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I am submitting herewith a dissertation written by Jane McAmis Sparks entitled "Effect of a Program of Recreational Activities Made Available in a Junior High School Library Upon Use of Library Materials by Students." I recommend that it be accepted in partial fulfillment of the requirements for the degree of Doctor of Education, with a major in Curriculum and Instruction.

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1

EFFECT OF A PROGRAM OF RECREATIONAL ACTIVITIES MADE AVAILABLE IN A JUNIOR HIGH SCHOOL LIBRARY UPON USE OF LIBRARY MATERIALS BY STUDENTS

A Dissertation

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ABSTRACT

The purpose of this study was to determine whether a program of recreational activities made available in the junior high school library, designed to increase student use of the library, would bring about an increase in student use of library material. This study was undertaken as an investigation into a possible method for stimulating student use of the junior high school library, even in the absence of administrator and/or teacher commitment to the library's role as the center of the school's curriculum.

The study was conducted at Christenberry Junior High School in Knoxville, Tennessee, an inner-city school with a textbook centered curriculum and little teacher or student use of the library. A program of recreational activities was made available to the students during the school's lunch period, and students were allowed to go to the library during this time. Before introducing the recreational activities, a record of normal student use of the library was maintained for six weeks. The recreational program was introduced and allowed to operate for four weeks. After the introductory period, the lunch-time library program continued to operate while records were again maintained of normal student use of the library for six weeks. Records were also maintained of the number of items of library material borrowed by each student during both periods of observation.

The data indicated that even though the number of student visits to the library did increase during the second data collection period, the increase was not statistically significant, but there was a

significant increase in the number of items of library material borrowed by the students. Additional findings included the information that the borrowing of library material was lowest during each observation period for boys, with only 28% of the seventh grade boys borrowing material during the first period and 33% of the ninth grade boys borrowing material during the second period. The group with the highest percentage of students who borrowed material in both observation periods was eighth grade girls, with 58% of this group borrowing material during the first period and 75% of the group borrowing material during the second period.

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CHAPTER I

INTRODUCTION TO THE STUDY

I. STATEMENT OF THE PURPOSE

The purpose of this study was to determine whether a program of recreational activities made available in the junior high school library, designed to increase student visits to the library, would bring about an increase in student use of library materials.

II. THE PROBLEM

School libraries in recent years have been expanding and changing, evolving into instructional media centers, full of a wealth of materials in a variety of formats, carefully chosen to meet the needs of teachers and students. In many schools, the role played by the school library program in the curriculum of the school has also expanded and has become, according to Davies (1974), "a source and a force for educational excellence . . . an integral support component of the total teaching-learning enterprise."

The facilities and media collections of school libraries were enlarged and upgraded during the years of federal funding assistance beginning with the Elementary and Secondary Act of 1965. The newly updated school library was then referred to by many new names, including instructional materials center, instructional media center, and school library media center, in order to signify the new philosophy guiding the library and the school. No longer was the role

of the library to be that of a somewhat isolated book circulation service, but the program was to become an inseparable component of the total educational program of the school (Davies, 1974). Davies also stated, "Accountability has sounded the death knell for any school's library functioning in cloistered seclusion from the instructional process" (Davies, 1974). Much of the professional literature published during the decade of the 1970s expanded on the theme of the role of the library and the librarian at the heart of the instructional program of the school.

Yet, researchers found, in studying use of the school library, that the school library often remains a separate part of the school (Jay, 1970; Johnson, 1975; Wimberly, 1975; etc.). In large measure because of the school's curriculum, the library remains a rather separate institution at the periphery of the educational program. When the curriculum of a school does not require an instructional materials center as Davies describes, it is difficult for the library to serve as one (Welch, 1975; Wimberly, 1975).

The curriculum of many schools has not evolved to become more responsive to the needs of individual children in a complex society, or to reflect changes in educational theory. The Commission on Instructional Technology reported that "often instruction is restricted to the teacher talking, and the students listening to the teacher or reading their textbooks" (Davies, 1974). Other instructional media are often not needed by teachers and students in a school where the textbook is the most important or the only instructional tool. Other elements of a school program which can act as deterrents to an

integrated library and instructional program are the lack of provisions for individual student differences in class assignments, the lack of an overall plan for learning from grade to grade, and overemphasis on the learning of isolated facts rather than an emphasis on the learning of skills necessary for information gathering and problem solving (Davies, 1974).

The problems of school libraries serving schools with traditional curriculums need to be recognized and studied with fresh approaches. Libraries in such schools may perform different functions and serve students and faculty members in different ways, but, as Rossoff (1961) stated, "the school library is an indispensable unit in any school regardless of its educational philosophy." He believes the library in traditional schools serves "as an instrument for enrichment, student guidance and escape from the formal atmosphere of the classroom."

The library program in the traditional school may be focused more sharply on direct service to the student and the student's personal needs rather than on his/her curricular needs. Whatever information needs the student might have, one of the most difficult tasks of many librarians is to find methods for bringing the material and the user together. The problem can be made even more difficult by a low level of student attendance in the library. Unless teachers are very active in providing classroom collections of material for student use, students themselves must feel comfortable enough about going to the library for any use of library materials to take place.

School libraries can be operated with a schedule of class visits. This is especially true in elementary schools, where each class may be scheduled for a library period once or twice a week. In some secondary schools it seems that the library's primary function is to serve as an extension of the study hall. Even though this practice is deplored in professional literature, students do have access to the library during their study hall period (Fargo, 1947). However, some secondary schools have no study hall periods and no scheduled library periods. In this case, the library is used by class groups when teachers request time, or by individual students who have permission to leave class or who go to the library between classes. In many of these schools, library use by students is extremely limited (Wofford, 1961).

Research studies have been done concerning the problem of student use of the library. Many of these studies have reached the conclusion stated by Cole (1963), "in the final analysis, it is the classroom teacher who actually sees that the library resources are used extensively, if they are." This aspect of the teacher's influence on student use of the library has been discussed in professional literature for many years. Yet the reality remains that there are few teachers who make effective use of the library resources or encourage students to do so (Lounsbury, 1964). In schools with a limited amount of student use of materials, there is probably little teacher use of materials either.

The problem of low levels of library use is a significant one. Many librarians, especially in the public library, feel that by offering

programs such as concerts, hobby shows, pet shows, craft demonstrations, etc., potential library patrons will be lured to the library, will like what they see, and will return to use library materials. This type of activity is used especially with children and young adults. It is felt that if the students come to the library and have a positive experience, they will return (Delaware, 1973).

The level of student use of the library seems to be lowest many times in schools which serve large proportions of disadvantaged students (Benford, 1971). These students may be discouraged from visiting the library by the very nature of most school libraries. In an address to the Michigan Association of School Librarians, Weaver (1971) stated:

> The library atmosphere has traditionally been one which was inviting to the youngster with highly developed cognitive skills. An austere, businesslike atmosphere prevails. Little emphasis has been given to the matter of how to make the library a supportive, accepting open place where the youngster could "feel good" . . . .

A need exists for a program designed to create such an environment in the secondary school library, to give students positive experiences in the library with the belief that student use of library materials would increase because of the program.

Professional attention needs to be directed to studying ways for libraries in all types of schools to best serve the needs of their own students and teachers, whether the library exists in a school with a philosophy which demands an instructional media center at the heart of the curriculum or in a school where the library serves as an oasis for student enrichment and guidance.

III. IMPORTANCE OF THE STUDY

The conclusions of this study should help document the gap between the library's position in the school as assumed in the professional literature and that which actually exists, so that more effective measures can be developed for dealing with actual problems confronted by school librarians. The conclusions of this study should suggest a method for stimulating student use of the library, even in the absence of administrator and/or teacher commitment to the library's role as the center of the school's curriculum.

IV. HYPOTHESES

The hypotheses formulated were as follows:

1. A program of recreational activities provided for students in the junior high school library will result in an increase in student visits to the library.
2. A program of recreational activities provided in the junior high school library will result in an increase in student use of library materials.

V. THE DESIGN

This experiment was conducted at Christenberry Junior High School in Knoxville, Tennessee. Of the nearly 420 students, a large proportion could be classified as disadvantaged. The school serves a neighborhood changing from large single family homes to one of small apartments, and a large low-income housing project. The

school's schedule did not include a study hall and very few teachers used the library for scheduled class visits. The amount of library usage by teachers and students was very low (see Table 1).

The lunch period at Christenberry was 90 minutes long, with three lunch shifts of 30 minutes each. Students were free to go to the lunchroom, auditorium, or outside for their 30 minute period. Except for 5 minute intervals between classes, the lunch period was a student's only free time during the day.

A program of recreational activities was provided in the library during the school's lunch period. The researcher conducted a study using the one group pretest-posttest design.

