ED 267 775   IR 012 143

AUTHOR   Ho, May Lein; Loertscher, David
TITLE   Collection Mapping in School Library Media
              Centers.
PUB DATE   Jan 86
NOTE   19p.; Paper presented at the Annual Convention of the
              Association for Educational Communications and
              Technology (Las Vegas, NV, January 16-21, 1986). For
              entire proceedings, see IR 012 121.
PUB TYPE   Reports - Research/Technical (143) --
              Speeches/Conference Papers (150)

EDRS PRICE   MF01/PC01 Plus Postage.
DESCRIPTORS   Computer Graphics; Elementa y Secondary Education;
              *Evaluation Methods; Instructional Materials;
              *Library Collection Development; *Library
              Collections; Library Standards; *Library Surveys;
              Media Specialists; Nonprint Media; Questionnaires;
              Research Methodology; Tables (Data)
IDENTIFIERS   AECT Research and Theory Division Meeting;
              *Collection Mapping

ABSTRACT
              This study was conducted to field-test collection
mapping as an evaluation technique, to determine collection standards
against which individual schools could compare themselves, and to
compare the collections in schools to nationally-recommended lists
published by Brodart and Wilson. Questionnaires were sent to 120
library media specialists in elementary, junior high, and high
schools in 11 states. A total of 68 (37 elementary, 10 junior high,
and 21 high schools) respondents provided sufficient data to be
included. Survey areas included grade levels and number of students,
total number of library media materials (categorized by Dewey Decimal
System), and number of materials in both general and specific
emphasis areas. Analysis of the data indicates that: (1) the average
collection size ranged from 8,372 for elementary school to 18,306 in
high schools; (2) the greatest number of elementary schools (14) were
in the range of 16 to 23.9 items per student as compared with the
national recommended standard of 40 items per student; (3) 431
emphasis collections covering 134 discrete topics were identified;
and (4) collections related to social science, reading, and
literature predominated. Findings also indicate that school library
media specialists build different collections from those recommended
by national lists, and it is recommended that these lists be
re-examined in light of current school curriculums. It is concluded
that collection mapping is a viable and effective technique for
collection analysis and management. Examples of collection maps and
charts generated by a computer program written for this project in
BASIC and a list of references are provided. (JB)

COLLECTION MAPPING IN SCHOOL LIBRARY MEDIA CENTERS

by

May Lein Ho, University of Arkansas
P.O. Box 2661, University of Arkansas
Fayetteville, AR 72701

David Loertscher, University ot Oklahoma
P.O. Box 1801
Fayetteville, Ar 72702

2

COLLECTION MAPPING IN SCHOOL LIBRARY MEDIA CENTERS
by May Lein Ho and David Loertscher

Collection evaluation is a process that allows a
school library media specialist to analyze the
collection and its use in order to anticipate demand
and shape it accordingly. This activity can help
determine how the collection meets the personal and
academic needs of   library users. Evaluation also
demonstrates the e   nt to which the materials in the
school media colle_cion support the instructional goals
of the curriculum (Mancall and Swisher, 1983, pp.
257-258). In an era demanding excellence and, at the
same time, accountability, collection evaluation has
been playing an important role in a school library
media center.

For many years, collection size measure has often
been the single most important way to evaluate the
collection. Yet, simply measuring collection size is
not sufficient enough to reflect how a collection
matches the school & curriculum it is designed to
serve. Nor can this measure clearly indicate the
strengths, weaknesses, or balance of a collection. The
collection mapping technique with its attendant
quantitative and qualitative measures might be an
answer to problems like these.

