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REFERENCE QUESTIONS ASKED IN AN ELEMENTARY SCHOOL LIBRARY

Helen G. Morgan

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REFERENCE QUESTIONS ASKED IN AN
ELEMENTARY SCHOOL LIBRARY

A Thesis
Presented to
the Graduate Faculty
Central Washington State College

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

by

Helen G. Morgan

June, 1972

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This paper presents data concerning the types of questions asked in an elementary school library, and the types of tools used to answer these questions. It also presents data to show whether or not these questions were answered and if the students required assistance with this research. No previous research had been done in this area. This lack necessitated an original form which was used to obtain the data and aid in the tabulation of the data.

Recommendations include expansions for this study.

CHAPTER I

THE PROBLEM AND DEFINITION OF TERMS

I. THE PROBLEM

Statement of the Problem

This study was done in order to find out what types of questions students in an elementary school library asked, if these questions were answered, in what tools the answers were found, and if the students needed assistance in their research.

Limitations of the Study

The following are the limitations of the study:

1. Questions were limited to those asked by third, fourth and fifth grade students attending Mt. Stuart School, Ellensburg, Washington, during the period of March 23, 1970, to May 15, 1970. This school had a total enrollment of approximately 450 students ranging from kindergarten through the fifth grade. However, preliminary observations and the advice of the school librarian indicated that the children in kindergarten and grades one and two were not doing independent library research as such, and could not cope with the forms left on the reference desk (See Appendix A). Since the librarian's time was limited and the investigator could not be in the library at all times, no attempt was made to record the questions of those younger children.
2. Some students needed no assistance in finding the answers to their questions. Their ability to do independent research made

recording their questions somewhat difficult. Fargo realized this problem when she stated,

. . . the counting of reference questions asked at the desk by no means tells the story. We have no way of knowing . . . how many reference questions were searched by pupils working independently (18:89).

As Callen points out, even third graders can do independent research (8:23-25). The school librarian and the investigator made every effort to ask the student doing independent research what his question was.

3. Some questions that would normally have been asked in a school library were able to be answered in the classrooms because a set of encyclopedias is located in each classroom. The report of the participants in a conference pertaining to the use of reference materials in schools stressed that the ideal situation is to have the most commonly used reference materials available in the classroom (10:6). This, of course, reduces the number of questions coming into the library.

4. Some of the answers to the students' questions were not available in the school library. As Fargo points out, ". . . the best of school collections are never sufficiently extensive to cover all the undertakings in which boys and girls engage" (19:68). These questions were taken by the investigator to an outside agency such as the Ellensburg City Library or Bouillon Library at Central Washington State College.

5. Directional type questions such as, Where are the poetry books? or Where is a book about dogs? were not counted as questions for this study unless the student indicated that he had a particular question concerning the book.

II. DEFINITION OF TERMS USED

Reference Research

The process of locating specific information and expanding knowledge by using a wide variety of printed and audio-visual materials (2:18).

Reference Book

"Any book which is consulted primarily for specific information" (6:1).

Dictionary

A tool dealing primarily with all aspects of words from proper definitions to spelling (35:14).

Encyclopedia

"Works containing informational articles on subjects in every field of knowledge, usually arranged in alphabetical order" (35:13).

Yearbook

A tool usually including a large amount of information relating to events, progress and conditions during the year covered, arranged in concise form (4:13).

Biographical Tools

Tools including data about individuals, either living or dead, usually arranged as general brief sketches, national or regional biographies, or subject types.

Geographical Sources

Sources which are primarily graphic representations, usually including maps, atlases, gazetteers and guidebooks.

Directories of Agencies

"A list of persons or organizations, systematically arranged, usually in alphabetical or classed order, giving addresses, affiliations, etc., for individuals, and address, officers, functions and similar data for organizations" (35:269).

Handbooks

"A miscellaneous group of facts centered around one central theme or subject area" (35:192).

Manual

A tool containing how-to-do-it information.

Serials

Sources which are issued at regular intervals in successive parts, and intended to be continued indefinitely. May include periodicals as magazines, journals, proceedings and other transactions which appear regularly and continuously (35:99).

Indexes

"A detailed list of names, terms, subjects, places, or other significant items in a complete work with exact page or other references to materials included in that work" (35:92).

Bibliographies

"Lists of books by title, author, and subject or some other arrangement suitable for locating specific titles" (35:13).

A-V Sources

Audio-visual sources including such non-book materials as disc or tape recordings, slides, filmstrips, prints, reproductions, and models.

General Reference Tool

A tool which provides much information on the different subject fields in order to give a wide and unrestricted coverage (24:137).

Subject Reference Tool

"A publication in which items of information about one particular subject--literature, history, music, sports, education--are brought together from many sources and arranged so that individual items can be found quickly and easily" (24:137).

CHAPTER II

THE NEED FOR AND THE PURPOSE OF THE STUDY

I. THE NEED FOR THE STUDY

Very little research has been done in the area of reference service for children. Apparently no studies exist about the types of questions asked by students in an elementary school library. Orsini noted the lack of research on this subject when she quoted Sargent:

Nearly seventy-five years ago, A. L. Sargent (1895) wrote: "The subjects on which children seek information are as varied as those brought by older people and the material is equally elusive. . . ." Current articles could be cited which re-echo this statement and similiar statements. However, this is a generalization which is not substantiated by published data other than that done by relatively few individual libraries, and this sparse data has been quantitative--how many children asked questions; how many questions were answered during a specific period, etc.

Guidelines are needed which will help librarians to measure and evaluate information service to children in a unified way (39:169).