The study was conducted in the following manner:

1. Measurement of library use by students was taken each day for a 6 week period before the experimental treatment was introduced. This measurement included:
   a. number of students who entered the library
   b. purpose of student visits to the library
   c. number of items of library material borrowed
   d. number of students who borrowed material
   e. period of the school day when students entered the library
2. A program of recreational activities was made available for students during the 90 minute lunch period for 10 weeks.
3. At the end of 4 weeks, a period of time to allow students to become comfortable with the program, measurement of use

TABLE 1

CIRCULATION REPORTS FROM THE 10 JUNIOR HIGH SCHOOLS OF THE KNOXVILLE SCHOOL SYSTEM, SEPTEMBER 1979 TO DECEMBER 1979

	September			October			November			December			
	Enrollment	Number of Items Borrowed	Number per Student	Enrollment	Number of Items Borrowed	Number per Student	Enrollment	Number of Items Borrowed	Number per Student	Enrollment	Number of Items Borrowed	Number per Student	Average No. of Items Borrowed per Student
School A	356	1954	5.48	360	1849	5.14	339	1502	4.43	345	1751	5.08	5.02
School B	750	1992	2.65	701	3943	5.62	765	3095	4.05	681	1599	2.35	3.66
School C	943	2255	2.39	940	3160	3.36	935	2927	3.13	926	1704	1.84	2.68
School D	817	1300	1.59	808	1658	2.05	821	1842	2.24	817	1765	2.16	2.01
School E	426	609	1.43	423	959	2.26	421	834	1.98	384	716	1.86	1.88
School F	797	1561	1.96	794	1590	2.00	787	1701	2.16	736	855	1.16	1.82
School G	365	843	2.31	341	459	1.35	375	479	1.27	342	301	.88	1.45
Christenberry	413	568	1.37	407	785	1.92	411	589	1.43	421	372	.88	1.40
School H	285	267	.94	294	202	.69	292	442	1.51	262	136	.52	.92
School I	407	83	.002	405	256	.63	409	226	.55	412	328	.80	.546

of the library during the rest of the school day was again taken each day for a 6 week period.

4. Comparison of the two sets of measurement was made by descriptive analysis.

VI. LIMITATIONS

Because an intact group and not a random sample was used as the experimental subjects for this study, it cannot be assumed that the findings of the study will apply to another population.

VII. ORGANIZATION OF THE STUDY

Chapter I has presented the statement of the problem, the purpose of the study, the hypotheses and the method of procedure.

Chapter II presents a review of related literature.

Chapter III describes the methods used in gathering the data and the treatment procedures.

Chapter IV presents an analysis of the data.

Chapter V includes a summary of the findings, conclusions and recommendations for further study.

CHAPTER II

REVIEW OF RELATED LITERATURE

I. INTRODUCTION

The role of the school library in the curriculum of the school and the influence of the library program on the development of students' lifetime habits of information gathering and use have long been concerns of librarians and other educators. Lucile Fargo, an author of early basic textbooks for school librarians, believed that the school library program could have a lasting influence upon students. She listed as one of the aims of the library program: "To encourage lifelong education through the use of library resources." She stated that "to a far greater extent than may be realized, adult education begins in the school library" (Fargo, 1947). Tauber reported 20 years later, during a conference on the use of library materials for instructional purposes, that this objective of the library program had not changed (Tauber, 1968).

In order for the library to function as an integral part of the student's educational career, it must be recognized as a vital component of the curriculum of the school. There must be opportunities for the students and the library resources and services to be brought together (Rossoff, 1971).

The purpose of this study was to determine whether a program of recreational activities made available in the junior high school library and designed to increase student visits to the library

would bring about an increase in student use of library materials. Student use of school libraries and the level of library services offered and accepted by students are determined by a variety of factors. Two of these factors are the attitude and philosophy of the school administration, and the instructional philosophy of the faculty (Rossoff, 1961).

Literature related to the question of student use of school libraries, especially in a junior high school, is presented in this chapter in four sections: 1) the ideal role of the library in the junior high as presented in professional literature; 2) the actual role of the library in some school programs; 3) teacher influence of student use of the library; and 4) student use of libraries.

II. THE IDEAL ROLE OF THE LIBRARY IN THE JUNIOR HIGH AS PRESENTED IN PROFESSIONAL LITERATURE

As Rossoff (1971) stated, "Everyone agrees in principle that no matter how constituted, the library is at the center of the school's instructional program." This philosophy has been presented and discussed in professional literature for many years.

In 1924, during an address to the School Library Section of the American Library Association, the following description of a junior high library program was given by James Glass, Director of Junior High Schools, Pennsylvania.

> The place of the library in the junior high school building is at the front center located at a point most easily accessible to the greatest number. . . . Its needs in equipment of furniture, books, periodicals, supplementary instructional aids, and decoration should take precedence over the needs of

> every other activity in school administration. . . . The faculty is served by the library, the pupils are served, every classroom, every subject in the program of studies, every assembly program, every homeroom activity, every curricular interest, each social activity, in short, the whole life is ministered to by the library (Glass, 1925).

The library is often called the "hub of the school" or the "hub of the curriculum" by those who wish to convey their belief in the importance of the library to the school's program (Nelson, 1970). One of the earliest references to this idea can be found in an article by Celeste Slauson, written in 1929. In writing about the junior high school library program she stated, "the library becomes the 'hub of the wheel from which all spokes radiate.' The program could not function without the aid of the library" (Slauson, 1929).

Ten years later, in another article written about libraries in junior high schools, Pygman supported the view that the library is as important a part of the school curriculum as any subject offered. He described the library as an "indispensible integral factor in enlarging the pupil's world by giving service in enriching the curriculum, in offering encouragement and guidance in worthwhile reading and in affording opportunities for pupil growth by actual participation in building up the library and increasing its service" (Pygman, 1939).

More modern proponents of the junior high school library are Grambs and Noyce, who published a study in 1961, The Junior High We Need. They present 11 points that should be considered in the development of an ideal junior high school. The second point urges that the schools have a "well-stocked library staffed by a professional librarian-teacher." In the ideal school the library, the program

of study, and reading-skill development will be coordinated with teachers and their classes using the library as a productive resource (Grambs, 1961).

III. THE ACTUAL ROLE OF THE LIBRARY

Even though many educators do agree that the library belongs at the heart of the school's instructional program, there may be a great deal of difference between philosophy and actual practice. Rossoff (1971) went on to point out that in practice many schools operate in a manner which discourages use of the library by students and teachers. Students are bound in a lock-step time schedule which gives them little opportunity to use library facilities. Teachers follow a tight curriculum, one which compels them to cover facts and ignore meaning. There is resistance to changing from time-worn practices and reluctance to developing fresh approaches to teaching.

Reed (Lubans, 1974) suggested that certain classroom practices in the intermediate grades may actually harm the library program. There is less emphasis on intense instruction in reading skills by this age level, though many reading problems still exist. She believed that the library program suffers when the reading needs of students in the middle school range are not recognized with good classroom procedures which fire interests that can be satiated in the library.

The problems of library use and the factors which influence teachers and students to use the school library have been studied by many researchers. All of the reports of research which could be

found presented negative pictures of the actual role of the library in the schools studied as noted in the following four paragraphs.

Tielke (1968) studied the development of three elementary school libraries in Texas and the relationship between "selected environmental factors" with that development. He concluded in his case studies that classroom teachers have not generally recognized the potential contribution of the library to the instructional program and that the library program in a school is developed almost solely through the efforts of the librarian with almost no participation by teachers, principals or other professional personnel.

In another study of elementary school libraries, Wiedrick (1973) found that, in the 13 schools studied, the main use made by students was to borrow, read or return a book for leisure reading, while seeking information for school studies or assignments was of secondary importance. The use of the library by fifth and sixth grade pupils was not significantly related to teachers', librarians' or principals' perceptions of the role and function of the library. The researcher concluded that the "extent of integration of library services and resources with the instructional program appeared to be variable and generally incomplete."

In a survey of school library use in the North Central Association of Schools in Missouri, data were collected which led Mullen to conclude that 1) principals, teachers and librarians were making only moderate use of practices recommended in professional literature for integrating the library program and the instructional program; 2) librarians were not generally participants in curriculum or

course planning groups; and 3) teacher assignments did not often involve students in the use of the library (Mullen, 1965).

Hinds (1976) studied the utilization of library resources of 10 inner-city schools in New York and found that the major function of the librarian was to "cover a class" while teachers took their "preparation period." She believed that administrative action is necessary to involve school librarians in curriculum planning before the library's resources can be integrated with the educational program in the school.

The factor of attitudes of teachers and principals toward the library or toward the use of instructional media has been studied. It would seem that a positive attitude toward the library and the library's materials would lead to increased use of that material, but Wimberly and Welch conducted studies with findings which did not support this view. Welch (1975) concluded that teacher attitudes toward the use of instructional media was not a major factor in determining utilization of media in instruction. Teachers who taught in a traditional curriculum relied upon traditional forms of instructional devices while teachers who taught in an innovative curriculum tended to use more recently developed instructional media. Wimberly (1975) studied the attitudes of teachers toward eight media forms including textbooks and library books. She found that the teachers' attitudes were not significantly related to the forms of media they utilized. Textbooks were held in lowest attitudinal position by teachers but were utilized the most.

Two authors who conducted informal surveys of the use of school library resources in secondary schools collected what they considered to be discouraging information. Leopold (1972) wrote that her survey in 1965 showed an average use of one half library book per student per month, and that less than one third of the students and 1% of the faculty made any independent use of the library. She concluded that "except for the presence of warm bodies flirting or doing homework, which study hall use brings into the reading room, our school libraries are only expensive storehouses." Hartz (1964) surveyed the students and faculty members of eight high schools who used the library during one day in 1964 and found that of 461 teachers, only 12% used the library for academic reasons. Forty-one percent of the students used the library, but 25% of those were studying their own textbooks. Hartz stated that he was in complete agreement with Lash who wrote an article on school libraries in 1953 entitled "Heart of the School--My Foot!" (Lash, 1953).

Three formal research studies on libraries in secondary schools report finding similar evidence of lack of use. Ducat (1960) looked at library use by students and faculty in three secondary schools. She found that classroom instruction was largely textbook centered and that few assignments were made which motivated students to use library resources. Only a small percent of the students made regular visits to the library. Twenty percent of the students rarely used library resources. There was little evidence that the school library played a major role in the total school program. Significant in relation to this was the lack of leadership at higher levels of

administration, and within various departmental subject areas, in providing motivation to use the library as a source of materials in the teaching program and in developing programs which would require the use of varied instructional materials.