Introduction of Collection Mapping Technique

The collection mapping technique was first
designed by Dr. David Loertscher (in press) for guaging
the potential of school library media collections to
support the instructional program in schools. The
basic theory behind mapping a school library media
collection is based on the philosophy that a collection
in a school should serve the curriculum. According to
Loertscher, the total collection in a school library
media center should be divided into three major
divisions for the purpose of collection development:
(1) A basic collection designed to serve a wide variety
of interests and needs. This collection provides
breadth. (2) General emphasis collections which
contain materials that support a whole course of
instructin such as U.S. History and beginning reading.
These collections provide intermediate depth in a
collection. (3) Specific emphasis collections which
contain materials that support units of instruction
such as "Civil War" or "dinosaurs." These collections
provide full depth and support as advocated by the
national standards. The mechanism by which a
collection is divided into the three main collection

segments, evaluated and then managed has been titled collection mapping. Mapping the collections will help a library media specialist identify collection strengths which can be compared to the curriculum of the school. The library media specialist can also compare collection size in topical areas to a national sample of emphasis collections.

Purposes of the Study

The purpose of the present study was designed to field test collection mapping as a technique and to collect enough data so that individual schools could compare their collections against a national pool of school collections. The study attempted to explore the following questions: Wh_ are the characteristics of school library collecti s when they are mapped? What types of collections do school library media specialists build? Can the collection mapping technique be applied to a large number of schools in various geographical locations? Can a national data pool be developed which will allow school library media specialists to compare their collections with a national sample? And, finally, how do the collections in schools compare to nationally recommended lists such as Brodart's Elementary School Library Collection (1984), the H.W. Wilson's Junior High School Library Catalog (1980), and Senior High School Library Catalog (1982)?

Methodology of the Study

To explore these questions, questionnaires with cover letters were sent in October 1984 to 120 library media specialists in elementary, junior high, and high schools in 11 states (Arkansas, California, Colorado, Connecticut, Florida, Georgia, Indiana, Iowa, Oklahoma, Texas, and Wisconsin). Eighty schools returned the questionnaires. Of these, 68 provided sufficient data and were judged typical enough to be included in the study. These 68 schools included 37 elementary schools, 10 junior high schools, and 21 high schools.

There were four sections in the questionnaire. In Part 1, the library media specialist was requested to provide school name and address, the grade levels in the school, and the number of students. In Part 2, the respondent provided the total number of items in each of the following segments of the collection: reference, 000, 100, 200, 300, 398.2, 400, 500, 600, 700, 800, 900, biography, fiction, story collection, easy, periodicals, and professional collection. In Part 3 and Part 4, the respondent identified general and specific emphasis areas if there were any, and

indicated the total number of items in each of the areas identified. In the study, a general emphasis area was defined as a collection strength in a library media center to support courses of instruction, while a specific emphasis area supports a single unit of instruction.

A computer program written in Basic was designed by the researcher during the Summer of 1984. The program generated a collection map and a collection chart for each school (see Table 1 and 10 as examples). A sample collection map for a typical school is shown in Table 1.
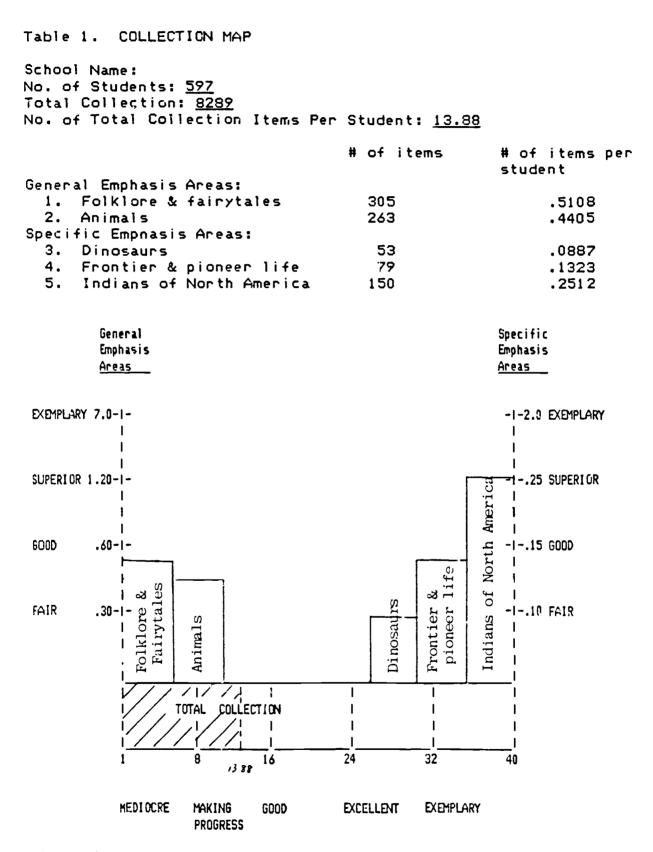
Table 1 maps a collection into three segments: (1) The number of items per student in the total collection graphed horizontally at the base of the map. (2) General emphasis area collections which generally support courses of study mapped vertically on the left. In this case, animals and folklore & fairytales are charted. (3) Specific emphasis areas which generally support units of instruction mapped vertically on the right. In this collection three areas were identified: dinosaurs, frontier and pioneer life, and Indians of North America. The collection map shows the collection strengths in terms of size. For example, there are enough materials about Indians to merit a superior rating and might be recognized by other schools in the district as a source for supplementary materials.

