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Collection diversification in three media centers in Hamilton County, Iowa

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Abstract

Specific research problems to be investigated are:

1. What percent of the nonfiction book titles related to selected social studies topics will be in all three of, in two of, and in only one of the secondary school media center collections?
2. What percent of the nonfiction book titles related to selected social studies topics and listed in the Senior High School Library Catalog will each of the three media centers have?

COLLECTION DIVERSIFICATION
IN THREE SCHOOL MEDIA CENTERS
IN HAMILTON COUNTY, IOWA

A Research Paper
Presented to the
Faculty of the Library Science Department

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

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CHAPTER ONE

The Problem

Introduction

Public school media centers are an integral part of the total school program. Research has shown that there is a "positive relationship between the level of library service available and the students' scholastic achievement."¹ Schools with good media centers and full-time media specialists have students who score better on tests in reading comprehension and knowledge and use of reference materials than students in schools with "minimal or no library service."²

Two important roles of the media center and the media specialist in a secondary school are meeting the needs of the curriculum and meeting the needs of the individual student. These two roles demand a wide variety of materials to satisfy the needs of curriculum and student.

The media specialist's role in meeting the demands of the curriculum is to work closely with teachers as they plan instructional units. The media specialist suggests "useful materials and

¹Clyde LeRoy Greve, "The Relationship of the Availability of Libraries to the Academic Achievement of High School Seniors," Dissertation Abstracts 35 (1975): 4575A.

²Ralph Donnelly McMillen, "An Analysis of Library Programs and a Determination of Educational Justifications of These Programs in Selected Schools of Ohio," Dissertation Abstracts 27 (1966): 331A.

effective ways of using them."³ In the process of planning a unit, the materials that the media center has to support units are delineated but also the materials that the media center lacks are discovered. The process of planning units may uncover the need for additional materials.

The media specialist, in meeting the needs of individuals, is also accomplishing one of the primary goals of education: "to help each student learn to the limits of his or her potential and to expand to the fullest extent the very capacity to learn."⁴ The challenge in meeting this goal lies in having materials available on the reading and intellectual level of the students and in having a variety of formats that fit the individuals' learning styles.

The media specialist knows the importance of the role of the media center in academic achievement. The media specialist knows the importance of providing a wide variety of materials in different formats. However, media center budgets do not always allow for the quantity and variety of materials that are necessary.

In times of inflation and budgetary restraints and cutbacks, the media specialist is hard-pressed to maintain an adequate collection. Budgetary restrictions are also likely to affect the methods used in selecting materials for a collection. The process of

³Richard L. Darling, Teams for Better Education: The Teacher and the Librarian (Champaign, Illinois: Garrard, 1969), p. 6.

⁴Alice E. Fite, "Report of the Task Force on the Role of the School Library Programs in Networking," School Media Quarterly 7(1972): 90.

selection may become more responsive to specific teacher requests to build the collection rather than selecting materials from standard selection sources to build a collection reflecting a balance among all curriculum areas. Therefore, alternate methods for obtaining a variety of materials must be explored if each individual user's needs are to be met.

One alternative is the participation of school media centers in interlibrary loan activities. "School library media programs must be included, where appropriate, in cooperative program activities. For without them nearly 50 million children and young adults enrolled in the nation's public and nonpublic schools will be underserved or unreached."⁵ "The information needs of students, teachers, and others involved in elementary and secondary education frequently go beyond the resources that even the very best school library media programs are able to make available."⁶

Before any planning for the sharing of resources can occur, a determination will have to be made as to whether the media centers that may be involved in such a program possess collections diversified enough to warrant the development of an interlibrary loan program. Therefore, the purpose of this study will be to determine how much overlap and how much diversification exists among the collections of three media centers. A second purpose of the study

⁵David L. Bender, "Networking and School Library Media Programs," School Library Journal 26 (1972): 31.

⁶Fite, p. 93.

will be to explore the extent to which the collections of the same three media centers hold titles that occur in a standard selection source.

Problem Statement

Specific research problems to be investigated are:

1. What percent of the nonfiction book titles related to selected social studies topics will be in all three of, in two of, and in only one of the secondary school media center collections?

2. What percent of the nonfiction book titles related to selected social studies topics and listed in the Senior High School Library Catalog will each of the three media centers have?

Hypotheses

The following hypotheses will be tested:

1. Twenty percent of the nonfiction book titles related to selected social studies topics will be held by all three media centers.

2. Thirty percent of the nonfiction book titles related to selected social studies topics will be held by two of the media centers.

3. Fifty percent of the nonfiction book titles related to selected social studies topics will be held by only one of the media centers.

4. Seventy-five percent or more of the nonfiction book titles related to the selected social studies topics and in the collections of each media center will be listed in the Senior High School

Library Catalog.

Significance of the Study

The results of the study will provide the first step in determining whether an interlibrary loan system is a feasible alternative to expanding the resources of the three secondary school media centers. The study may reveal diversification of collections great enough to warrant sharing resources. Interlibrary loan may then become one viable solution to budgetary restrictions by enabling participating media centers to increase the amount of materials available without additional expenditures. Profiting the most from interlibrary loan will be the students of our schools. "The quality of the information services to which students and their teachers have access affects directly what they learn and how well they learn it--a factor of no little consequence for this Nation's future."⁷

The results of the study will show to what extent the media centers' collections reflect recommendations in a standard selection source. In a study by Ellen Altman of selected secondary school libraries in New Jersey,⁸ the assumption was made that if a title appeared in a standard selection source a media center was likely to have that title in its collection. This study will determine whether that assumption is applicable to the three school media

⁷Fite, p. 91.