Jay (1970) identified deterrents to the use of the secondary school library in her study. Students complained of scheduling constraints, instruction dependent on the textbook and too little opportunity for participation in meaningful classroom assignments. Teachers reported that they needed more time to plan classroom activities in a location where materials were available for examination, less required coverage of textbook material, and the conviction that library usage was necessary to teach their subject.

Johnson (1975) surveyed teachers and librarians in nine senior high schools and 16 junior high schools in Tucson, Arizona, in his study of teacher utilization of libraries. He found that 44% of the teachers did not use the library primarily because they saw no particular need to do so.

Five studies were located which dealt specifically with junior high schools and junior high school libraries. Rose (1966) surveyed 215 junior high school teachers in Baltimore County, Maryland, on their use of their school library. He found that 60% of the sample regarded the library as essential or important to their teaching, but found also that actual use of the library was not extensive. Even teachers who rated the library as important or essential to their teaching were not heavy users of their school libraries.

Davies (1974), in describing a library program as an integral component of the total curriculum, discusses the role of the librarian as an agent for change who will take an active part in all phases of curriculum study and revision. In 1977, Stroud developed a qualitative measuring instrument for junior high libraries. In the study which examined the service areas of utilization, planning, production and evaluation, the author found that the "media specialists' involvement in instructional planning, evaluation, and curriculum development was disappointing." Only about one third were taking an active role in instructional planning (Stroud, 1977).

In 1964, a unique study was conducted by the Commission on Secondary Curriculum of the Association for Supervision and Curriculum Development and reported in The Junior High School We Saw: One Day in the Eighth Grade. Curriculum workers recorded the experiences of 102 eighth grade students in 98 schools in 26 states as they went about their normal school activities, in order to report what happened in a junior high school program on a typical day. The purpose of the study was to describe the junior high curriculum, not as it should be, but as it actually was; not in terms of the vision of the adult, but as it was experienced by the pupil. The type of curriculum described by the observers was not one which would offer support for an integrated library program.

> It does seem almost indisputably evident that the typical eighth grade situation is teacher dominated with pupils rather passive and actively involved only to a limited degree. . . . The classrooms observed reflected clearly these kinds of instructional practices rather strikingly: (a) lecture-demonstration, (b) read-recitation, and (c) correct-explain-practice. These patterns of instruction were predominantly

> under the explicit direction of the teacher. . . . The need to "cover" material was all too apparent.

The reporters asked, "Why were students' lessons not personalized? Where were the unit tasks of reporting and individual research? (Lounsbury, 1964).

One concern of the ASCD Commission in undertaking the study of the junior high school curriculum was that the modern junior high school had not fulfilled its potential and that the practice was lagging too far behind theory. Two studies on junior high school libraries report conclusions that indicate the junior high library is not fulfilling its potential in contributing programs and services designed particularly for the junior high student. Sisson (1961) attempted to describe an adequate program of library service for the junior high school. Requests for junior high school library regulations were sent to each state department of education, but only a few reported that any particular attention was paid to the junior high program. Sisson concluded that there was "no evidence of any planning for the unique needs of the junior high school library."

Cyphert (1958) questioned 94 junior high librarians in Pennsylvania about their programs and then recommended that "the junior high school library be more widely recognized in educational literature and practice as a distinct and specialized field of library endeavor."

IV. TEACHER INFLUENCE ON STUDENT USE OF THE LIBRARY

One aspect of student and teacher use of the library which has received much attention in professional literature is the influence

of teacher use of the library upon student use. Wilson (1967) stated that the most important factor in the success of the school library program is the extent to which teachers motivate students to use the library. "Every study on the educationally effective library has made this point."

Blazek (1975) was concerned in his study with the hypothesis:

> The greater the teacher utilization of media center resources in his teaching, the greater the use of the center by pupils because of their recognition of the teacher as a subject matter authority they will emulate his manner of acquiring knowledge and/or in their regard for him as a desirable personality will seek to please him.

Blazek believed that the teacher is the key to student use of the library. In his study, high school students were urged by their mathematics teacher to use a weekly list of media, related to topics studied, for 8 weeks. A control group received no lists. Circulation records kept in the library before, during and after the experiment showed that the experimental students were influenced significantly to use materials during the test period, but that their use of materials returned to normal when the test ended (Aaron, 1970).

Perkins (1965) also believed that the responsibility for the library habits of students belonged to the teachers "not for the reason sometimes advanced that it should be, but for the fact that it does." He reported the results of a study to determine the extent of prospective teachers' knowledge of library fundamentals. A standardized test on library usage was given to 2,466 college seniors, all prospective teachers, in 38 colleges and universities. He concluded from the results of the test that "prospective teachers are not

capable of using library materials adequately, and their knowledge of the available library resources is limited."

Teachers' lack of knowledge of library methods and materials has been discussed and deplored since 1899, when a subcommittee of the NEA asked "whether the professional training of teachers had not yet reached that period in its development when the library must be one of the factors in the training of pupil teachers" (Rossoff, 1971). Rossoff believed that the situation had not improved by 1971. He stated that teachers come into the profession with no understanding of the school library as a medium of instruction. They do not know the instructional materials related to their fields of teaching nor do they know meaningful ways of utilizing these materials for their own benefit or their students' benefit. They are unfamiliar with the services of the library and do not know how to motivate students to read, how to guide students in their reading or how to use the results of their reading in classroom performance (Rossoff, 1971).

A teacher's personal habits and background can have an effect on student reading and library skills. Hagrasy (1961) hypothesized that "there should be a measurable relationship between (1) teachers' reading habits and library background (as predictors) and (2) pupils' reading and library skills (as criteria)." The thesis was substantiated in that when a teacher's library background and reading habits were significantly low, his/her class' reading and library skills were also low and when the class' reading and library skills were significantly high, then the teacher's reading habits and background were at least relatively high.

Gaver lists four conclusions on causes for the lack of teacher use of the school library that she drew from a study of teacher education and an analysis of data gathered by the American Association of School Librarians.

1. School libraries are on the fringes of education.
2. Many teachers do not understand the role of the school library in the modern school or are apathetic in accepting any part in it.
3. Most institutions of higher education which have teacher-education programs lack the basic resources needed to orient future teachers and school administrators to the role the school library instructional center can play in their future success.
4. Most college librarians do not concern themselves with the establishment or maintenance of an organized collection of instructional materials at the elementary or secondary levels as a proper responsibility of their institution's library (Gaver, 1966).

V. STUDENT USE OF LIBRARIES

Many writers agree on the importance of the teacher's role in influencing students to use library resources. Yet many of these writers also agree that teachers do not understand the role of the library and its place in the curriculum of the school and therefore are unable to lead or encourage students in using library materials in a meaningful way in their school work (Gaver, 1966). This is a problem which has existed since 1899 and has not been solved in the years of growth and expansion of library materials and services (Rossoff, 1971; Blazek, 1975).

While it is acknowledged that the library's role in involving teachers with students and library resources has not been very successful in many instances, and while this problem has been discussed and studied by many, there has been little written on one aspect of

the library's role in the school; that is the direct influence of the library upon the student. Rossoff stated that the essential purpose of the school library was to provide media and information for students' classroom assignments and to satisfy their own personal interests. "Above all, the library exists for the benefit of the student" (Rossoff, 1971).

Busha (1980), in discussing research needs in the field of librarianship, stated that one question librarians have an obligation to study is library effectiveness which includes the use and nonuse of library materials. Although several researchers have looked at student library use in terms of teacher influence and curriculum requirements (Jay, 1970; Ducat, 1960; Hagrasy, 1961), few studies could be found which examined directly student use and nonuse of library materials for curricular and personal needs.

Two major studies located on this question were comprehensive surveys of all types of library use by students conducted in Philadelphia and Colorado. The Philadelphia Project, begun in 1968, involved surveys of thousands of students and hundreds of teachers, library personnel and parents to determine actual library resource needs by elementary and secondary students in an evaluation of existing library resources. The study was sponsored by officials of the Free Library of Philadelphia, the School District of Philadelphia and the Roman Catholic Archdiocesan School System. Some findings of the survey include:

1. There was a tremendous demand by students for a wide variety of library materials. A large part of these materials were needed for class assignment.

2. Audiovisual materials were more greatly demanded by students in lower socioeconomic levels.
3. A change takes place in the students' attitude toward reading as he/she advances in school in that he/she seems to lose interest in reading.
4. The group of students using only the public library increases as the student gets older.
5. Students in lower socioeconomic areas of inner cities feel they have less need for materials, especially printed ones.
6. School librarians and teachers believe that library resources are important in the education of students. Most elementary school teachers use library materials frequently in their classrooms, but most high school teachers do not.
7. There is a need for resources and services provided for the urban poor to reflect greater concern for relevance to their interests and concerns. There is a need for programs and activities to encourage children and young people in the inner city to reach out for learning material (Benford, 1971).

In A Survey of the Attitudes, Opinions and Behavior of Citizens of Colorado with Regard to Library Services, Secondary School and College Student Summary, conducted by the Colorado State Library in 1974, the following information on student use of libraries was collected:

1. Over one third of the high school students surveyed felt that libraries were more concerned about books than about people and that libraries catered to a few particular types of people.
2. About one fifth of the secondary students said they felt uncomfortable in a library and thought libraries had little to offer the average person.
3. The students were relatively more critical of their school library than they were of the public library. They seemed to feel least favorable toward the staff of their school libraries and to a lesser degree toward the library collection.