Orsini also states in Advances in Librarianship:

. . . one searches the literature in vain for surveys, research and reports on innovative practices in giving reference service to elementary age children. The literature does show that many librarians are in the thinking and talking stages; but too few elementary libraries are in the stage of active experimentation (39:159).

When asked if there is any real evidence to show that a trained librarian is a necessary or urgent member of a school staff, Orsini felt a challenge. She claims a need for professional dialogue and a need for studies in the area of information service, such as the

investigation of the influence of various factors on the demand for, and the utilization of, information service (39:164).

Frances Henne maintains that,

We do not know enough about the nature of materials that students use for academic purposes in the school library . . . or about the number . . . of students using the library resources. School librarians might well find out about the specific materials used by students, the purposes for which they use them, [and] where they got them (32:23).

II. THE PURPOSE OF THE STUDY

Echoed again and again throughout the literature is the need for information about reference service in an elementary school library. Therefore the purpose of this study was to add to the very limited amount of research done in this area. By compiling the questions according to the Dewey Decimal Classification, some insight might be gained as to the type of questions asked. The most frequently used types of reference tools might be shown by listing the types of sources used by the students for their research. Also, the need for assistance by the student would be indicated. Information of this type could be used many ways. Helen Saunders suggests several:

1. the nature of the questions could indicate where additional materials were needed.
2. the nature of the questions could reveal needed reference tools in a new area.
3. the study could be helpful in planning the program of library usage.
4. the study could be useful for budgeting.

5. the study could be of interest to faculty, administrators, and students.

6. the study might be used for public relations (46:84).

Hopefully, the study would indicate the necessity for a well-equipped library with a well-trained librarian. As Saunders states,

Good reference service . . . can be at the heart of the library program. The administration of the reference aspect of the school library calls for careful consideration, planning, and evaluation of the reference collection and its proper use (46:85).

CHAPTER III

REVIEW OF THE LITERATURE

A careful search of the literature revealed that no studies have been undertaken in the area of reference questions asked by students in an elementary school library. The most closely related study, done by Davis in 1942, was Reference Questions in a Senior High Library. Davis made a study of,

. . . relationships between the number and types of questions asked by senior high students in Rockford, Illinois, and their intelligence, courses pursued, grades received, sex and race (11:3).

Noteworthy limitations of this study were: (1) the state of affairs in our country at the time--strikes at home and war in Europe, (2) the location of the study--an industrial town in Middle West, and (3) the fact that the investigator did not attempt to evaluate the reference work or the books used (11:5). Davis classified the questions according to motivations:

Type	I	Based on definite class assignment . . .	73.89 per cent
	II	Motivated by class discussion	7.42 per cent
	III	Based on personal interests not connected with class work	9.16 per cent
	IV	Based on personal readings exclusive of assignments	6.74 per cent
	V	Based on extracurricular activities such as school newspapers, debating, sports, etc.	2.78 per cent (11:11)

The questions were arranged by courses taken, rather than by the Dewey Decimal System. The results showed that the social sciences motivated

most questions, English courses motivated the second most, with science bringing in only one-tenth as many questions as the social sciences, and about one-half as many as English (11:22).

As early as 1935, when there were few trained librarians in elementary schools, Helen Carpenter described a project tried in twenty New York public elementary schools. The project attempted to answer the questions of how much technical training a school librarian needs,

'in order to handle successfully ordinary reference questions?' and also 'What instruction in the use of the library should be given to elementary school pupils to enable them to answer such reference questions themselves?' (9:15)

In these twenty schools selected at random, the teacher-librarian was asked to record all reference questions for a period of five days. These questions were sent to the Superintendent of Libraries to be studied and tabulated according to the source in which the answer most likely would be found. Of the 989 questions, seventy were such that the teacher-librarian's acquaintance with the book collection alone would have been sufficient aid. The tabulation showed 290 (approximately one-third) questions for which an encyclopedia would have been first consulted. Following is the finding of the tabulation:

Knowledge of book collection alone	70
Card catalog	259
Index, table of content, etc. of a book	120
Encyclopedia	290
Unabridged dictionary	33
Magazines and newspapers themselves	5
Readers' Guide	20
Anthologies and books of quotations	34
Knowledge of classification alone	7
Century Cyclopedia of Names, or Champlin, etc.	6
Biographical dictionaries for living people	20
Special reference books (holidays, dates)	5

Atlas and Gazetteer	18
Vertical file	53
World Almanac	42
General questions about libraries, rules, etc.	<u>7</u>
Total	989
	(9:18)

It is interesting to note that the above data did not necessarily indicate where the answers to the reference questions were found by the student, but in fact where the answers might be found according to the ideas of the Superintendent of Libraries. However, the conclusion drawn by the study was:

. . . it has been shown that children come to the elementary school library in search of widely diversified information. Only a book collection containing ready reference books and informational books of all types, carefully chosen and organized for use thru simple classification and cataloging, can provide the answers desired; and it is evident that this wise choice and careful organization of books and materials can be managed only by a person with some technical training. . . . The pupils too must have organized materials and a trained person to direct them, if they are to learn to answer their own questions with skill and judgment (9:19).

Prior to 1960, Edith Bishop did a public library survey of questions regarding the requests made to the librarian. She found that slightly over one-third of the requests were made by elementary school students.

The elementary students used more than half of the fiction requested. . . . In the field of science . . . [they] used 44.6 per cent of the material. . . . History was another area in which elementary students held a very slight lead (5:3159-61).

Bishop also included degrees of success and reasons for failure in answering these requests to the librarian in a public library.

Another study was done by Caroline Hieber which recorded reference questions asked at Lehigh University Library during the two-year period between November, 1963 and October, 1965. The answers

were classified by their formats, dividing them into: (1) exact-reproduction type, (2) fill-in-the-blank type, (3) short descriptive types, (4) information-about type, and (5) list-of-references type (33:i).