⁸Ellen Altman, "Implications of Title Diversity and Collection Overlap for Interlibrary Loan among Secondary Schools," The Library Quarterly 42 (1972): 177-194.

centers in Hamilton County.

Assumptions

Similar topics will be taught in secondary courses that have similar titles in the three schools in Hamilton County, Iowa. The schools frequently use the same textbooks and courses tend to be standardized.

One goal of media center programs is to support and enrich the curriculum; therefore, each media center collection will have books that specifically reflect the resource needs of teachers and students.

There will be diversity in the book collections of the three school media centers even though the same selection tools are used. Senior High School Library Catalog is a common selection tool used by all three media specialists.

Small school media centers have a contribution to make to inter-library loan as well as large school media centers and can share resources to promote teaching and learning in each school.

Cataloging of books will be similar enough in the three media centers so that the collections can be compared on the basis of the Dewey Decimal System of Classification.

Limitations of the Study

No attempt has been made to select a representative sample of media centers. Schools selected are in close proximity to one another and will allow the researcher access to shelf lists and public catalogs.

The study covers only a part of a common subject area, social studies, and the findings related to collection diversification are applicable only to that subject area. No generalizations can be made about the diversity of the entire collection of the three media centers.

The study covers only nonfiction book titles and excludes periodicals and audiovisual materials. Periodicals are excluded because of the limited number of titles available in each school, thus it is likely that very little diversity would be found among the periodical titles in the three school media centers. Audiovisual materials are excluded because the Arrowhead Area Education Agency provides an efficient and cost-effective program for the sharing of audiovisual resources among the three schools.

Other limitations to the study are given in the methodology section.

Definition of Terms

The following definitions will be used in this study:

1. collection diversification- the amount of title overlap and title uniqueness among media center book collections.
2. secondary- high school grades ten, eleven, and twelve.
3. title overlap- a book title owned by two or more media centers in the comparison group.
4. unique title- a book title owned by only one of the media centers in the comparison group.

CHAPTER TWO

Literature Review

There have been several studies done to determine collection diversification among media centers of many types. Most studies have found diversification in the collections the studies compared. Although degrees of uniqueness vary, interlibrary loan is still considered feasible and worthy of pursuit.

Two dissertations done to survey collections are included in this review because a portion of each study reflects on the degree of collection overlap of books reviewed in major selection sources.

Eugenia E. Schmitz completed her dissertation, "A Study of the Library Book Collections in Mathematics and the Physical Sciences in Fifty-four Michigan High Schools Accredited by the North Central Association of Colleges and Secondary Schools," in 1966. The purpose of her study was "to investigate the size, recency, and quality of the book collections in mathematics and the physical sciences."⁹ The quality of the collection was measured, in part, by the researcher compiling a core list of titles from major book selection bibliographies. The researcher checked the public catalogs and the shelf lists of the fifty-four schools used in the study

⁹Eugenia Evangeline Schmitz, "A Study of the Library Book Collections in Mathematics and the Physical Sciences in Fifty-four Michigan High Schools Accredited by the North Central Association of Colleges and Secondary Schools," Dissertation Abstracts 28 (1976): 248A.

to determine what titles on the core list were in each school's collection.

One result of Schmitz's study revealed that there was no significant overlap in titles reviewed in major book selection bibliographies. "No single title from the master mathematics (or physical science) book list was owned by all fifty-four schools."¹⁰

In 1965, Norma Louise Jones wrote her dissertation for the University of Michigan. Her paper was entitled "A Study of the Library Book Collections in the Biological Sciences in Fifty-four Michigan High Schools Accredited by the North Central Association of Colleges and Secondary Schools." The Jones study was the prototype for the Schmitz study. Similar methodologies were used to obtain data. The Jones study revealed no significant overlap of titles in the biological sciences in the fifty-four Michigan high schools even though the core list of titles was obtained from major reviewing sources.

The following studies were done to measure title overlap. A study begun in 1972 was completed by Mary V. Gaver and Gale Sypher Jacob to determine the feasibility of publishing a "composite bibliography drawn from the shelf lists of three or four select high school libraries."¹¹ It was a project that had originated

¹⁰Schmitz, p. 248A.

¹¹Gale Sypher Jacob, The High School Collection: An Introductory Study of Six High School Libraries (Williamsport, Pennsylvania: Bro-Dart, 1974), p. v.

with the American Library Association (ALA). In 1971, the ALA decided not to pursue the project. "The ALA files on objectives and suggestions for schools to be included were then turned over to Mary V. Gaver for possible implementation."¹²

Six high schools were chosen for the project: Oak Park and River Forest High School in Oak Park, Illinois; Irondequoit High School in Rochester, New York; Hanover Park High School in East Hanover, New Jersey; Walt Whitman High School in Bethesda, Maryland; South Plantation High School in Plantation, Florida; and Oakland High School in Oakland, California. "These schools were selected for a variety of reasons: excellence of collection, nationally respected library personnel, geographic location, curriculum, and community characteristics."¹³ Six schools were used instead of the three or four suggested by the ALA because it was discovered that there was more diversity among library collections than was believed to be true.

The methodology used was to microfilm the shelf lists of the six high schools, which included audiovisual titles but not the "professional collection, 'must order direct' titles, college catalogs, and periodicals."¹⁴ The computer system of Bro-Dart, Inc. was used to collate the lists. It was found that out of the 80,000 total titles less than 1,000 titles were duplicates.

¹²Ibid., p. v. ¹³Ibid., p. v.

¹⁴Ibid., p. 3.

The data was then broken into smaller categories so that title diversification would become clearer. Print-outs were produced to show individual titles in two Dewey classifications: 301.4 and 550.0 to 554.0. Two charts were then produced that showed the number of titles held by one school, by two schools, etc. The result was that out of 571 titles in the 301.4 Dewey category only seven titles were common to all six schools. A similar chart showed titles held in the 550, 551, 551.4, and 551.5 Dewey categories. Two or less titles were held by all six schools in each of these categories.