In another study of student users and nonusers, conducted by the Regina Public Library in Saskatchewan, Canada, in 1973, the researchers reported that there appeared to be few major differences between the children who used the library and those who did not. They felt that the overall similarity of the two groups of students, users and nonusers, was an encouraging sign for the library and that this similarity seemed to indicate that the nonusers might be encouraged to make use of the library without there being dramatic changes in the library's collection or services. An increased emphasis on non-print materials to attract students who did not read for pleasure and programming in areas of high interest to current library users which might also attract students who were currently nonusers were strategies suggested in the report (Fasick, 1979).

One method used often by librarians in public libraries to encourage student visits to the library is programming. It is hoped that positive experiences in the library will lead to positive attitudes toward the library and the library's resources. A program is defined as:

> A library sponsored or cosponsored event, inside or outside the library itself, usually well planned but sometimes spontaneous, which appeals for a variety of reasons to a group rather than an individual. A program is informational and/or recreational in nature and can be combined with or totally divorced from traditional print materials promotion and other library activities (Chelton, 1975).
>
> It should be of the best quality and provided for its own sake, as part of the library's services, not solely as an enticement to borrowing books (American Library Association, 1977).

The Delaware County Libraries' Association (1978) gave the following as some of the reasons for programming:

1. Attract nonusers
2. Humanize the library
3. Provide special events for nonusers
4. Increase circulation
5. Improve the library image
6. Broaden interests of students through exposure to new ideas

Library service to students, especially to students of disadvantaged families, might need to be studied and re-evaluated with a different focus than that which has traditionally guided the school library. In commenting on the report of the Philadelphia Project, Lamkin of the U.S. Office of Education stated, "Increasingly, our inner-city population is expressing its discontent with traditional libraries through a very simple expedient: they do not use them" (Benford, 1971). Brown (1971) believes that too many library programs

have been judged on the basis of numbers; more students and higher circulation when true measures of success, especially for the disadvantaged, should be measured by changes in attitudes toward the library, changes in attitude toward life in general, and the use made of information sources outside the library as well as within its doors.

A letter from a teacher to The Action Library, a demonstration center developed as a result of the Philadelphia Project, praises the library for "piercing the nimbus of mystery that has surrounded libraries." The library appeared to be a friendly, warm place to that teacher, where a child could relax in an atmosphere in which reading and other forms of verbal communication were encouraged. The students were felt to have made an unconscious association between books and friendly faces and were helped to develop a positive attitude toward learning (Benford, 1974).

Rossoff (1971) believed in the unique learning opportunities for students which could exist in the school library. He described the library in the school as the one place where children could go at any time and know that attention would be paid to their special needs and concerns. This concern for the individual child is the unique commitment of the school librarian. It takes precedence over every other activity. . . . Above all, the library exists for the benefit of students."

VI. SUMMARY

The role of the school library is generally held to be one of great importance to the curriculum, the teachers and the students. Many educators speak of the library as the "hub of the school" or the "heart of the curriculum." Yet, in actual practice, the role of the library often remains as that of an isolated support service. Demands of a textbook centered curriculum and the lack of understanding of the library's potential by teachers and administrators contribute to the lack of use of library resources by many teachers.

Teacher influence on student use of the library has been studied by many researchers. Many writers believe that the major factor governing student use of the library is teacher encouragement and use. There has been little discussion of methods to encourage student use in the absence of teacher commitment to the library program.

Surveys of student use of libraries in Philadelphia and Colorado found that many secondary students felt that the library was not a place for all kinds of students. Many disadvantaged students felt that the library was an alien institution. In order to encourage visits by all types of students, many public libraries offer various types of programs designed to attract many different groups of students to the library. Librarians hope that students who have pleasurable experiences in the library while attending a program might develop more positive attitudes toward the library and return for other kinds of activities.

CHAPTER III

PROCEDURES

I. INTRODUCTION

In order to determine whether a program of recreational activities made available in the library and designed to increase student visits to the library would bring about an increase in student use of the library, the researcher conducted a study using the one-group pretest-posttest design. The sections which follow describe the experimental design and the procedures involving the experimental group, methods for collecting data, treatment procedures and procedures for analyzing the data.

II. THE EXPERIMENTAL DESIGN

The research design used in this study was the one-group pretest-posttest design. In this case the experimental group serves as its own control with the criterion measure being administered to the group before and after the experimental treatment. This procedure is valid when the dependent variable is reasonably stable (Roscoe, 1969), and there is no carryover from one measure to the next (Borg, 1963). In this study, the pattern of student use of the library for the months preceding the introduction of the experimental treatment was reasonably stable, as indicated in Table 2.

The measurement of library use for the 6 weeks period immediately preceding the experimental treatment, or the pretest data,

TABLE 2

PATTERN OF STUDENT USE OF THE CHRISTENBERRY LIBRARY DURING THE SCHOOL YEAR PRECEDING THE EXPERIMENTAL TREATMENT

	September	October	November	December
Enrollment	413	407	411	421
Number of items borrowed	568	785	589	372
Number of items per student	1.37	1.92	1.43	.88
Number of school days in the month	14	20	18	12
Number of items per student per day	.098	.096	.079	.07

did not carryover or affect the measurement of library use for the 6 weeks period immediately following the experimental treatment, or the posttest data.

The nature of the methods for collecting data eliminated the following extraneous variables described by Campbell (1963) as variables which might jeopardize the internal validity of an experiment. The variables which were controlled are as follows:

1. Testing, which refers to the effects of taking a test upon the scores of a second test. The same data collecting techniques were used during both collection periods. Students and teachers were not aware that data were being collected.
2. Instrumentation, which denotes the change in the calibration of a measuring instrument or changes in the observers or scorers used. The same methods for collecting data were used during the two collection periods. No change in observers or scorers was made.
3. Statistical regression, which refers to the selection of groups on the basis of extreme scores. Normal, everyday use of the library was observed and recorded.

III. PROCEDURES

Selection of the Experimental Group

The population for the study consisted of all students enrolled in grades seven through nine at Christenberry Junior High, Knoxville, Tennessee, during the spring semester of 1979 (see Table 3).

TABLE 3

DEMOGRAPHIC DATA ON THE POPULATION
USED IN THE STUDY

Variable	Percentages	Number
Grade		
7	31%	132
8	32%	134
9	36%	152
Sex		
Female	48%	200
Male	52%	218
Income Level		
Receiving free lunch	51%	212
Not receiving free lunch	49%	206
Race		
Black	3%	11
White	97%	407

Methods for Collecting Data

Student use of the school library during the entire school day was carefully observed and recorded for a 6 week period, January 15 through February 21, immediately before introduction of the treatment procedure, and for a 6 week period, April 8 through May 16, after the experimental program had been in effect for 4 weeks. The treatment program was allowed to operate for a 4 week period before observations of use of the library were resumed so that it was an accepted part of the school day and was running smoothly before the second set of measurements was recorded.

Two different forms were used to record data each day during the record keeping periods. Form 1 (see Appendix) was used to record information on student activity in the library including:

1. time of student visit
2. purpose of student visit
3. number of items of library material borrowed during the day
4. number of students who borrowed material during the day

Student visits were recorded for each time block during the school day:

1. homegroup
2. between periods
3. six class periods
4. after school

The purposes for student visits listed on the observation record included:

1. return books
2. check out books
3. read newspapers and magazines
4. consult reference materials for a class assignment
5. work on other assignments for teachers
6. borrow material or equipment for a teacher
7. consult reference materials for personal needs
8. non-library work

No attempt was made in recording this information to indicate identifying information about single students. The students were counted and their purpose for visiting the library was observed and recorded.

Form 2 (see Appendix) was used to record information on individual students including:

1. sex
2. grade level
3. free lunch status, an indication of socio-economic level
4. number of items of library material borrowed
5. date on which library material was borrowed

The students and teachers were unaware that student visits to the library and borrowing of material were being monitored, thus minimizing the Hawthorne effect, a situation in which the subject's behavior may be influenced partly by his/her perception of the experiment.

Treatment Procedures

The experimental program of recreational activities made available in the library was designed to attract students to the

library during their free time to see whether exposure to the library and pleasurable experiences in the library would influence other forms of library use.

Each student had free time during his/her lunch period of 30 minutes. The school lunch period, or fourth period, lasted 90 minutes, with different groups of students beginning and finishing lunch at each half hour. Students were allowed to leave the lunch room after eating and could go outside or to the auditorium, or they were free to go outside or to the auditorium at the beginning of their lunch period, if they chose not to eat. When the experimental program was offered in the library, students were then allowed to go to the library during their free time.

Activities made available in the library included quiet games, such as chess; checkers; Boggle, a word game; Mastermind, a game of logic; and jigsaw puzzles. Two listening and viewing stations were provided with sound filmstrips on subjects of interest to the students such as sports, strange and supernatural mysteries and animals. Records of popular fiction and old radio programs were available for listening. Other library materials including current magazines and newspapers were also available. Students were free to choose any activity, or to choose none. The researcher acted as an observer and supervisor.

A special poster, designed by a student, was hung on the door during this period to invite students to enter, and was not hung on the few occasions when the library had to be closed to the recreational activities because of other classes scheduled for research assignments.

Record sheets were kept with information on the number of students who participated in each activity.

After the program had been in operation for 4 weeks, and students were familiar with it, information on other uses of the library during the rest of the school day was recorded. The lunchtime program continued during the second collection of data on library use.

Procedures for Analyzing Data

The data collected from observations of student visits and materials borrowed from the library were analyzed for changes in the variables:

1. number of students who visited the library
2. number of students who borrowed material from the library
3. number of students from each grade level who borrowed material from the library
4. number of students of each sex who borrowed material from the library

The significance of the difference between the number of students who visited the library was tested with a one tailed t-test for independent samples. The significance of the difference between the number of items of library material borrowed was tested with a t-test for the standard error of a mean difference in correlated data. The .05 significance level (.95 confidence) was selected for rejection of null hypotheses.