Sally Poundstone who made a study of methods of collecting reference statistics in public libraries, states,

Public library reference work seems to fall into these main categories: questions answered for patrons in the library; services provided for patrons in the library; questions answered by telephone; questions answered by mail (43:2750).

Her study dealt with the manner in which the question was answered in the public library.

In The Measurement and Evaluation of Reference Services,

Rothstein concludes:

The questions posed to reference librarians in public libraries are potentially of infinite variety. . . . In the various public libraries where they have been classified by subject, they seem to concentrate heavily in the social science (D. C. 300's), history and biography (D. C. 900's) and the sciences pure and applied (D. C. 500's and 600's) and for information relating to the present and near past at that (45:463).

As with Poundstone, Rothstein's study involved the questions of the patrons in public libraries.

Summary of the Review of Literature

Of the studies discussed, the only one dealing with reference questions asked by elementary school students was reported by Carpenter, and was done prior to 1935. The tabulation of questions was handled by the Superintendent of Libraries and the assumed answers were typed according to likely sources, presumably because the teacher-librarians were not sufficiently trained to help the students find the answers.

The other study about school library questions was done by Davis and related to students in a senior high school. Neither this study, done before 1942, nor the study reported by Carpenter is up-to-date, and might not reflect the findings done in a modern school library, with its newer media and professional staff. Orsini points out that new research is necessary when she states:

Taking into consideration the fact that we are in the midst of a knowledge explosion and a population explosion and the fact that more money is being spent on library materials than ever before, children's librarians must reevaluate the quality of reference service given to children (40:62).

These are the only related studies to be found, and none of them deal specifically with the reference questions asked by students in an elementary school library, and the specific tools used to answer these questions.

CHAPTER IV

PROCEDURES OF THE STUDY

I. PRELIMINARY PROCEDURES

Background

Mt. Stuart School is located in Ellensburg, Washington, a town of 14,400. A mainly rural community with cattle and logging industries, it is also the home of Central Washington State College. Mt. Stuart had an enrollment of approximately 450 students in 1970, of which 89 were third grade students, 66 were fourth grade students, and 59 were fifth grade students. Since this study pertained to only those three grades, the total number of students involved was 214. (The fifth graders attended camp away from school for one week during the study, so for one week the number was 155.)

The library, centrally located in the almost new one-story building, had a friendly, relaxed atmosphere. The students were well versed in library skills, and were able to check out their own library materials. When they were finished, the students independently checked in these materials, and returned them to the proper place on the library shelf. Due dates were not used. Flexible scheduling was encouraged. Teachers could reserve the library for an hour if they so desired. Even if a group were in the library, other students were encouraged to use the facilities at the same time.

The Form

The form used for this study (See Appendix A) was devised so that the students could comprehend and complete the information alone, if necessary. The upper blue area above the double line was to be filled out by the student, the librarian, or the investigator. It had blanks for the student's name, grade and sex. His question was recorded as quoted if possible. The tools used for the research were listed. The student could then underline his choice of "all," "some," or "none" for the amount of information he found, and "yes" or "no" if he needed assistance. The lower green area was planned to facilitate the tabulation of the information. Dewey Decimal Numbers and the types of reference tools were listed so the investigator could quickly check each form.

The forms were explained to the teachers and principal, but not to the students. Some students might voluntarily come to the library due to their interest in the form itself, and thus misrepresent the facts. As Hillway notes, "By the very fact that they are volunteers, they do not accurately represent the population under study" (34:60). Since the investigator had been assisting the school librarian prior to this study, the students were at ease in her presence. In order to record the questions of the students working independently, the librarian or investigator mingled among the students and asked each one what his question was. Many brought their questions directly to the librarian.

II. THE STUDY

The Questions

During the seven-week period of this study, ninety-one questions were asked by 214 students. Some were multiple questions. Many were "information about" questions. Others were the same question asked by groups of students. Following are the lists of questions asked by the third, fourth, and fifth grade students. They are classified according to the ten classes of Dewey Decimal Classification, with the exception of the 900's, which are further classified to show the number of geography questions (910-919), the number of biography questions (920-929), and the number of history questions (930-999).

Dewey Decimal 100-199 No questions.

Dewey Decimal 200-299 No questions.

Dewey Decimal 300-399 Four questions were asked, or 4.4 per cent of the total.

1. Do you have anything about the pioneer's covered wagons?
2. Information on merchant marines.
3. What is Law Day?
4. Do you have any books on clipper ships?

Dewey Decimal 400-499 Eleven questions were asked, or 12.1 per cent of the total.

1. What is the meaning of the word "bridge" in the case of bridging the gap in education?
2. I want a book in Spanish that has Cinderella or Sleeping Beauty in it.
3. How do you pronounce, "Tanzania"?

Dewey Decimal 400-499 (continued)

4. What do "characters" and "detectives" mean in the sentence, "Who were the characters and detectives in the mystery you are reading?"
5. What do factor and product mean?
6. Is there such a word as "wordparts"?
7. What is the difference between infinity and guguplex?
8. What does "biped" mean?
9. What the word pioneer word menes [sic]?
10. What does the word pioneer mean?
11. What does the word pioneer mean?

Dewey Decimal 500-599 Thirty-one questions were asked or 34

per cent of the total.