A composite chart of the entire Dewey system for books only was compiled. The conclusion reached from this data was that of the "85,197 book titles held by the six high schools, 52,000 (61%) are unique titles."¹⁵

The end result of the project was to compile a composite bibliography of the collections of the six high school libraries. Because of cataloging variations among the schools, the original plan to organize the bibliography by Dewey numbers was abandoned. The bibliography was arranged by titles instead. It was the intent of the compilers that the bibliography be useful in building high school collections, "in schools that have some characteristics similar to the six project schools."¹⁶ For that reason, a detailed description of each school used in the project comprised the remainder of the paper by Jacob.

¹⁵Ibid., p. 2. ¹⁶Ibid., p. 2.

Ellen Altman's dissertation, "Implications of Title Diversity and Collection Overlap for Interlibrary Loan among Secondary Schools," is the one that serves best as the guideline for this paper. The purpose of her paper was to determine the feasibility of interlibrary loan by determining whether there was significant title diversification among secondary school libraries in the state of New Jersey to justify establishing an interlibrary loan program.

She chose the schools to participate in the sampling by using the New Jersey State Library's statistical report which presents information on a county basis. She selected schools from counties which were closest to the state average. She was able to choose four counties that met her criteria:

Those counties satisfying the volume-distribution requirement (3,000-10,999) were studied to assess their deviance from state norms on the following variables: mean number of books per student, per capita book expenditures, presence of a full-time librarian in each school, mean number of books per school. Those counties falling more than one standard deviation beyond the mean were considered atypical and were excluded.¹⁷

In addition to the public school collections, she also studied the collections in the area centers.

To determine what topics to study for title diversification, Altman had teachers representing each area of the curriculum in each of the 31 schools and the head librarians answer a questionnaire. The questionnaire elicited the topics on which independent

¹⁷Ellen Altman, "Implications of Title Diversity and Collection Overlap for Interlibrary Loan among Secondary Schools," The Library Quarterly 42 (1972): 183.

study had been done by students in their schools. From the answers, Altman chose twelve topics most frequently mentioned. She then assigned each topic to the appropriate Dewey classification.

She then went through the shelf list cards in each library and area center and recorded titles under each independent study topic heading. She excluded what she defined as core titles from her count--any title listed under the appropriate Dewey numbers for the twelve topics in Senior High School Library Catalog (9th ed.) and Standard Catalog for High School Libraries (8th ed.).

The results when school collections were compared "showed that unique titles represented 48.8% of all noncore titles in the primary county and 51.19% in the second county."¹⁸ The study indicated that collections in the school libraries were not identical and the implication was clear that interlibrary loan was feasible.

In 1973 John J. Knightly completed a dissertation in which he compared the book collections of academic libraries in 22 colleges and universities in Texas in nineteen program areas.

The data gathering instrument consisted of stratified random samplings from the U.S. book titles published in a given year in each of the nineteen subject fields as recorded in the American Book Publishing Record.¹⁹

He chose 845 titles. He used the public catalogs of the schools to check for titles on his random list.

The percentage of overlap on the list and in the card catalogs

¹⁸Ibid., p. 185.

¹⁹John J. Knightly, "Library Collections and Academic Curricula: Quantitative Relationships," College and Research Libraries 36 (1975): 295.

was higher for colleges and universities with master or doctoral degree programs and lower for no degree colleges. Basically, he found that there was considerable overlap in collections of academic libraries.

However, "each library makes to some extent a unique contribution to overall subject coverage."²⁰ Other conclusions from his study were that careful study should be made before academic libraries attempt to concentrate "collection responsibility"²¹ at one library; that an automatic ordering plan that relies heavily upon curriculum be studied because such a plan "may alter the nature of their collections."²² He also suggested that research be done to see if the materials that are highly duplicated are also the materials that have the highest usage rate. He felt that such research would be essential in planning an effective information network.

Carol Ann Doll's dissertation, published in 1980, explored overlap and duplication in the collections of children's materials in school and public libraries. She chose two elementary libraries and one public library in each of four communities in Illinois to conduct her study.

She selected at random two hundred book titles from the shelf lists of the libraries. She discovered that the average book collection overlap between the two elementary school libraries was 30

²⁰Ibid., p. 300.

²¹Ibid., p. 301. ²²Ibid., p. 301.

percent and 50 percent between the school libraries and the public libraries.²³

She also examined some nonbook materials from a list provided by each library: "spoken-fiction sound recordings, science filmstrips, and magazines."²⁴ The results of her study of nonbook materials were that the public libraries owned more sound recordings and had more magazine titles. The school libraries owned more science filmstrips.²⁵ One major conclusion from her study was that "every library has unique book titles to contribute to a community pool of resources."²⁶

One conclusion that can be drawn from the studies is that even though media centers use common reviewing sources their collections may not be similar. The Schmitz and Jones studies indicated there was no significant overlap in mathematics and physical sciences or biological sciences titles in Michigan secondary schools even though the book titles were listed in common reviewing sources. Although overlap occurs in collections there is still a significant amount of uniqueness in each collection. An interlibrary loan program is a feasible alternative to pursue because each media center can make a contribution to the pooling of resources.

²³Carol Ann Doll, "School and Public Library Collection Overlap and the Implications for Networking," School Library Media Quarterly 11 (1983): 196.

²⁴Ibid., p. 196. ²⁵Ibid., p. 197.

²⁶Ibid., p. 197.