IV. SUMMARY

This chapter contained a discussion of the procedures followed in this study. The discussion included information related to the research design, selection of the experimental group, methods for collecting data, treatment procedures and procedures for analyzing data.

CHAPTER IV

ANALYSIS OF DATA

I. INTRODUCTION

This study was conducted in order to determine whether a program of recreational activities provided in the library and designed to increase student visits to the library would bring about an increase in student use of the library. Procedures used in this study were presented in Chapter III which described the research design, methods for collecting data and the treatment procedure.

This chapter presents the analysis of data collected from observation of student visits to the library and from individual student records of items of library material borrowed from the library. The findings related to the following hypotheses are presented:

Hypothesis One. A program of recreational activities provided for students in the library would result in an increase in student visits to the library.

Hypothesis Two. A program of recreational activities provided in the library will result in an increase in student borrowing of library material.

The data related to each hypothesis is presented and discussed separately. For purposes of inquiry, the hypotheses are stated in their null (H_0) form. If differences were identified ($p \leq .05$), the H_0 was rejected and the research hypothesis accepted.

II. STUDENT VISITS TO THE LIBRARY

$H_0$1. A program of recreational activities provided for students in the library will not result in an increase in student visits to the library.

Data for $H_0$1 were compiled from two sets of records of student visits to the library maintained by the researcher. One set of records measured normal student use during the school day for 6 weeks immediately preceding the introduction of the experimental program and for the same regular student use for 6 weeks after the experimental program had been introduced and in operation for 4 weeks. Another set of records contained a daily count of student participation in the recreational activity period during the lunch period. Separate record sheets (Forms 1 and 2 in the Appendix) were maintained for each school day.

Pretest and Posttest Data Collection Periods

During the two periods of record keeping of regular library use, the library was closed for some days because of snow or illness of the researcher. In the first measuring period, the library was closed for the following starred days:

Week 1	M	T	W	T	F
Week 2	M	T	W	T	*
Week 3	M	T	W	*	*
Week 4	M	T	*	*	F
Week 5	M	T	W	T	*
Week 6	M	T	W	T	*

During the second measuring period, the library was closed for the following days:

Week 1	*	T	W	T	F
Week 2	M	T	W	T	F
Week 3	M	T	W	T	*
Week 4	M	T	W	T	F
Week 5	M	T	W	T	*
Week 6	M	T	W	T	F

As each of the five school days in a week has a particular character in a school because of weekly plans of activities and classroom tasks, it was decided to equalize the pretest and posttest record keeping periods in order to make a more reasonable comparison of the data from the two periods. The days in the pretest and posttest periods were matched and observation records were eliminated for days when the library was open during one period but not during the other. This left a total of 22 days when the library was open for comparable days during both periods of observation. For example, as the library was closed on the second Friday in the first period of observation, the record for the second Friday in the second observation period was eliminated. The 22 days in each measurement period used for this study are illustrated below.

	PRETEST					POSTTEST				
Week 1	+	T	W	T	F	*	T	W	T	F
Week 2	M	T	W	T	*	M	T	W	T	+
Week 3	M	T	W	*	*	M	T	W	+	*

Week 4	M T * * F	M T + + F
Week 5	M T W T *	M T W T *
Week 6	M T W T *	M T W T +

* = library closed

\+ = record eliminated

Student Participation in the Recreational Activities

The recreational activities provided for the students during the lunch period were simple activities designed to increase student visits to the library. Materials for these activities included games, puzzles, listening and viewing centers, and the book, magazine and newspaper collection of the library. The activities offered were kept constant throughout the 4 week introductory period and the second period of measurement of regular library use. Table 4 presents information on numbers of student visits to the library during the lunch period for the weeks of February 25 to March 26. A graphic representation of the data is given in Figure 1. Students were involved in four types of activities during this recreational period:

1. playing with games or puzzles
2. examining magazines or newspapers
3. participating with the listening and/or viewing centers
4. browsing through the book collection

Separate records of lunch time attendance were maintained during the second set of measurement of normal library use for the 22 day posttest period between April 8 and May 18. These totals are presented in Table 5. A graphic representation of this data is given in Figure 2.

TABLE 4

STUDENT PARTICIPATION IN THE RECREATIONAL ACTIVITIES DURING THE FOUR WEEK INTRODUCTORY PERIOD

	Games	Browsing	Magazines	A.V. Materials	Total
Mon. 2/25	1		1		2
Tues. 2/26	4	1	1		6
Wed. 2/27	7	1	8		16
Thurs. 2/28	4	4			8
Fri. 2/29	1			2	3
Tues. 3/4	4	5	1		10
Wed. 3/5	4	1	4	5	14
Thurs. 3/6			10	3	13
Fri. 3/7			5		5
Mon. 3/10	2	7	1	2	12
Tues. 3/11	10	7	8	7	32
Wed. 3/12	8	3	2		13
Mon. 3/17	5	7	1		13
Tues. 3/18	2	7	6	2	17
Wed. 3/19	4	1	7	10	22
Tues. 3/25	10	15	1		16
Wed. 3/26	13	10	2	7	32

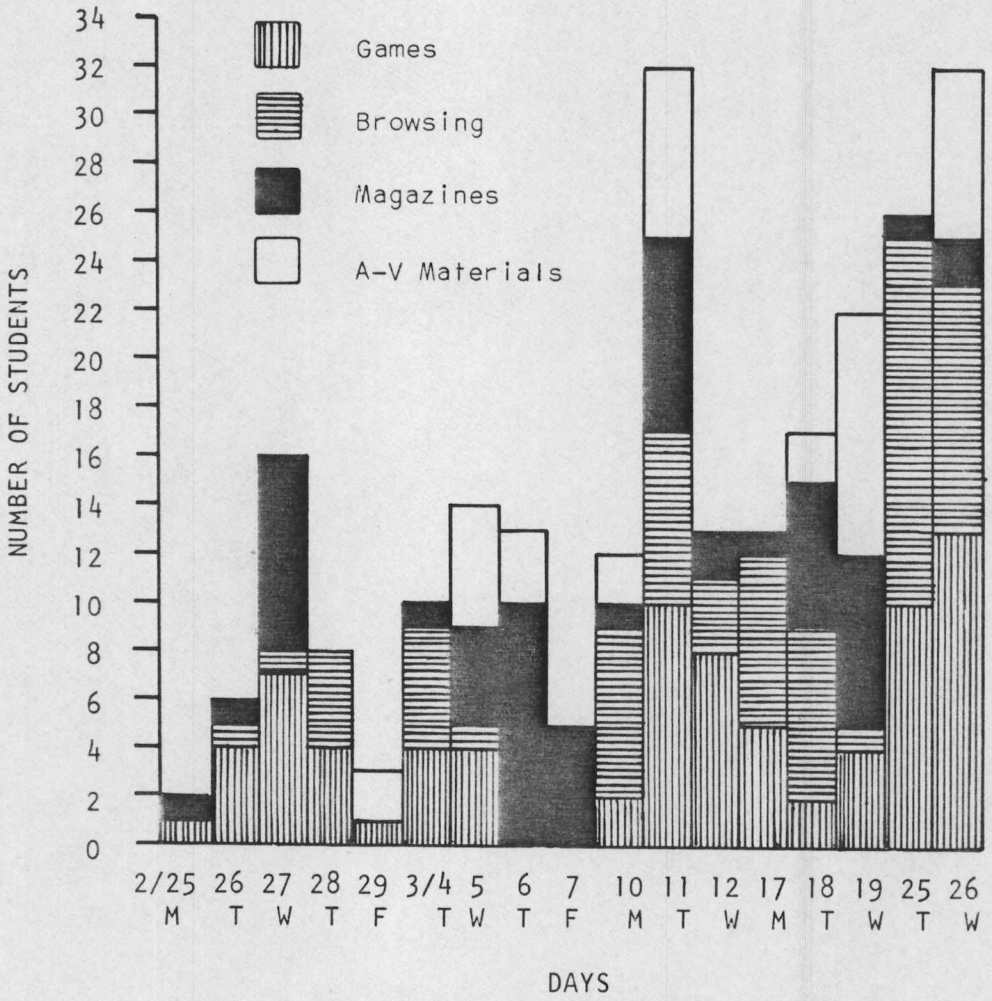


Figure 1. Number of Students Who Participated in Each Recreational Activity During the Introductory Period.