1. Is light waves or particles?
 2. Does the moon circulate around the earth?
 3. Information about chimpanzies.
 4. What do deer eat?
 5. How big is the sun in diameter?
 6. Information on neon-tetras' breeding habits.
 7. Anything on beavers.
 8. Rhinoceros: What do they eat? Where do they live?
- Can one be a good pet?
9. Information on rattlesnakes.
 10. Crab spider: What does he eat? How does he move?
- Habits in general.
11. How many baby fish do guppies lay? How do they take care of them?
 12. What do monkeys eat?
 13. What are the lion's habits?
 14. What are the spider's habits?
 15. Ticks: What they do, do they lay eggs? What color are they? How big are they? How does a tick live?
 16. Which is smaller, Mercury or Pluto?
 17. What kind of animal is a penguin?
 18. Where do you find books about snakes or lizards?
 19. I want to know about bears.
 20. Need A-V materials on frogs.
 21. A group of third grade boys wanted information on how to catch frogs and make an aquarium.
 22. Information about the life cycle of eels.
 23. Information about falcons.
 24. Some third-grade boys had some frog eggs and wanted to know how to take care of them.
 25. Do you have any rock books? (What would happen to crushed lava rock if it were exposed to heat? Several boys had some and wanted to light a match to it.)
 26. Information about the vampire bat.

Dewey Decimal 500-599 (continued)

27. Information about the musk ox.
28. Information for a debate between boys and girls on light waves or light particles.
29. What kind of bug is this? (A camel cricket)
30. Something on rabbits.
31. Information about rabbits.

Dewey Decimal 600-699 Five questions were asked, or 5.5 per cent of the total.

1. What is first aid? What's the cause of first aid?
2. Information available about dams.
3. What disease is the most serious, and what is its cure?
4. Why, if the stomach can digest metals, does it not dissolve itself?
5. Diphtheria: Symptoms, incubation period, where germ is in the body.

Dewey Decimal 700-799 Three questions were asked, or 3.3 per cent of the total.

1. Do you have anything on the Indianapolis 500? (He wanted a side view of a racing car to use to make a model for the Cub Scout race car derby.)
2. Something on whittling.
3. I would like a book about crocheting.

Dewey Decimal 800-899 Seven questions were asked, or 7.7 per cent of the total.

1. Books by Jack London.
2. Poems by Carl Sandburg.
3. Need a poem for class.
4. Need any poem for class.
5. Need an animal poem.
6. Need a poem about an old man for class.
7. Need a poem about any animal.

Dewey Decimal 900-909 One question was asked, or 1.1 per cent of the total.

1. Information about the Alaskan earthquake of 1964.

Dewey Decimal 910-919 Twelve questions were asked, or 13.2

per cent of the total.

1. Is there a State of Iowa?
2. Where is Spirit Lake?
3. What is the difference between the heights of Mt. Rainier? Also Mt. Stuart, Mt. Chamberlain, and Mt. Everest.
4. Need product maps of Minnesota.
5. What products does Iowa have?
6. Products of Vermont State.
7. To whom do you write in the State of Texas to get information on the State?
8. What is the length and width of the State of Mississippi?
9. What is the largest city in Mississippi?
10. Research on Kansas.
11. What are the products in the States of Missouri and Wisconsin?
12. What products does Iowa have?

Dewey Decimal 920-929 Thirteen questions were asked, or 14.3

per cent of the total.

1. Looking for famous Negroes and something about them.
2. Would like to find a famous Negro for a report.
3. Where could I find Willie Mays? Do I look in a new book?
4. Information on Benjamin Davis, Negro officer?
5. Information on Molly Pitcher. [pseudonym]
6. Contributions of Negro.
7. Contributions of Negroes.
8. Information on Harriet Tubman.
9. Who was Martin Luther King?
10. Two boys asked the librarian to help them settle a bet. One said that Bonnie and Clyde were shot, and the other said they were hung. Could she help them?
11. Contributions of special Negroes, especially Martin Luther King, Jr.
12. Information on Selas [Cyrus] McCormick.
13. Cyrus McCormack.

Dewey Decimal 930-999 Four questions were asked, or 4.4 per

cent of the total.

1. What pioneers took on their trip.
2. What is a pineer [sic] and how they made their way thro Oregon Tril [sic].
3. Who were the first pioneers?
4. How did they [pioneers] find the food in today? [sic]

Table 1

Number of Questions in the Classes of the
Dewey Decimal Classification

Dewey Decimal Classification	Summary	Number of questions	Per cent of total
100-199	Philosophy and related disciplines	0	0
200-299	Religion	0	0
300-399	The social sciences	4	4.4
400-499	Language	11	12.1
500-599	Pure sciences	31	34.0
600-699	Technology (Applied sciences)	5	5.5
700-799	The arts	3	3.3
800-899	Literature and rhetoric	7	7.7
900-909	General geography and history	1	1.1
910-919	General geography	12	13.2
920-929	General biography	13	14.3
930-999	General history	<u>4</u>	<u>4.4</u>
Total		91	100.0

The Answers

The students were asked how much of their answer was found. On the form they could underline "all," "some," or "none" in order to indicate the degree of satisfaction they felt with their answer. Of the eighty-seven forms, "all" of the answer was found by thirty-six students, or 41.4 per cent. Partial answers were indicated by the thirty-three, or 37.9 per cent, who underlined "some." Only one person, or 1.2 per cent, underlined "none," and seventeen, or 19.5 per cent, did not underline any of the three choices.

Table 2
Degree of Satisfaction with
Answer by Students

Extent of answer found	Number	Per cent
All	36	41.4
Some	33	37.9
None	1	1.2
Blank	<u>17</u>	<u>19.5</u>
Total	87	100.0

The Tools Used

The answers to the students' questions were found in 113 tools. The most popular tools were the encyclopedias, which were used thirty-nine times, or over one-third more than any other tool. The second most-used, with thirty-two choices, were books from the library shelf. Many times the card catalog was consulted in order to find these books.