CHAPTER THREE

Methodology

General Description

The study was conducted in the secondary school media centers in three towns in Hamilton County, Iowa--Blairsburg, Jewell, and Webster City. The schools were chosen because of geographic proximity and the potential for ease of exchange of media center materials among the schools through the Arrowhead Area Education Agency delivery van. Each media center is staffed by a professional media specialist and has an active media program.

Book titles which were related to selected social studies topics and were in the nonfiction circulating collections of the three media centers were the population for this study. Book titles in the reference collections of the schools were excluded as they are not generally available for interlibrary loan because the general circulation procedures for reference collections are usually restrictive. Different editions of the same title were counted as one title. Social studies was chosen as the curriculum area for comparison of book titles because all three schools offer at least three similar social studies courses for students in grades 10-12.

American History, World History, and American Government were the social studies courses used in this study. The courses of Geography, Economics, Social Psychology, Choosing Life Values,

Global Studies, Great Men and Women, and Psychology were not used because they were not offered at all three schools. The Current Events course was not used even though the course was offered at all three schools. Book collections are not utilized to a great extent for resource information for this course.

Curriculum guides from each school were used to select the social studies courses common to all three schools. The curriculum guides were also used to select the broad, common topics covered in each of the three courses. The Abridged Dewey Decimal Classification and Relative Index (editions 10 and 11) were used to convert the social studies topics into the appropriate classification numbers. Table 1 represents the topics by course title and by corresponding Dewey numbers.

In addition to determining collection diversification in the three media centers, the researcher checked the number of book titles in the selected social studies topics that the three media centers had and that are listed in the Senior High School Library Catalog (11th and 12th editions).²⁷ The purpose of this portion of the study was to check the assumption included in the Altman study²⁸ that use of a common selection source will contribute to a high degree of title overlap among media center collections.

²⁷This title will be shortened to the Catalog in the remainder of the study.

²⁸Ellen Altman, "Implications of Title Diversity and Collection Overlap for Interlibrary Loan among Secondary Schools," The Library Quarterly 42 (1972): 177-194.

Table 1

Social Studies Courses and Topics
with Corresponding Dewey Numbers

Course Titles and Topics	Corresponding Dewey Numbers*
American Government	
Legislative Branch	328; 342.5
Executive Branch	342.6; 351; 353
Judicial Branch	347
Election Process	324; 324.73; 342.7
Political Party System	324; 324.2; 324.73; 329 342.8
American History	
Reconstruction	973.8
Westward Expansion	973.8; 978; 996.9
Early 20th Century	973.91
The Great Depression	330.973; 973.917
World War I	940.3; 940.4; 973.91
Later 20th Century	973.92
World War II	940.53; 940.54; 973.917; 973.918
World History	
Classic Civilizations-Greece	909; 913.38; 938
Classic Civilizations-Rome	909; 913.37; 937
Reformation and Renaissance	270.6; 940.2
Middle Ages	270.4; 270.5; 909.07; 914.4; 940.1

*See Table 8 in Appendix D for subjects corresponding to the Dewey numbers.

Procedures for Gathering Data

The following procedure was used to determine collection diversification in the three media centers for nonfiction book titles in the selected social studies topics and to find what percent of these titles are listed in the Catalog. The shelf list cards from Media Center A²⁹ in the Dewey numbers for each of the social studies topics listed in Table 1 were used as the beginning list. Each shelf list card from Media Center A was marked with an "SHC" if the titles appeared in either the 11th or 12th edition of the Catalog. The number of titles in each Dewey number and the number of titles Media Center A had that are listed in the Catalog were counted and the numbers recorded.

The next step was to take the shelf list cards from Media Center A to Media Center B. First, the shelf list cards from Media Center B were counted in each Dewey category in the selected social studies topics and the numbers recorded. The shelf list cards from Media Center A were then compared with the shelf list cards from Media Center B. Any titles that the two media centers had in common were indicated by putting a "B" on the appropriate shelf list cards from Media Center A. At the conclusion of the comparison, any shelf list card from Media Center A that did not have a "B" on it was put in a separate pile. The titles on the cards in that pile were looked up in the public card catalog of Media Center B to see if the titles were present in Media Center B's collection but cataloged in a different

²⁹Each of the three media centers is not identified by school name, but is identified by letter--A, B, or C--in the rest of the study.

Dewey category. If the title was found to be present but cataloged differently, a "B" was placed on Media Center A's shelf list card. Titles found to be unique to Media Center B were recorded on 3 x 5 cards. The call number, author, title, publisher, and date for each unique title were recorded on the card. All titles unique to Media Center B's collection were checked in the Catalog and an "SHC" recorded if the title was found.

The original shelf list cards from Media Center A and the 3 x 5 cards for each unique title in Media Center B were taken to Media Center C. A count was made and recorded using the shelf list cards in Media Center C of the total number of titles Media Center C held in each of the Dewey categories in the selected social studies topics. The shelf list cards from Media Center C were compared with the shelf list cards from Media Center A. A "C" was placed on the shelf list card from Media Center A for each title C and A had in common. At the conclusion of the comparison any shelf list card from Media Center A that did not have a "C" on it was separated out. The titles on the cards in the separate pile were looked up in the public card catalog of Media Center C to see if the title was held by Media Center C but cataloged in a different Dewey category. If the title was found in the public catalog, a "C" was marked on the appropriate shelf list card from Media Center A.

The same procedure was used to compare the unique titles recorded on 3 x 5 cards from Media Center B with the titles in Media Center C's shelf list not common with titles on the beginning

list from Media Center A. Titles unique to Media Center C were recorded on 3 x 5 cards. All titles unique to Media Center C were checked in the Catalog and an "SHC" recorded if the title was found.