TABLE 5

STUDENT PARTICIPATION IN THE RECREATIONAL ACTIVITIES
DURING THE POSTTEST PERIOD

	Games	Browsing	Magazines	A.V. Materials	Total
Tues. 4/8	14	8	2	3	27
Wed. 4/9	14	18	10	8	50
Fri. 4/11	5	2	2	5	14
Tues. 4/15	4	3	2	5	14
Wed. 4/16	7	14	1	8	30
Thurs. 4/17	17	10	3	4	34
Mon. 4/21	15		7	9	32
Tues. 4/22	29	7	7	4	47
Wed. 4/23	31	6	2	3	42
Tues. 4/29	9	6	6	10	31
Fri. 5/2	37	18	16	5	76
Mon. 5/5	26	6	13		45
Tues. 5/6	21	18	6	5	50
Mon. 5/12	14	7	7	10	38
Tues. 5/13	19	7	8	11	45
Wed. 5/14	12	4	10	4	30

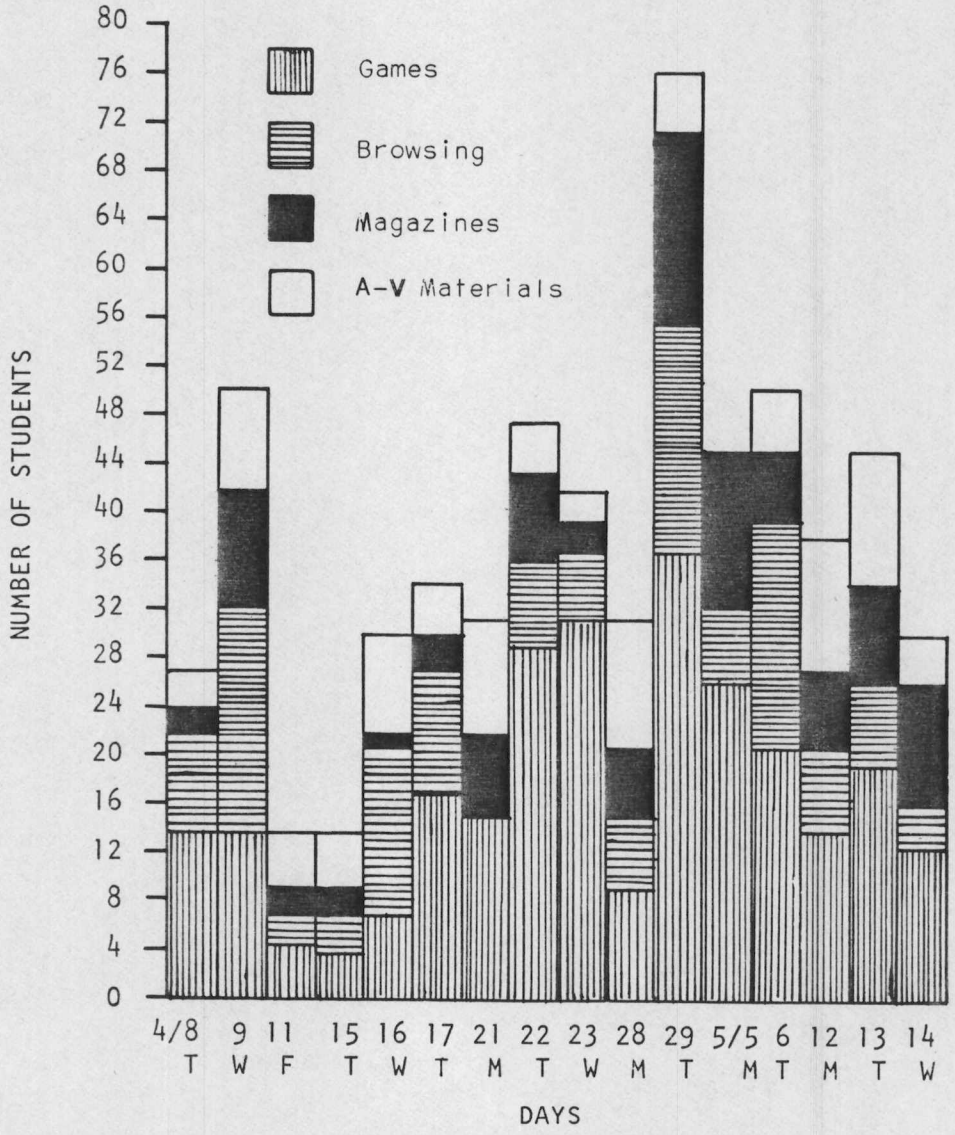


Figure 2. Number of Students Who Participated in Each Recreational Activity During the Posttest Period.

As the weeks progressed, participation in the activities grew. The games and puzzles were the most popular activity, but the number of students who browsed through the books and magazines also grew. Many students came almost every day and seemed to appreciate the peaceful atmosphere of the library, some staying their entire lunch period. There were no discipline problems with any of the students. Many students learned to play chess or checkers from other students. Most of the magazine and newspaper readers were eighth and ninth grade boys, while most of the browsers in the book collection were girls. The games and puzzles were especially popular with the seventh graders.

Normal Student Use of the Library

During the pretest and posttest periods, information on student visits to the library was recorded on observation records, indicating the type of activity in which the student participated and the time period during which the visit occurred. If a student engaged in more than one activity, only the main activity was recorded.

Table 6 presents the total number of student visits to the library for each activity during each period of the day for the pretest period.

Table 7 presents the total number of student visits to the library for each activity during each period of the day for the post-test period.

The time of day when the largest increase in student attendance occurred was during the 20 minute home group period at the beginning of the day. Unless there were special announcements or record keeping

TABLE 6

TOTAL NUMBER OF STUDENT VISITS TO THE LIBRARY DURING THE PRETEST PERIOD

	Home Group	5 Minutes Between Classes	1st Period	5 Minutes Between Classes	2nd Period	5 Minutes Between Classes	3rd Period	5 Minutes Between Classes	4th Period	5 Minutes Between Classes	5th Period	5 Minutes Between Classes	6th Period	After School
Return books	28	18		3	1	2	2		2	4	1	3	4	8
Check out books	39	5	44	2	13	4	8		7	2	14	2	16	7
Read magazines and newspapers	33		22		4		40		30		23		44	2
Reference work for class	3		36	1	5		29		31		35		24	2
Other class assignment			11		5		6		2		8		2	
Borrow equipment for teacher					1	1								
Non-library work					1								4	
Reference for personal information			2											
Totals	103	23	115	6	30	7	85	0	72	6	81	5	94	19

TABLE 7

TOTAL NUMBER OF VISITS TO THE LIBRARY DURING THE POSTTEST PERIOD

	Home Group	5 Minutes Between Classes	1st Period	5 Minutes Between Classes	2nd Period	5 Minutes Between Classes	3rd Period	5 Minutes Between Classes	4th Period	5 Minutes Between Classes	5th Period	5 Minutes Between Classes	6th Period	After School
Return books	63	10	6	4	3	10		3	1	6	2	7		11
Check out books	111	13	10	8	19	2	9	1	13	2	29	2	25	26
Read magazines and newspapers	96	3	28		31		22		16		28		58	
Reference work for class			30		12		6		8		5		4	
Other class assignment	3		2		7		10		6		9		4	
Borrow equipment for teacher					1		1		1		1			
Non-library work			7				4						2	
Reference for personal information					2									
Totals	273	26	83	12	75	12	52	4	45	8	74	9	93	37

activities, this was generally a time when few activities were planned for the students. During the posttest period many students began coming to the library during the home group time.

Comparison of Pretest and Posttest Data on Student Visits to the Library

To test the difference between total visits to the library, the number of student visits for recreational activities was added to the total number of visits for other purposes during the posttest period, and this new total was compared with totals from the pretest data. The totals were categorized according to type of activity. To test the significance of the differences between numbers of visits for these activities, a one tailed t-test for independent samples was employed. The categories and number of visits in each category are indicated in Table 8.

The means and standard deviations for visits to participate in different activities in the library are indicated in Table 9. A comparison of the mean scores did not yield a significant difference at the .05 level ($t = 1.10$, $p = .05$, one tailed when tested by the t-test). The null hypothesis ($H_0 1$) was, therefore, retained.

III. STUDENT BORROWING OF LIBRARY MATERIAL

$H_0 2$. A program of recreational activities provided in the library will not result in an increase in student borrowing of library material.

TABLE 8

NUMBER OF STUDENT VISITS IN EACH CATEGORY

Activity	Prestest Total	Posttest Total
Return books only	76	126
Check out books	163	270
Read magazines	198	282
Reference work	165	65
Other assignments	34	41
Borrow equipment	2	4
Non-library work	5	13
Personal research	2	2
Lunchtime program	-	605

TABLE 9

ANALYSIS OF STUDENT VISITS TO THE LIBRARY

	N	$\overline{X}$	SD	t
Pretest	8	71.66	77.43	1.10
Posttest	9	156.44	188.6	

Critical value for t (one-tailed) $p \leq .05 = 2.131$ (15 df)

Data for $H_0 2$ were compiled from individual student records of the number of items of library material borrowed by a student and the date on which the material was borrowed. Each record also indicated the sex and grade level of the student. At the end of the study, records were eliminated for students who were not enrolled in school for the entire period during which the study was conducted.

Circulation statistics compiled each month from September to January by the researcher suggested that the proportion of Christenberry students who borrowed library material was low (see Table 1, p. 8). Information from the individual student borrowing records maintained during the pretest period would seem to corroborate this idea. Table 10 illustrates the percentage of students attending Christenberry School during the research study period, January 15 to May 16, who borrowed library materials during the pretest and posttest periods. Information is separated into groups by grade level, sex and sex within grade level.

Library use was lowest during the pretest and posttest period for boys, with seventh grade boys having the lowest level during the pretest period (28%) and the ninth grade boys having the lowest level during the posttest period (33%). The group with the highest percentage was eighth grade girls, both during the pretest period (55%) and the posttest period (57%).

Data from the individual student records also yielded information on the number of visits made by students to the library to borrow material and the number of items of material borrowed. Table 11 presents the number of items borrowed and the number of visits made to borrow material by boys and girls in each grade.