The third most-used tools were the dictionaries. They were consulted eleven times. The fourth most-used were the geographical tools, with seven choices. A six-way tie among the yearbooks, the biographical tools, the handbooks, the serials, the audiovisual sources, and the books brought from the students' classrooms claimed the fifth place. Each was used three times. Manuals and indexes were chosen twice each, ranking sixth. The vertical file and the bibliographies were consulted once each. The only type of tool that was not used was the directory of agencies.

All but four of these reference tools were found at Mt. Stuart School. Two were located in Bouillon Library, Central Washington State College. One was the New York Times Index, which ascertained how Bonnie and Clyde were killed, and the other was the Book of States, which had the data listing which agency to write for Texas State information. From her home, the investigator brought a Seattle Daily Journal of Commerce, which explained Law Day, and also a crochet manual.

More than two-thirds (66.9 per cent) of all the tools used could be classified as general reference tools. Less than one-third (33.1 per cent) were subject reference tools.

Table 3
Types of Reference Tools Used

Type of tool	Number of times used	Per cent
Encyclopedias	39	34.50
Books from library shelf	32	28.30
Dictionaries	11	9.70
Geographical tools	7	6.20
Audiovisual sources	3	2.65
Biographical tools	3	2.65
Books from classrooms	3	2.65
Handbooks	3	2.65
Serials	3	2.65
Yearbooks	3	2.65
Indexes	2	1.80
Manuals	2	1.80
Bibliographies	1	.90
Vertical file	1	.90
Directories of agencies	<u>0</u>	<u>0</u>
Total	113	100.00

Assistance Needed by the Students

The students could check "yes" or "no" to show whether they needed help with their reference work. Assistance was required by fifty-eight, or almost two-thirds of the students. Only twenty-nine, or less than one-third, required no assistance. Two did not check either "yes" or "no."

Table 4
Number of Students Requiring
Research Assistance

Need of assistance	Number	Per cent
Yes	58	65.2
No	29	32.6
Blank	<u>2</u>	<u>2.2</u>
Total	89	100.0

Information about Students Asking Questions

A section of the form was designed to gather information about the students who were asking questions in the school library. This information included name, grade, and sex. Primarily this information was included in order to reach the student in case an immediate answer could not be found for his question. Actual tally of the number of boys and girls asking questions, and in what grade they were proved to be difficult because several questions were asked by groups of students, or a whole class. However, the number of boys and girls asking questions was equal. Fifty-four boys and fifty-four girls asked questions. More

questions were asked by fifth graders, approximately forty-three questions, even though only 27.6 per cent of the total students involved were in the fifth grade.

Table 5

Enrollment and Questions Asked in Each Grade

Grade	Number of students	Per cent of total	Number of questions (approximate)	Per cent of total
3	89	41.6	35	32.4
4	66	30.8	28	25.9
5	59	27.6	43	39.8
unknown	—	—	<u>2</u>	<u>1.9</u>
	214	100.0	108	100.0

CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

I. SUMMARY

Very little research has been done in the area of reference service for children. This study was done in order to find out what types of questions were asked in an elementary school library, if these questions were answered, in what tools the answers were found, and if the students needed assistance in their research. The questions were limited to those asked during a seven-week period by the third, fourth, and fifth grade students attending Mt. Stuart Elementary School, Ellensburg, Washington.

The total number of questions asked by the students was ninety-one; thirty-one in pure science, thirteen in general biography, twelve in general geography, and eleven in language. Surprisingly, the social science classification had only four questions.

The answers to the questions were found to complete satisfaction by thirty-six students, partial answers were found by thirty-three students, and none of the answer was indicated by one student. Degree of satisfaction was not indicated by seventeen students, presumably because they forgot about the form after they did their research.

The most popular tools used were the encyclopedias, which were used thirty-nine times. The second most-used tools, with thirty-two choices, were the books from the shelves. The third most-used tools

were the dictionaries, with eleven choices, and the fourth most-used tools were the geographical tools. Although the audiovisual tools were used only three times during this study, their future use should be much greater due to the fact that the librarian was in the process of classifying and cataloging them. At that time, use was limited to a few lists and the librarian's memory of available materials.

Students requiring assistance with their reference questions numbered fifty-eight, or almost two-thirds of the students. Only twenty-nine, or less than one-third of the students, required no assistance.

Although the number of students in the fifth grade accounted for only twenty-eight per cent of the students involved, the fifth grade students asked forty per cent of the questions. The questions asked were evenly divided between girls and boys.

II. CONCLUSIONS

The fact that a student asked a question may be more important than the fact that he did or did not find all of his answer every time. Many times, finding the "right" answer is stressed to the point that thinking about the question and answer is omitted. As Simms points out:

Somewhere, in the pupil's educational history, his questioning approach to learning is stifled by intensive verbalization, until he becomes uncomfortable when he is faced with an "open-ended" question, and anxious when he cannot find firm, clear answers (50:371).

The encouragement of questioning minds is more important than the memorization of an answer. Sims commented on the need to capitalize encouragement:

Our duty then as school librarians is twofold; the first and lesser duty, is to provide the right environment of books for the true development of our children; the second, which we share with all teachers, is to substitute for the false security of "knowledge" a questioning and courageous mind that accepts the insecurity of not knowing the answer. A school library that serves to encourage the pupils' questions, and by doing so leads on from problem to problem, may well make its greatest contribution to the development of the children who use it (50:371).

A school librarian, along with the rest of the school staff, can help to develop this questioning mind. The proficient librarian welcomes questions. The students know that they can ask for her help and that they can come to the library in order to answer their questions. Note that sixty-five per cent of the students required assistance in their research. An inquiring mind can be stifled by not knowing how to find answers. It can also be stifled by having to wait; therefore, flexible scheduling, along with a full-time librarian, must be instituted. How many of the ninety-one questions would have been asked if the student had been required to wait for his scheduled library period?