The titles on the 3 x 5 cards from Media Center C were then looked up in the public card catalog of Media Center B to see if the titles were present in the collection but cataloged differently. If a title was found, a "B" was placed on the 3 x 5 card from Media Center C. The 3 x 5 cards from Media Centers B and C were taken to Media Center A where the titles were looked up in the public card catalog. If a title was found, an "A" was marked on the appropriate card. The titles found to be cataloged differently were then added to the total count of titles done originally from the shelf list cards of each media center so that the total number of titles included those titles cataloged differently.

The total count of titles in each Dewey category for each media center was tabulated. The cards were divided into groups: one group for titles common to all three media centers, one group for titles common to two of the media centers, and one group for unique titles. The totals from each of the groups for each of the Dewey categories were recorded.

The total number of titles listed in the Catalog was counted. Titles that appeared in both editions of the Catalog were counted once. The cards from the three media centers marked with an "SHC" were counted.

CHAPTER FOUR

Analysis of the Data

The data for the study were recorded on the shelf list cards from Media Center A and on 3 x 5 cards that represented book titles unique to Media Center B and to Media Center C (see Appendix A). The total number of titles each center had in the selected Dewey categories was obtained by counting the corresponding shelf list cards in each of the three media centers. The number of titles in the selected social studies topics listed in the Senior High School Library Catalog (the Catalog) was compiled by Dewey numbers.

Gathering data was facilitated by having the shelf list cards from Media Center A that could be transported from that center to the other two centers in the study and by being able to write on the shelf list cards of Media Center A. By gathering data during the summer months when all three schools were not in session, the researcher did not have to contend with collection changes that could occur during the school year due to additions of new materials or withdrawal of materials.

Compiling the data gathered from the three secondary school media centers was facilitated by having the data on cards as the cards could easily be grouped and counted. Grouping was done to count the number of titles in three of the centers, in two of the

centers, and in only one of the centers. Cards that indicated the titles were also listed in the Catalog were grouped and counted.

Both editions of the Catalog were compared so that any title in the selected social studies topics appearing in both editions was counted once. The researcher discovered that of the thirty-seven Dewey Decimal number categories used in the study in the selected social studies topics, thirteen did not appear in the Catalog (see Table 7, Appendix B).

One of the assumptions made in this study was that cataloging would be similar enough in the three media centers that the collections could be compared by using the Dewey Decimal System of Classification numbers. Each title thought to be unique to a media center collection was looked up in the public catalogs to check for cataloging differences. Any difference in classification numbers was noted on the shelf list or 3 x 5 card. For instance, if a title found in Media Center B was found in Media Center C's public catalog and had a different Dewey number, a "C" was placed on the 3 x 5 card from Media Center B and the different Dewey number was placed in parentheses next to the "C" (see Appendix C).

Checking the public catalogs of all three media centers was mandatory. Prior to gathering data, the researcher assumed that checking the public catalog in Media Center B and in Media Center C would be adequate. However, to be sure that titles thought to be unique to each media center were unique, it was evident that the public catalog in Media Center B had to be checked twice and

the public catalogs in Media Centers A and C once. For example, the titles on the 3 x 5 cards from both Media Centers B and C were looked up in the public catalog of Media Center A to check to see if the titles were indeed unique or in the collections of Media Center A but cataloged differently.

Of the 1,299 total titles in the three collections in the selected social studies topics, 105 (eight percent) were assigned different Dewey numbers. Another interesting finding that was gleaned from the group of cards representing titles that were cataloged differently was that fifteen of the titles were listed in the Catalog.

Data from the shelf list cards and the 3 x 5 cards are displayed on Tables 2, 3, and 4 to show the number of book titles held by each of the media centers for each topic in the three social studies courses. The tables also show the number of the titles held in the collections in all three media centers, in two of the media centers, and in only one of the media centers. The numbers representing the total number of titles in each Dewey category on the right-hand side of the tables and the numbers representing the number of titles in three, two, and one of the centers on the left-hand side of the tables will be equal if the number under the heading "In All Three Centers" is multiplied by three; the number in "In Two Centers" is multiplied by two; the number under "In One Center" is added to the product of the other two columns.

Table 2 represents the data for the American Government course topics. One observation that can be made from Table 2

Table 2

Number of Book Titles Held by Three Secondary School Media Centers for
American Government Topics by Dewey Decimal Classification Numbers

Topics/Dewey Numbers*	Total Number of Book Titles				Number of Different Book Titles		
	Media Center A	Media Center B	Media Center C	Total	In Three Centers	In Two Centers	In One Center
Legislative Branch							
328	-	-	-	-	-	-	-
342.5	-	-	-	-	-	-	-
Executive Branch							
342.6	-	1	-	1	-	-	1
351	-	-	-	-	-	-	-
353	12	8	9	29	-	5	19
Judicial Branch							
347	4	6	5	15	2	2	5
Election Process							
324	10	5	5	20	3	3	5
324.73	6	8	5	19	2	5	3
342.7	-	-	-	-	-	-	-
Political Party Systems							
324.2	-	-	-	-	-	-	-
329	61	35	20	116	10	15	56
342.8	3	2	1	6	-	2	2
Totals	96	65	45	206	17	32	91

*Dewey numbers related to more than one topic are listed under one topic only.

