour*

QUESTIONNAIRE FOR THE IDENTIFICATION OF  
JUNIOR HIGH SCHOOL SEARCH TECHNIQUES

Items 1-20 list assignments that can be completed successfully by using library search techniques. Circle the letter at the left that indicates the degree of use you make of these assignments, using the scale below:

a. Never      b. Occasionally      c. Every week      d. Daily

- a b c d 1. Locate information in a non-fiction book by using book's index
- a b c d 2. Locate pronunciation, spelling, meaning, and/or usage of a word in an English language dictionary
- a b c d 3. Locate a term or phrase using a specialized dictionary
- a b c d 4. Identify and locate a geographical place
- a b c d 5. Locate information concerning a famous living or deceased person
- a b c d 6. Locate a magazine article printed some time ago
- a b c d 7. Locate a specific short story or play, using the appropriate index
- a b c d 8. Find a poem on a specific topic, or one by a specific poet
- a b c d 9. Find the source of a specific quotation
- a b c d 10. Locate a reproduction of a famous painting
- a b c d 11. Locate statistical information in a yearbook or almanac
- a b c d 12. Locate information about a vocation in which you are interested
- a b c d 13. Locate and interpret a mathematics or science table
- a b c d 14. Locate a film or study-print about a specific topic
- a b c d 15. Listen to a tape or recording on a specific topic
- a b c d 16. Collect and compare information from two or more sources
- a b c d 17. Organize information notes into an outline for a report
- a b c d 18. Give credit to sources for a report, by footnotes or "internal" credit
- a b c d 19. Prepare a bibliography of sources used in making a report
- a b c d 20. Other assignments using search techniques (List these on back)

Items 21-26 are statements about instruction in the use of media. Circle the letter at the left to indicate your acceptance according to the scale below:

a. Very acceptable      b. Acceptable in most cases      c. Not acceptable

- a b c 21. Classroom teacher should provide all instruction in search techniques.
- a b c 22. Librarian should provide large group instruction in search techniques.
- a b c 23. Teacher and librarian should share responsibility for this instruction.
- a b c 24. Instruction should be given only as the individual needs it in library.
- a b c 25. No formal search technique instruction is needed in junior high school.
- a b c 26. Other suggestions for providing instruction (List on back)

To:

Dr. George Ross

Director of Research

Educational Service Center

Taft Junior High School

November 16, 1970

Dear Fellow Teacher,

A questionnaire requesting information about classroom assignments which might involve the use of library search techniques was distributed to all Cedar Rapids junior high school teachers Wednesday, November 4. The response has been excellent. Some questionnaires are still out, and we hope to have all of them returned this week. If you have already sent yours to Dr. George Ross at the Educational Services Center, thank you! If you haven't, will you please take time to check your responses on the printed questionnaire and drop it into the school mail today?

Yours sincerely,

Ruth Harbour

## RECOMMENDED REFERENCE SOURCES

The following are the reference sources recommended by librarians for use with Items 1-19 of the questionnaire:

1. Index of book: Encyclopedias, non-fiction titles
2. English language dictionary: Unabridged and abridged titles of various grade levels
3. Specialized dictionary: Brewer's Dictionary of Phrase and Fable; Concise Dictionary of American History; Dictionary of American Slang; Cassell's dictionaries
4. Geographical place: Webster's Geographical Dictionary; Columbia-Lippincott Gazetteer; atlases
5. Biographical dictionaries: Who's Who; Who's Who in America; Current Biography
6. Periodicals: Readers' Guide to Periodical Literature American Heritage Magazine Index
7. Short story or play: Short Story Index; Index to Plays
8. Poetry: Granger's Index to Poetry; Brewton's Index to Children's Poetry
9. Quotations: Bartlett's Familiar Quotations; Hoyt's; Stevenson's
10. Famous paintings: Index to Reproductions of American Paintings
11. Statistical information: Statesman's Yearbook; World Almanac; Reader's Digest Almanac
12. Vocations: Lovejoy's Vocational Guide



13. Mathematics or science table: Chemistry and Physics Handbook; Encyclopedia of Science and Technology
14. Film or study print: Card catalogs--school, TRC or Joint County
15. Tape, recording: Card catalogs; TRC tape list
16. Two or more sources for information: Use card catalog, Readers' Guide, Vertical File
17. Organize outline: Language arts textbook section
18. Crediting sources: Downs' How to Do Library Research
19. Bibliography: Books, Libraries and You, by Jessie Boyd; card catalog; encyclopedias
20. Recommended more work with encyclopedias  
Encyclopedia of Sports; music and art references