Many school libraries are without librarians. The stereotyped school librarian is on duty not to serve, but to clerk. Many schools make little use of their libraries, because books are outdated and out of reach, and the quarters are small and inadequate. These schools are missing a great opportunity. How exciting it is to see minds experimenting and growing. Shera made this interesting comment:

A school is not a kindergarten, a substitute for parental nurture, a church, an athletic club, a perpetual Roman holiday, or a device for the elimination of juvenile delinquency; it is an institution for promoting the growth, development, and enrichment of man's intellectual powers. It is the proving ground of the mind, and the library is its arsenal. We suffer defeat in the unceasing battle against ignorance largely because we have not learned how to use its weaponry (48:124).

III. RECOMMENDATIONS

Since no other studies could be found about reference questions asked in the elementary school library, this study is of limited value, in that it deals with one school, and a brief period of time. Similiar studies are needed for a basis of comparison. Other recommendations for follow-up studies might be the following:

1. Expand this study over a longer period of time for the purpose of discovering the most frequently asked questions, and the variance of questions asked during the school year.

2. Expand this study to include an area which would differentiate between curriculum-oriented questions and interest-oriented questions.

3. Expand this study to include other schools, in order to determine the likenesses and differences in questions asked in various school libraries.

4. Expand this study to include the questions from students in the primary grades, thus promoting more questions and interest from this area.

5. Expand this study to provide a basis for recommending needed reference books and multi-media in a school library.

BIBLIOGRAPHY

1. Aceto, Vincent. "The Children's Librarian--Passive Provider or Active Agent for Change?", RQ, 7:74-81, Fall, 1967.
2. American Association of School Librarians. Standards for School Programs. United States of America: American Library Association, 1960.
3. Baron, Claire L. "Scholars Can Be Made As Well As Born," Wilson Library Bulletin, 39:261, 266, November, 1964.
4. Barton, Mary Neill, and M. V. Bell. Reference Books. 6th ed. Baltimore: Enoch Pratt Free Library, 1966.
5. Bishop, Edith P. "Reference Questions--How Well Do We Answer Them?", Library Journal, 85:3159-61, September 15, 1960.
6. Bomar, Cora Paul. Reference Materials for School Libraries. 3d ed. Raleigh, N. C.: Department of Public Instruction, 1968.
7. Butler, George E. "Using the Elementary School Library", Education 84:213-16, December, 1963.
8. Callen, Cecelia M. "Library Research in the Primary Grades?", Pennsylvania School Journal, 118:22-25, September, 1969.
9. Carpenter, Helen S. "What is Back of Efficient Reference Work in an Elementary School Library?", Wilson Bulletin, 10:15-19, September, 1935.
10. Conference on Creative Use of Reference Materials, Lincoln, Nebraska, and Conference on Effective Use of Reference Materials, Coral Gables, Florida. Using Reference Materials Effectively in Schools. Chicago: Field Enterprises Educational Cooperation, 1960.
11. Davis, M. L. Reference Questions in a Senior High Library. New York: Columbia School of Library Service, 1942. (Mimeographed on microfilm).
12. Dewey, Melvil. Dewey Decimal Classification and Relative Index. 9th abridged ed. New York: Forest Press, Inc., 1965.
13. Dobson, Marjorie. "Stimulating the Use of Reference Materials", Education, 84:198-201, December, 1963.

14. Dyer, C., and E. D. Goldstein. The Role of School Libraries in Education. Hamden, Connecticut: The Shoestring Press, 1970.
15. Ehrhardt, Harryette B. "If We Don't, They Won't", The Reading Teacher, 22:377-81, January, 1969.
16. Ellsworth, Ralph E. The School Library. New York: The Center for Applied Research in Education, Inc., 1965.
17. Fargo, Lucile F. Activity Book for School Libraries. Chicago: American Library Association, 1938.
18. _____. The Library in the School. 3d ed. Chicago: American Library Association, 1939.
19. _____. The Library in the School. 4th ed. completely revised and rewritten. Chicago: American Library Association, 1947.
20. _____. The Program for Elementary School Library Service. Chicago: American Library Association, 1930.
21. Fay, Leo, Thomas Horn, and Constance McCullough. "Preparing Children to Use Reference Books", The Education Digest, 27:39-41, February, 1962.
22. Fleming Frances. "Schools and Public Libraries Work Together in Maryland", Libraries and Youth: Children and Young People, A Symposium, ed. Dorothy A. McGinniss. Syracuse, New York: School of Library Science, Syracuse University, 1968.
23. Freund, Roberta Bishop. Open the Book. New York: The Scarecrow Press, 1962.
24. Gates, Jean Key. Guide to the Use of Books and Libraries. New York: McGraw-Hill Book Co., 1962.
25. Gaver, Mary Virginia. Effectiveness of Centralized Library Services in Elementary Schools. 2d ed. New Brunswick, New Jersey: Rutgers University Press, 1963.
26. _____. "Every Child Needs a School Library", Of, By, and For Librarians. Selected by John David Marshall. Hamden, Connecticut: The Shoestring Press, 1960.
27. _____. "The School Library: An Intellectual Force?", Library Journal, 92:1989-91, May 15, 1967.
28. Gengler, Charles R. "Developing Skills for Problem-Solving: A Study." School Libraries, 15:31-35, May, 1966.
29. Gillespie, John. "How to Build a Basic Reference Collection", Grade Teacher, 83:74-75, November, 1965.