Table 3

Number of Book Titles Held by Three Secondary School Media Centers for
American History Topics by Dewey Decimal Classification Numbers

Topics/Dewey Numbers*	Total Number of Book Titles				Number of Different Book Titles		
	Media Center A	Media Center B	Media Center C	Total	In Three Centers	In Two Centers	In One Center
Reconstruction 973.8	29	41	21	91	12	10	35
Westward Expansion 978	45	45	14	104	3	21	53
979	5	2	4	11	1	1	6
996.9	-	-	-	-	-	-	-
Early 20th Century 973.91	25	37	16	78	8	16	22
Great Depression 330.973	28	16	15	59	4	13	21
973.917	14	24	12	50	4	8	22
World War I 940.3	12	17	11	40	2	9	16
940.4	15	16	16	47	4	11	13
World War II 940.53	16	25	6	47	-	6	35
940.54	77	115	68	260	11	42	143
973.918	2	4	3	9	-	2	5
Later 20th Century 973.92	7	17	1	25	1	1	20
Totals	275	359	187	821	50	140	391

*Dewey numbers related to more than one topic are listed under one topic only.

Table 4

Number of Book Titles Held by Three Secondary School Media Centers for
World History Topics by Dewey Decimal Classification Numbers

Topics/Dewey Numbers*	Total Number of Book Titles				Number of Different Book Titles		
	Media Center A	Media Center B	Media Center C	Total	In Three Centers	In Two Centers	In One Center
Greece							
909	14	26	26	66	2	13	34
913.38	-	2	1	3	-	-	3
938	20	11	7	38	3	7	15
Rome							
913.37	-	6	6	12	-	3	6
937	14	12	8	34	4	6	10
Middle Ages							
270.4	-	-	-	-	-	-	-
270.5	-	-	-	-	-	-	-
909.07	-	1	1	2	-	-	2
914.4	-	-	-	-	-	-	-
940.1	26	22	12	60	3	13	25
Reformation							
270.6	-	-	-	-	-	-	-
940.2	20	28	9	57	6	7	25
Totals	94	108	70	272	18	49	120

*Dewey numbers related to more than one topic are listed under one topic only.

is that nonfiction book collections for the American Government course topics are very small (206 titles), with five of the twelve Dewey number categories showing no book titles at all. Of the 206 total titles in the collections of all three centers for the topics for the American Government course, Media Center A had ninety-six (47 percent) of the total. Only seventeen (12 percent) of the 140 different titles were held by all three centers; thirty-two (23 percent) were held by two of the centers; ninety-one (65 percent) were held by only one center.

Table 3 lists the data for the American History course topics. The highest number of titles, 260, appears in the Dewey category 940.54, which is the number for the military history of World War II. The second highest number of titles, ninety-one, appears in the Dewey category 973.8, which is the number for the general history of the United States from 1865-1901. Fifty of the 581 different titles (9 percent) were held by all three centers; 140 titles (24 percent) were held by two of the centers; 391 titles (67 percent) were unique to one center. Most of the American History topics seem to have a large representation of titles in each of the centers, much more extensive than for American Government. Only one of the thirteen Dewey category numbers was not represented in any of the collections.

Table 4 represents the data for the World History course topics. Four of the twelve Dewey category numbers were not represented in the collections of the three media centers. Two of the three Dewey numbers, 270.4 and 270.5, chosen from the eleventh edition of the Abridged Dewey Decimal Classification and Relative Index (see Table 8, Appendix D)

were not represented in the collections. Media Center A did not have any books cataloged in the 909.07, 913.37, and the 913.38 Dewey categories. The highest number of titles, sixty-six, appears in the Dewey category 909, which is the number for general world history. Eighteen of the 187 different titles (10 percent) were held by all three centers. Forty-nine titles (26 percent) were held by two of the centers. One hundred twenty (64 percent) of the 187 different titles were unique to one center.

Table 5

Total Number of Different Book Titles Held by Three Secondary School Media Centers in the Selected Social Studies Courses

Courses	In Three Centers	In Two Centers	In One Center
American Government	17	32	91
American History	50	140	391
World History	18	49	120
Total	85	221	602

^{2, 3 AND 4} Tables ~~8~~ show~~s~~ the total number of book titles held by the media centers for the topics in each course. American History topics were represented by 821 titles (63 percent) of the grand total of 1,299 titles. World History topics were represented by 272 titles (21 percent) of the grand total. American Government topics were represented by 206 titles (16 percent) of the grand total. American History topics had the highest percentage of unique

titles, 65 percent. Fifteen percent of the titles in topics for the American Government and twenty percent of the titles in topics for the World History courses were unique.

Hypothesis one stated that "twenty percent of the nonfiction book titles related to selected social studies topics will be held by all three media centers." Table 5 shows that only nine percent (85 titles) of the 908 different titles were held by all three media centers. The first hypothesis was rejected.

The second hypothesis was also rejected. It stated that "thirty percent of the nonfiction book titles related to the selected social studies topics will be held by two of the media centers." The data revealed that only twenty-four percent (221 titles) of the 908 different titles were held by two of the media centers.

The third hypothesis stated that "fifty percent of the non-fiction book titles related to the selected social studies topics will be held by only one of the media centers." Table 5 shows that sixty-six percent of the 908 different titles are held by only one of the media centers. The third hypothesis was rejected.

Data on Table 6 were compiled from the shelf list cards from Media Center A and the 3 x 5 cards from Media Centers B and C that had an "SHC" marked on them. Table 6 shows the number of titles listed in the Catalog in the Dewey numbers for the selected social studies topics and the number and percent of those titles held by each of the three media centers. The 295 titles listed in the Catalog represent only thirty-two percent of the 908 titles held

Table 6

Number and Percent of Book Titles Listed in
Senior High Catalog and Held by Each Secondary School Media Center