TABLE 10

PERCENTAGE OF STUDENTS WHO BORROWED LIBRARY MATERIAL

Group	Number	Number Who Borrowed in Pretest	Percentage	Number Who Borrowed in Posttest	Percentage
Total School	391	168	42%	201	51%
Boys	204	67	32%	77	37%
Girls	187	101	54%	124	66%
7th Grade	126	48	38%	70	55%
Boys	64	18	28%	29	45%
Girls	62	30	48%	41	66%
8th Grade	121	58	48%	68	56%
Boys	59	22	37%	21	35%
Girls	62	36	58%	47	75%
9th Grade	144	62	43%	63	43%
Boys	81	27	33%	27	33%
Girls	63	35	55%	36	57%

TABLE 11

STUDENT VISITS TO THE LIBRARY AND THE NUMBER OF ITEMS OF MATERIAL BORROWED

Group	Pretest			Posttest		
	Number Who Borrowed Material	Number of Visits	Number of Items Borrowed	Number Who Borrowed Material	Number of Visits	Number of Items Borrowed
Total School	168	352	473	201	567	842
Boys	67	122	171	77	184	266
Girls	101	230	302	124	383	576
7th Grade	48	107	185	70	228	360
Boys	18	43	77	29	86	139
Girls	30	64	108	41	142	221
8th Grade	58	139	134	68	177	242
Boys	22	38	43	21	46	60
Girls	36	101	91	47	131	182
9th Grade	62	106	154	63	162	240
Boys	27	41	51	27	52	67
Girls	35	65	103	36	110	173

In order to test the significance of $H_0 2$, a one tailed t-test for the standard error of a mean difference in correlated data was computed for the number of items of material borrowed during each observation period. The two scores for each student, total number of items borrowed during each period, were paired for this test. The resulting t-ratio for boys and girls in each grade level are presented in Table 12.

Of the six groups tested, the t-ratio computed for four of these groups indicated that at the .05 confidence level the t-ratio was significant. The null hypothesis ($H_0 2$) was, therefore, rejected.

IV. SUMMARY

Data collected for the study have been presented and analyzed in this chapter. The t-test analyses retained null hypothesis one and rejected null hypothesis two.

1. To test $H_0 1$, the pretest and posttest data on student visits were analyzed using a t-test for independent samples. Even though the number of student visits to the library did increase during the posttest data collection period, especially in the categories of returning books, checking out books and reading magazines, the increase was not statistically significant. The null hypothesis ($H_0 1$) was, therefore, retained.
2. To test $H_0 2$, data from the individual student records were analyzed using the t-test for the standard error of a mean difference in correlated data. Tests were computed

TABLE 12

ANALYSIS OF ITEMS OF MATERIAL BORROWED

Group	N	Computed t	df	t-Ratio Significant at the .05 Level	Significant
7th grade boys	32	2.327	31	2.042 (30 df)	yes
7th grade girls	36	3.996	45	2.014	yes
8th grade boys	29	1.406	28	2.048	no
8th grade birls	51	3.64	50	2.008	yes
9th grade boys	38	1.356	37	2.030 (35 df)	no
9th grade girls	45	2.748	44	2.021 (40 df)	yes

for students grouped by sex within grade level. Of the six tests computed, t-ratios for four of the groups--seventh grade boys, seventh grade girls, eighth grade girls and ninth grade girls--were significant at the .05 level. Therefore, $H_0 2$ was rejected. Additionally it was found that borrowing of library material was lowest during the pretest and posttest period for boys, with seventh grade boys having the lowest level during the pretest period (28% of the group borrowed any material) and the ninth grade boys having the lowest level during the posttest period (33% of the group borrowed any material).

The group with the highest percentage of students who borrowed library material was eighth grade girls, both during the pretest period (55%) and the posttest period (57%).

CHAPTER V

SUMMARY, FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

I. SUMMARY

The purpose of this study was to determine whether a program of recreational activities made available in the junior high school library, designed to increase student visits to the library, would bring about an increase in student use of the library. In order to determine the effects of the provision of the recreational program, the researcher formulated the following hypotheses:

1. A program of recreational activities provided for students in the junior high school library will result in an increase in student visits to the library.
2. A program of recreational activities provided for students in the junior high school library will result in an increase in student use of library materials.

The role of the school library is generally held to be one of great importance to the curriculum, the teachers and the students. Many educators speak of the library as the "hub of the school" or the "heart of the curriculum." Yet, in actual practice, the role of the library often remains as that of an isolated support service. Demands of a textbook centered curriculum and the lack of understanding of the library's potential by teachers and administrators contribute to the lack of use of library resources by many teachers.

Teacher influence on student use of the library has been studied by many researchers. Some writers believe that the major factor governing student use of the library is teacher encouragement and use. There has been little discussion of methods to encourage student use in the absence of teacher commitment to the library program.

Surveys of student use of libraries in Philadelphia and Colorado found that many secondary students felt that the library was not a place for all kinds of students. Many disadvantaged students felt that the library was an alien institution. In order to encourage visits by all types of students, public libraries offer various types of programs designed to attract many different groups of students to the library. Librarians hope that students who have pleasurable experiences in the library while attending a program might develop more positive attitudes toward the library and return for other kinds of activities.

This study was conducted at Christenberry Junior High School in Knoxville, Tennessee, between January 15, 1980 and May 16, 1980. Christenberry School, an inner-city school, had an enrollment of 417. Ninety-seven percent of the students were white. Fifty one percent of the students received free or reduced-price lunch, an indication of low socio-economic level.

Library use by students at Christenberry was low for the months of September through December. The curriculum of the school was textbook centered and teachers required little student use of the library resources.

In order to investigate one method to increase student visits to the library for pleasurable activities, a program of recreational activities was made available during the school's lunch period, and students were allowed to go to the library during this time. A student's 30 minute lunch period was his/her only free time during the day. The activities were simple, and the researcher served as an interested supervisor. Games and puzzles were provided. Listening and viewing centers were available with material of interest to the students, and the magazine, newspaper and book collections of the library were available.

Before introducing the recreational activities, a record of normal student use of the library was maintained for 6 weeks. On a record sheet for each day, student visits to the library were recorded by purpose and time. These data served as the pretest data. The recreational program was introduced and allowed to operate for 4 weeks so that the students would become comfortable with the program. Attendance during the lunch-time period was recorded on another form. After the introductory period had ended, the lunch-time library program continued to operate while the researcher observed and recorded normal student use of the library for another 6 weeks. These data served as the posttest data.

Records were also maintained of the number of items of library material borrowed by each student during both periods of observation. Individual student records indicated grade and sex of the student, the number of items of library material borrowed and the date on which the items were borrowed. Records for students who had not

been enrolled for the duration of the study were eliminated in the data analysis.

II. FINDINGS

The following findings are based on the analysis of the data gathered to test the hypotheses:

1. To test $H_0 1$, the pretest and posttest data on student visits were analyzed using a t-test for independent samples. Even though the number of student visits to the library did increase during the posttest data collection period, especially in the categories of returning books, checking out books and reading magazines, the increase was not statistically significant. The null hypothesis ($H_0 1$) was, therefore, retained.
2. To test $H_0 2$, data from the individual student records were analyzed using the t-test for the standard error of a mean difference in correlated data. Tests were computed for students grouped by sex within grade level. Of the six tests computed, t-ratios for four of the groups--seventh grade boys, seventh grade girls, eighth grade girls and ninth grade girls--were significant at the .05 level. Therefore, $H_0 2$ was rejected.

Two additional sets of findings included the following:

1. Borrowing of library material was lowest during the pretest and posttest period for boys, with seventh grade boys having the lowest level during the pretest period

(28% of the group borrowed any material) and the ninth grade boys having the lowest level during the posttest period (33% of the group borrowed any material).

2. The group with the highest percentage of students who borrowed library material was eighth grade girls, both during the pretest period (55%) and the posttest period (57%).

III. CONCLUSIONS

The data for this study led to the formulation of the following conclusions:

1. When students have time to explore the collection of materials available in the library at their own pace, circulation of materials will increase. The students who came to the library during the lunch period had time to browse through the books and other materials with friends. Very little time was available during the rest of the day for this kind of activity. When classes of students came to check out books, the time was not used well by many students because of the strong influence of peer pressure to be uninterested in any activity suggested by the teacher and the tendency to use such time as time for socializing. Even students who were interested in books and reading were encouraged by the pressure of the rest of the class to spend the time talking or pretending to look for books. When students came in groups of two or

three during their lunch period, these pressures were absent, and purposeful exploring of the library was more obvious.

2. The traditional collection of curriculum related material in the school library was not relevant for the personal needs of these students. Eighth and ninth grade boys did not borrow many books from the library, but were the largest group of magazine and newspaper readers during the activity period. The magazine collection of the library was not adequate, as a major portion of the materials budget was restricted to the purchase of books and non-print materials, with the philosophy that these materials would support the curriculum of the school. Few books are available for junior high students with reading difficulties. Books which offer information in a format attractive to the junior high student, with the facts presented in a terse, well-organized style to be easily grasped by students who don't read very well, are difficult to find.

3. Students' changes in behavior indicated that their perceptions of the library's function in the school were different during the lunch-time program than during the rest of the school day. During the activity period, students seemed to view the library as a refuge. They behaved in a calm manner, and there was a comfortable feeling in the room even with large groups from all three grade levels engaged in several activities. This feeling

was not present at other times during the day. At these other times, the library functioned as an unimportant peripheral book collection.

IV. RECOMMENDATIONS

Recommendations which appear to be justified as a result of this study and the review of literature are as follows:

1. A library program striving to serve as a support for the curriculum of the school, operating in a school which does not recognize or require such instructional support, needs to adopt different kinds of philosophies and programs to serve the personal needs of the students in that school.
2. Junior high and middle school libraries need to develop programs and objectives unique to the students being served. There has been little attention given to this age student and the type of library program best suited to them.
3. School libraries serving large groups of disadvantaged students need to develop programs and objectives and collections of materials designed particularly for the students being served.
4. School libraries need to be committed to their role in the student's preparation for a lifetime of learning, as well as to the support of current curriculum being offered in the school.
5. An expanded program of activities offered in the library could be designed to meet various needs of the students.

In order to humanize the library, broaden the interests of the students, attract the nonusers and meet special needs of the students, many different kinds of activities could be offered. Some examples of special programs are the sharing of experiences or expertise by community members, speakers and other programs from health or other special service organizations, career day, hobby shows, craft demonstrations, sports demonstrations, special interest clubs, contests, musical performances, art exhibits, story telling, etc.