30. _____. "The 7 'Knows' of Choosing Books for Your School", Grade Teacher, 83:71, 114, November, 1965.
31. Harrod, Leonard Montogue. Library Work with Children, ed. Evelyn J. A. Evans. London: Andre Deutsch, 1969.
32. Henne, Frances. "Learning to Learn in School Libraries", School Libraries, 15:15-23, May, 1966.
33. Hieber, Caroline E. An Analysis of Questions and Answers in Libraries. Bethlehem, Pennsylvania: Center for the Information Sciences, Lehigh University, June, 1966.
34. Hillway, Tyrus. Handbook of Educational Research. Boston: Houghton Mifflin Co., 1969.
35. Katz, William A. Introduction to Reference Work: Vol. I, Basic Information Sources. New York: McGraw-Hill Co., 1969.
36. Lowrie, Jean E. "What Goes on the Reference Shelf of the Library", The Instructor, 73:53-55, November, 1963.
37. Mitchell, Malcolm G. "What's Going on in the School Library?", Phi Delta Kappan, 45:44-47, October, 1963.
38. McGuire, Alice Brooks. "Research Among the Very Young", RQ, 7:68-71, Winter, 1967.
39. Orsini, Lillian K. "Reference Service to Children", RQ, 7:60-62, Winter, 1967.
40. _____. "Reference Service to Children--Past, Present, and Future", Advances in Librarianship, ed. Melvin J. Voight, Vol. I, New York: Academic Press, 1970.
41. Perkins, Ralph. The Prospective Teacher's Knowledge of Library Fundamentals. New York: The Scarecrow Press, 1965.
42. Polette, Nancy. "First Grade Research and Reference Work", School and Community, 54:7, May, 1968.
43. Poundstone, Sally. "What Records Do You Keep on Reference Work?", Library Journal, 82:2750-53, November, 1957.
44. Reynolds, Judith A. "A Redefinition of 'Reference Materials'", RQ, 9:149, Winter, 1969.
45. Rothstein, Samuel. "The Measurement and Evaluation of Reference Service", Library Trends, 12:456-72, January, 1964.

46. Saunders, Helen E. The Modern School Library: Its Administration as a Materials Center. Metuchen, New Jersey: The Scarecrow Press, 1968.
47. Shakin, Grace M. "Teaching Children to Use Reference Books", Instructor, 71:92-93, November, 1961.
48. Shera, Jesse H. "Staffing Library Services to Meet Students Needs--Library Education", Student Use of Libraries. Chicago: American Library Association, 1964.
49. Shores, Louis. "The Other Half--Where to Find It", Education, 84: 202-206, December, 1963.
50. Simms, T. H. "Teaching Through the Library", School Librarian and School Library Review, 11:365-71, March, 1963.
51. Swarthout, Charlene R. The School Library as Part of the Instructional System. Metuchen, New Jersey: The Scarecrow Press, 1967.
52. Turner, William E. "Ungraded Social Studies through a Library Approach", Elementary School Journal, 68:26-30, October, 1967.
53. Warncke, Ruth. "It Takes All Kinds", Libraries and Youth: Cooperation to Give Service to Children and Young People, A Symposium, ed. Dorothy A. McGinniss. Syracuse, New York: School of Library Science, Syracuse University, 1968.
54. Westby, Barbara Marietta (ed.). Sears List of Subject Headings. 9th ed. New York: H. W. Wilson Co., 1965.
55. "What Goes on in the School Library?", Education Digest, 26:32-34. January, 1961.
56. Williams, Dorothy L. "Adventures in Finding Out", Wilson Library Bulletin, 43:456-57, January, 1969.

APPENDIX A

APPENDIX A

FORM

Name _____ Boy _____ Girl _____

Grade _____

Question _____

Did you find _____ of the answer? _____
all, some, none

In what book or books did you find the answer?

Did you need any help? yes _____ no _____

_____ 100

_____ 200

_____ 300

_____ 400

_____ 500

_____ 600

_____ 700

_____ 800

_____ 900-909

_____ 910-919

_____ 920-929

_____ 930-999

_____ General Reference Tool

_____ Subject Reference Tool

_____ Dictionary

_____ Supplementary tools

_____ Encyclopedia

_____ Yearbooks

_____ Biographical tools

_____ Geographical tools

_____ Directories

_____ Handbooks

_____ Manuals

_____ Serials

_____ Indexes

_____ Bibliographies

_____ A V Sources

_____ Other

[Shelf]

[Room]

[Vertical file]

APPENDIX B

APPENDIX B

REFERENCE WORKS AT MT. STUART ELEMENTARY SCHOOL

1970

- R
011 Children's Catalog. 11th ed. New York: H. W. Wilson Co., 1966.
- R
025.3 Akers, Susan Grey. Simple Library Cataloging. Chicago: American Library Association, 1954.
- R
025.4 Dewey, Melvil. Dewey Decimal Classification and Relative Index. 16th ed. New York: Forest Press, 1958.
- R
030 Pictorial Encyclopedia of American History. Chicago: Children's Press, 1962.
- R
031 Britannica Junior Encyclopaedia. 15 vols. Chicago: Encyclopaedia Britannica, 1970.
- R
031 Childcraft: The How and Why Library. 15 vols. Chicago: Field Enterprises Educational Corp., 1968.
- R
031 Compton's Pictured Encyclopedia. 15 vols. Chicago: F. E. Compton and Co., 1968.
- R
031 Compton's 1961 Yearbook. Chicago: F. E. Compton and Co., 1961.
- R
031 Compton's 1967 Yearbook. Chicago: F. E. Compton and Co., 1967.
- R
031 Kane, Joseph Nathan. Famous First Facts. 3d. ed. New York: H. W. Wilson Co., 1964.
- R
031 National Audubon Society. The Audubon Nature Encyclopedia. 3 vols. Philadelphia: Curtis Publishing Co., 1965.
- R
031 Our Wonderful World. 18 vols. New York: Grolier, 1965.
- R
031 World Book Encyclopedia. 19 vols. Chicago: Field Enterprises Educational Corp., 1960.
- R
220 Terrien, Samuel. Golden Bible Atlas. New York: Golden Press, 1957.