Courses/Dewey Numbers*	Senior High Catalog No.	Media Center A		Media Center B		Media Center C	
		No.	%	No.	%	No.	%
American Government							
329	10	5	.50	3	.30	3	.30
342.8	6	0	.00	0	.00	0	.00
347	7	0	.00	0	.00	0	.00
353	2	0	.00	0	.00	1	.50
American History							
330.973	16	6	.37	3	.18	4	.25
940.3	9	3	.33	2	.22	4	.44
940.4	4	0	.00	1	.25	0	.00
940.53	23	4	.17	7	.30	1	.04
940.54	55	14	.25	20	.36	9	.16
973.8	13	4	.30	5	.38	4	.30
973.91	25	3	.12	7	.28	3	.12
973.917	6	2	.33	2	.33	3	.50
973.918	3	0	.00	0	.00	0	.00
973.92	11	1	.09	1	.09	0	.00
978	20	5	.25	7	.35	4	.20
World History							
909	16	4	.25	3	.18	3	.18
909.07	5	0	.00	1	.20	0	.00
913.37	9	0	.00	2	.22	2	.22
913.38	4	0	.00	1	.25	1	.25
914.4	3	0	.00	0	.00	0	.00
937	11	5	.45	4	.36	3	.27
938	9	3	.33	3	.33	3	.33
940.1	9	5	.55	5	.55	5	.55
940.2	19	7	.36	12	.63	3	.15
Totals	295	71	.24	89	.30	56	.19

*Thirteen of the selected Dewey numbers for which no titles were listed in the Senior High Catalog are omitted.

by the three centers. Therefore, the fourth hypothesis which stated that "seventy-five percent or more of the nonfiction book titles related to the selected social studies topics and in the collections of each media center will be listed in the Senior High School Library Catalog" was rejected.

The highest number of titles listed in the Catalog was in the American History topics; the second highest was in World History; the third in American Government. This same ranking was reflected in the number of titles in each in the collections of the three media centers. The highest number of titles was in the Dewey category 940.54 with fifty-five titles listed in the Catalog. Fifty percent or more of the titles held by Media Center A and listed in the Catalog were in the following Dewey categories: 329 and 940.1; in Media Center B, 940.1; in Media Center C, 353, 973.917, and 940.1. The titles listed in the Catalog in the Dewey categories 342.8, 347, and 973.918 were not represented in the collections of the three media centers.

CHAPTER FIVE

Summary and Conclusions

One purpose of this study was to take the first step in determining whether interlibrary loan is feasible among the three secondary media centers in Hamilton County, Iowa. Interlibrary loan is a feasible alternative to pursue because the media centers included in previous studies had a significant amount of uniqueness in their collections. A second purpose of the study was to determine to what extent the three media centers' collections reflect the recommendations in a standard selection source, Senior High School Library Catalog (the Catalog). Even though media centers use common reviewing sources their collections may not be similar.

The study was conducted to find out what percent of the nonfiction book titles in selected social studies topics were held by all three, in two, and in only one of the media centers in the study. Also investigated was what percent of those same titles were held by each of the three media centers and were also listed in the Catalog.

Course outlines from each of the three secondary schools in Hamilton County, Iowa, were used to determine which social studies courses and topics within those courses were taught in all three schools. Topics in American Government, American History, and World History courses were assigned appropriate Dewey Classification numbers. Book titles in each collection for the selected Dewey

numbers were recorded on the shelf list cards from Media Center A and on 3 x 5 cards for titles unique to Media Centers B and C. Titles for the selected numbers listed in the Catalog and the titles on the shelf list and 3 x 5 cards were compared to find the number of titles listed in the standard reviewing source and held in each of the three collections.

Hypothesis one, "twenty percent of the nonfiction book titles related to selected social studies topics will be held by all three media centers," was rejected because only nine percent of the 908 different titles were held by all three centers. The second hypothesis was also rejected because only twenty-four percent of the total number of different titles were held by two of the media centers instead of the predicted thirty percent. Sixty-six percent of the titles were unique to the media centers, so the third hypothesis, "fifty percent of the nonfiction book titles related to selected social studies topics will be held by only one of the media centers," was rejected. The fourth hypothesis, "seventy-five percent or more of the nonfiction book titles related to the selected social studies topics and in the collections of each media center will be listed in the Senior High School Library Catalog," was rejected as Media Center A had only twenty-four percent of the titles; Media Center B had thirty percent of the titles; Media Center C had nineteen percent of the titles.

Conclusions

The results of the study show that only nine percent of the

different titles in the selected social studies topics are held by all three media centers. Sixty-six percent of the titles are unique. This indicates that there is sufficient title uniqueness in the collections of the three media centers to make interlibrary loan programs worth pursuing.

The 295 titles listed in the Catalog in the selected social studies topics represent thirty-two percent of the total number of different titles (908) held by the three centers. This indicates that the Catalog is not used to a significant degree to build a core collection in each media center.

The researcher found that 105 (eight percent) of the 1,299 titles in the collections of the three media centers were cataloged differently. Fifteen of the 105 titles were listed in the Catalog. One conclusion that might be drawn from this finding is that the three centers do not always use the suggested classification numbers listed in the Catalog.

The data on Table 2 revealed that the number of nonfiction book titles in the American Government course topics was small, only sixteen percent of the total number of 1,299 titles in the collections. One possible explanation for this might be that periodicals and reference books are used more extensively in this course than the nonfiction book collection. Another explanation might be that the researcher did not choose the most used Dewey numbers in the three media centers for the topics in American Government.

The data revealed that the highest number of titles, 260,

appeared in the Dewey category 940.54, the military history of World War II. Reasons for this result might be that the topic is used for research projects and is a topic for which books are purchased for leisure reading.

Two of the three Dewey numbers, 270.4 and 270.5, chosen from the eleventh edition of the Abridged Dewey Decimal Classification and Relative Index, were not represented in the collections of the three media centers. This may indicate that another edition of the classification schedule was used for cataloging purposes or that the titles were cataloged prior to the publication of the eleventh edition.