6. Teacher education instututions should strive to insure that teachers understand the role of the school library in providing materials and services for teachers and students and should encourage teachers to use a variety of materials in their teaching.
7. Teacher education institutions should include a model school library whose function is to acquaint prospective teachers in all areas with the wealth of material available for teachers and students and the methods for using such materials in classroom teaching and for teaching students to use such material.

BIBLIOGRAPHY

BIBLIOGRAPHY

Aaron, Shirley. "A Review of Selected Research Studies in School Librarianship 1967-1971: Part I." School Libraries, 21 (Summer 1972), 29-46.

Aaron, Shirley. "Current Research," School Media Quarterly, 2 (Winter 1978), 133.

Adams, Golden V. A Study: Library Usage, Skill and Knowledge of Junior High School Age Students Enrolled at Lincoln Junior High School and Burns Union High School, Burns, Harney Co., Oregon, 1971-72. U.S. Educational Resources Information Center, ERIC Document ED 077 538, 1972.

American Library Association, Young Adult Services Division. Directions for Library Service to Young Adults. Chicago: The Association, 1974.

Ary, Donald, Lucy Jacobs and Asghar Razavieh. Introduction to Research in Education. New York: Holt, Rinehart and Winston, Inc., 1972.

Barron, Daniel D. "A Review of Selected Research in School Librarianship: 1972-76." School Media Quarterly, 5 (Summer 1977), 271-289.

Benford, John. "The Philadelphia Project." Library Journal, 96 (June 15, 1971), 2041-2047.

Blazek, Ronald. Influencing Students Toward Media Center Use: An Experimental Investigation in Mathematics. Chicago: American Library Association, 1975.

Borg, Walter, and Meredith D. Gall. Educational Research. New York: David McKay Company, Inc., 1963.

Brown, Eleanor. Library Service to the Disadvantaged. Metuchen, New Jersey: The Scarecrow Press, Inc., 1971.

Busha, Charles, and Stephen Harter. Research Methods in Librarianship. New York: Academic Press, 1980.

Campbell, Donald, and Julian C. Stanley. Experimental and Quasi-Experimental Designs for Research. Chicago: Rand McNally, 1965.

Chelton, Mary K. "YA Programming Roundup." Top of the News, 32 (November 1975), 43-50.

Cole, Tom J. "Curriculum Enrichment Via the Library." Peabody Journal of Education, 41 (July 1963), 12-15.

Colorado Market Research Services, Inc. A Survey of the Attitude, Opinions and Behavior of Citizens of Colorado with Regard to Library Services. Secondary School and College Student Summary. Vol. 2. Denver: Colorado State Library, 1974.

Cyphert, Frederick. "Current Practice in the Use of the Library in Selected Junior High Schools in Pennsylvania." Dissertation Abstracts International, 18 (1958), 162.

Davies, Ruth Ann. The School Library Media Center, A Force for Excellence. New York: R. R. Bowker Company, 1974.

Delaware County Libraries Association, Children's Services Division. Something's Up! Programming Handbook. Broomall, Pennsylvania: The Association, 1978.

Ducat, Sister Mary Claver. "Student and Faculty Use of the Library in Three Secondary Schools." Dissertation Abstracts International, 21 (1960), 909.

Fargo, Lucile F. The Library in the School. Chicago: American Library Association, 1947.

Fasick, Adele, and Claire England. Children Using Media, Reading and Viewing Preferences Among the Users and Non-Users of the Regina Public Library, Regina Public Library, Saskatchewan, Canada. U.S. Educational Resources Information Center, ERIC Document ED 172 815, 1979.

Gaver, Mary. "Teacher Education and School Libraries." ALA Bulletin, 60 (January 1966), 63.

Glass, James M. "The Library in Junior High Schools." Library Journal, 50 (February 1925), 123-25.

Goldhor, Herbert, ed. Research Methods in Librarianship: Measurement and Evaluation. Urbana: University of Illinois Graduate School of Library Science, 1968.

Grambs, Jean D., and others. The Junior High We Need. Washington, D.C.: Association for Supervision and Curriculum Development, 1961.

Hagrasy, Saad M. El-. "The Teacher's Role in Library Service." Dissertation Abstracts International, 22 (1961), 2010.

Hartz, Frederic. "High School Library: A Study in Use, Misuse, and Nonuse." The Clearing House, 38 (March 1964), 423-428.

Hinds, Vira C. "The Utilization of Library Resources by Teachers in Ten Inner-City Schools of New York." Dissertation Abstracts International, 37 (1976), 3394-A.

Jay, Hilda L. "Increasing the Use of Secondary School Libraries as a Teaching Tool." Dissertation Abstracts International, 31 (1970), 2413-A.

Johnson, Harlan Ray. "Teacher Utilization of Libraries in the Secondary Schools of Tucson District No. 1." Dissertation Abstracts International, 36 (1975), 3546-A.

Lash, Henry. "Heart of the School? My Foot!" Wilson Library Bulletin, 27 (May 1953), 733-735.

Leopold, Carolyn Clugston. School Libraries Worth Their Keep. Metuchen, New Jersey: The Scarecrow Press, Inc., 1972.

Lounsbury, John, and Jean V. Marani. The Junior High We Saw: One Day in the Eighth Grade. Washington, D.C.: Association for Supervision and Curriculum Development, 1964.

Lubans, John, ed. Educating the Library User. New York: R. R. Bowker, 1974.

Milwaukee, Wisconsin Public Schools, Division of Curriculum and Instruction. Library Services for Elementary Schools in Areas of High Concentration of Pupils from Low Income Families January 31, 1966-June 17, 1966: Program Evaluation. U.S. Educational Resources Information, ERIC Document ED 065 151, 1967.

Mullen, Bennat. "A Survey of Problems, Practices, and Conditions Affecting the Use of the Library in Instruction in North Central Association Schools in Missouri." Dissertation Abstracts International, 28 (1965), 400.

Nelson, Ervin. "Media Industry: Its Growth, Structure and Role in Education." School Library Journal, 17 (March 1970), 101-103.

Perkins, Ralph. The Prospective Teacher's Knowledge of Library Fundamentals. New York: The Scarecrow Press, Inc., 1965.

Pygman, C. H. "Fits Junior High Program." The Nation's Schools, 24 (October 1939), 30-40.

Roscoe, John. Fundamental Research Statistics for the Behavioral Sciences. New York: Holt, Rinehart and Winston, 1969.

Rose, Mason Frederick. "A Survey of Teachers' Use of Their School Libraries in Five Junior High Schools in Baltimore County, Maryland." Unpublished Master's Thesis, University of North Carolina, Chapel Hill, 1966.

Rossoff, Martin. The Library in High School Teaching. New York: H. W. Wilson, 1961.

Rossoff, Martin. The School Library and Educational Change. Littleton, Colorado: Libraries Unlimited, Inc., 1971.

Sisson, Silvanus Hull. "Planning the Junior High School Library Program." Dissertation Abstracts International, 21 (1961), 3692.

Slauson, Celest M. "The Junior High Library." Wilson Library Bulletin, 3 (February 1929), 485-489.

Stroud, Janet G., and David V. Loertscher. "User Needs and School Library Service." Catholic Library World, 49 (November 1977), 162-165.

Stroud, Janet G. "Evaluation of Media Center Services by Media Staff, Teachers, and Students in Indiana Middle and Junior High Schools." Dissertation Abstracts International, 37 (1977), 4674-A.

Tauber, Maurice F., and Irlene R. Stephens. Conference on Use of Printed and Audio-Visual Materials for Instructional Purposes. New York: Columbia University School of Library Service, 1966.

Tielke, Elton F. "A Study of the Relationship of Selected Environmental Factors to the Development of Elementary School Libraries." Unpublished Doctoral Thesis, University of Texas, Austin, 1968.

Weaver, Donald. "Contributing to Relevance in School Programs." School Libraries, 20 (Summer 1971), 15-22.

Welch, Fred. "Relationships Between Curriculum Variables, Attitudes, Teacher Characteristics and the Utilization of Instructional Media." Dissertation Abstracts International, 35 (1975), 5795-A.

Wiedrick, Laurence G. "Student Use of School Libraries in Edmonton Open Area Elementary Schools." Dissertation Abstracts International, 34 (1973), 1070.

Wilson, Ella. "Research on the Elementary School Library." Theory Into Practice, 6 (February 1967), 30-39.

Wimberly, Sarah J. "A Study of the Attitudes of Pupils, Teachers and Principals in the Morehouse Parish School System Toward Educational Media and the Utilization of Media by Teachers." Dissertation Abstracts International, 35 (1975), 7791-A.

Wofford, Azile. "Students Don't Have Time to Use School Libraries." Library Journal, 86 (November 15, 1961), 4007.

APPENDIX

FORM 1

	Home Group	5 minutes between classes	1st period	5 minutes between classes	2nd period	5 minutes between classes	3rd period	5 minutes between classes	4th period	5 minutes between classes	5th period	5 minutes between classes	6th period	After school
Return books														
Check out books														
Read magazines and newspapers														
Reference work for class														
Other class assignment														
Borrow equipment for teacher														
Non-library work														
Reference for personal information														

Date_____

Number of students who borrowed material_____

Number of items borrowed_____

FORM 2

Student's Name	Grade
Free lunch status	Sex
Number of items borrowed--date	

VITA

Jane McAmis Sparks was born in Kingsport, Tennessee on December 7, 1941. She was graduated from Kingsport's Dobyns-Bennett High School in 1959. In 1962 she received a B.S. degree from The University of Tennessee, Knoxville with a major in English and speech. She taught elementary grades in the Roane County School System for three years before moving to Knoxville, Tennessee and beginning work on an M.S. degree in library science.

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