- R
317.3 Information Please Almanac, 1969. New York: Macmillan Co., 1968.
- R
317.3 World Almanac and Book of Facts, 1960. New York: Doubleday and Co., 1960.
- R
317.3 World Almanac and Book of Facts, 1965. New York: Doubleday and Co., 1965.
- R
317.3 World Almanac and Book of Facts, 1969. New York: Doubleday and Co., 1969.
- R
394.2 Douglas, George William. American Book of Days, rev. by Helen Douglas Compton. New York: H. W. Wilson Co., 1948.
- R
398.2 Botkin, Benjamin Albert (ed.). Treasury of American Folklore. New York: Crown Publishers, 1944.
- R
423 Barnhart, Clarence L. (ed.). The World Book Encyclopedia Dictionary. 2 vols. Chicago: Field Enterprises Educational Corp., 1963.
- R
423 Holt Basic Dictionary of American English. New York: Holt, Rinehart and Winston, 1966.
- R
423 Walpole, Ellen Wales. The Golden Dictionary. New York: Golden Press, 1966.
- R
423 Webster's Third New International Dictionary of the English Language. Unabridged. Springfield, Massachusetts: G and C Merriam Co., 1964.
- R
423 Wright, Wendall W. The Rainbow Dictionary. Cleveland: World Publishing Co., 1959.
- R
424 Browning, D. C., (ed.). Everyman's Thesaurus of English Words and Phrases, rev. from Peter Roget. New York: E. P. Dutton and Co., 1962.
- R
424 Roget, Peter Mark. Roget's International Thesaurus. New York: Thomas Y. Crowell Co., 1964.
- R
500 National Audubon Society. The Community of Living Things. 5 vols. Nankato, Minnesota: Creative Educational Society, 1965.
- R
503 Charles, Ford, (ed.). Compton's Illustrated Science Dictionary. Chicago: F. E. Compton and Co., 1963.
- R
503 Drimmer, Frederick. The Illustrated Encyclopedia of Animal Life: The Animal Kingdom. 16 vols. New York: Greystone Press, 1954.

- R
503 Young People's Science Encyclopedia. 20 vols. Chicago:
Children's Press, 1962.
- R
574 Editors of Life and Lincoln Barnett. The Wonders of Life on
Earth. New York: Golden Press, 1960.
- R
574 Life Editorial Staff. The World We Live In. New York: Time,
1955.
- R
582.13 House, Homer D. Wild Flowers. New York: MacMillan Co., 1935.
- R
598 National Geographic Society. Song and Garden Birds of North
America. Washington, D. C.: National Geographic Society,
1964.
- R
598 National Geographic Society. Water, Prey, and Game Birds of
North America. Washington, D. C.: National Geographic
Society, 1965.
- R
598.29 Audubon, John James. The Birds of America. New York: Macmillan
Co., 1937.
- R
599 National Geographic Society. Wild Animals of North America.
Washington, D. C.: National Geographic Society, 1960.
- R
808 Martignoni, Margaret Elizabeth, (ed.). Illustrated Treasury
of Children's Literature. New York: Grosset, 1955.
- R
808.8 Untermeyer, Bryna and Louis, (eds.). The Golden Treasury of
Children's Literature. New York: Golden Press, 1966.
- R
808.88 Bartlett, John (comp.). Bartlett's Familiar Quotations.
13th and Centennial ed., completely rev. Boston: Little,
Brown and Co., 1955.
- R
910 Shabad, Theodore, and Peter M. Stern (eds. and adapters).
Golden Geographic Encyclopedia. New York: Golden Press,
1958.
- R
912 Debenham, Frank. Global Atlas. New York: Simon and Schuster,
1958.
- R
912 Editors of Life and Rand McNally. Life Pictorial Atlas of
the World. New York: Time, 1961.
- R
912 Goode, John Paul. Goode's World Atlas, ed. Edward B. Espenshade,
Jr. 12th ed. New York: Rand McNally and Co., 1964.
- R
912 Highsmith, Richard M., Jr. (ed.). Atlas of the Pacific
Northwest. Corvallis: Oregon State University Press, 1962.

- R
912 International World Atlas. New York: Rand, McNally and Co., 1964.
- R
912 Rand McNally Cosmopolitan World Atlas. Chicago: Rand McNally and Co., 1959.
- R
912 The World Book Atlas. Chicago: Field Enterprises Educational Corp., 1959.
- R
917.3 National Geographic Society. America's Historylands: Touring Our Landmarks of Liberty. Washington D. C.: National Geographic Society, 1966.
- R
917.3 National Geographic Society. America's Wonderlands. Washington D. C.: National Geographic Society, 1966.
- R
917.3 Udall, Stewart, and the Editors of Country Beautiful. The National Parks of America. New York: G. P. Putnam's Sons, 1966.
- R
920.03 Kunitz, Stanley Jasspon (ed.). Junior Book of Authors. 2d ed. rev. New York: H. W. Wilson Co., 1951.
- R
920.03 Webster's Biographical Dictionary. Compiled by the Merriam Webster editorial staff. Springfield, Massachusetts: G. and C. Merriam Co., 1966.
- R
973 Morris, Richard B. and the Editors of Life. The Making of a Nation. New York: Time, 1963.
- R
973.03 Cavanah, Frances, and Elizabeth L. Crandall. Freedom Encyclopedia. Chicago: Rand McNally and Co., 1968.