The data on Table 7 show that not all the Dewey numbers used in the study were represented in the Catalog. One conclusion based on the fact that thirteen Dewey numbers were not represented in the selection source may be that nonfiction books published in these categories are not recommended by the Catalog. Another explanation that would bear further study is the possibility that the books cataloged in these Dewey numbers in the collections are represented in the Catalog but under different Dewey numbers.

Recommendations

The researcher recommends that an interlibrary loan program be implemented among the three centers because there is enough uniqueness in the collections to substantially increase the materials resources for all. An interlibrary loan program could be facilitated by the Arrowhead Area Education Agency van service that now

exists among the schools in the area. Each collection had less than one-third of the titles listed in the Catalog in the selected social studies topics. Since the Catalog is a major selection aid, the researcher recommends that when each media center adds to its collection in the selected social studies topics, titles in the Catalog be a first-purchase consideration.

This study was limited to three media centers. A further study could be done to include more of the schools within the Arrowhead Area Education Agency's district to establish the extent of diversification in those collections. The same methodology could be used to determine the extent of diversification in selected topics in other courses offered by the three schools used in the study. The question of why there are so few nonfiction books held by the three media centers in the selected topics for the American Government course could be explored.

Another study might be done to see if specialized retrospective selection sources other than the Catalog for specified curriculum areas would produce a higher percent of book titles listed in those sources and held by each of the media centers.

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Senior High School Library Catalog. 12th ed. New York: The H.W. Wilson Company, 1982.

APPENDIXES

APPENDIX A

Shelf List Card from Media Center A

324.73 Best, Judith
Bes The case against the direct election of the
president; a defense of the Electoral College.
Cornell Univ Pr., c 1975.
235 p.

SHC
B
C

1. Presidents--U.S.--Election I. T

3 x 5 Card from Media Center B

329 White, Theodore H. B
Wh The making of the President, 1968. Atheneum,
1969.

SHC
C

Appendix B

Table 7

Dewey Numbers Listed and Not Listed in
the Senior High School Library Catalog

Selected Dewey Numbers	In Senior High Catalog	Not In Senior High Catalog	Selected Dewey Numbers	In Senior High Catalog	Not In Senior High Catalog
270.4		X	913.38	X	
270.5		X	914.4	X	
270.6		X	937	X	
324		X	938	X	
324.2		X	940.1	X	
324.73		X	940.2	X	
328		X	940.3	X	
329	X		940.4	X	
330.973	X		940.53	X	
342.5		X	940.54	X	
342.6		X	973.8	X	
342.7		X	973.91	X	
342.8	X		973.917	X	
347	X		973.918	X	
351		X	973.92	X	
353	X		978	X	
909	X		979		X
909.07	X		996.9		X
913.37	X				

APPENDIX C

3 x 5 Card Showing Cataloging Difference

342.8	Stevens, Leonard A.	B
St	Salute! The case of the Bible vs. the flag. Coward, 1973.	
A(323.44)		

APPENDIX D

Table 8

Dewey Classification Numbers and Subjects*

270.4	Church History--Period of Papal Supremacy, 1054-1200
270.5	Church History--Late Middle Ages to Renaissance, 1200-1517
270.6	Church History--Reformation and Counter-Reformation, 1517-1648
324	Political Process
324.2	Political Parties
324.73	Practical Politics
328	Legislation
329	Political Parties and Related Organizations and Processes
330.973	Economic Situation and Conditions--U.S.
342.5	Constitutional and Administrative Law-Asia
342.6	Constitutional and Administrative Law-Africa
342.7	Constitutional and Administrative Law-North America
324.8	Constitutional and Administrative Law-South America
347	Civil Procedure and Courts
351	Central Governments
909	General World History
909.07	General World History, 500-1450/1500
913.37	Geography of and Travel in Ancient World--Italian Penninsula
913.38	Geography of and Travel in Ancient World--Greece
914.4	Geography and Travel--Western Europe
937	Ancient History--Rome
938	Ancient History--Greece
940.1	General History--Western Europe--Early History to 1453
940.2	General History--Western Europe--Modern Period, 1453-
940.3	General History--Western Europe--World War I, 1914-1918
940.4	General History--Western Europe--Military History of WW I
940.53	General History--Western Europe--World War II, 1939-1945
940.54	General History--Western Europe--Military History of WW II
973.8	General History--U.S.--1865-1901
973.91	General History--U.S.--1901-1953
973.918	General History--U.S.--Harry S. Truman, 1945-1953
973.92	General History--U.S.--1953-
978	Western United States
979	Pacific Coast States
996.9	Hawaii

*Abridged Dewey Decimal Classification and Relative Index, 11th ed.

ABSTRACT

The study was undertaken to determine the amount of diversification in the collections of three secondary school media centers in Hamilton County, Iowa. A second purpose of the study was to determine to what extent the collections of the three media centers reflected recommendations in a standard selection source, Senior High School Library Catalog (11th and 12th editions).

The population for the study was the nonfiction book titles in selected social studies topics in three courses: American Government, American History, and World History. By comparing titles on the shelf list cards in each center data were compiled that showed nine percent of the 908 different titles were held by all three centers; twenty-four percent were held by two of the centers; sixty-six percent were held by only one of the centers.

The titles on the shelf list cards were also compared with the titles in the Senior High School Library Catalog (11th and 12th editions). The percent of the titles in each of the three collections and listed in the selection source was twenty-four percent in Media Center A, thirty percent in Media Center B, and nineteen percent in Media Center C.

The study showed that sixty-six percent of the titles were held by only one of the media centers. The conclusion reached from this is that an interlibrary loan program would be feasible and should be

implemented among the three media centers. Another result of the study showed that less than one-third of the titles held by each of the three centers were also listed in Senior High Catalog.