Creating the Collection Map Scales

One of the major purposes of the study was to establish the scales for the collection map segments, to give the scales reliability, and to provide a comparative picture across many schools. The national standard of 40 items per student was used as a guide to graph the total collection at the base of the map. The labels selected to denote progress in building collections were as follows: "Mediocre," "Making Progress," "Good," "Excellent," and "Exemplary." All segments of the collection were charted in items per student. Table 2 shows the five labels and the number of items designated for each label.

Table 1. COLLECTION MAP

School Name:
No. of Students: <u>597</u>
Total Collection: <u>8289</u>
No. of Total Collection Items Per Student: <u>13.88</u>

	# of items	# of items per student
General Emphasis Areas:		
1. Folklore & fairytales	305	.5108
2. Animals	263	.4405
Specific Emphasis Areas:		
3. Dinosaurs	53	.0887
4. Frontier & pioneer life	79	.1323
5. Indians of North America	150	.2512

General
Emphasis
Areas

Specific
Emphasis
Areas

EXEMPLARY 7.0-|-   -|-2.0 EXEMPLARY
SUPERIOR 1.20-|-   -|-.25 SUPERIOR
GOOD   .60-|-   -|-.15 GOOD
FAIR   .30-|-   -|-.10 FAIR

Folklore & Fairytales · Animals · Dinosaurs · Frontier & pioneer life · Indians of North America

TOTAL COLLECTION

1   8   /3.88   16   24   32   40

MEDIOCRE   MAKING   GOOD   EXCELLENT   EXEMPLARY
            PROGRESS

(Note: All numbers charted in items per student)

Table 2. Scale for the Total Collection Graph

Label	Items/student
Mediocre	1 - 7.9
Making progress	8 - 15.9
Good	16 - 23.9
Excellent	24 - 31.9
Exemplary	32 - 40

The creation of labels and scales for general and specific emphasis areas was more difficult since there was no standard or professional judgment in the literature to call upon for guidance. Four labels were chosen as indicative of emphasis area size: "Fair," "Good," "Superior," and "Exemplary " All of the emphasis collections in the participating schools were pooled to create the scales. Since there were two types of emphasis areas, e.g., general and specific, two pools were created. Each of the emphasis area collection sizes was divided by the number of students in each respective school and then pooled for comparison. The results revealed a tremendous difference between the largest and smallest emphasis collection sizes. Usually, a graphic scale would be divided into equidistant intervals for charting. In this case, however, such an equidistant scale proved inadequate. Therefore, the emphasis size figures were divided into four quartiles and the resulting numbers of items per student became the scale intervals. Table 3 shows the emphasis area scale intervals.

Table 3. Emphasis Collection Quartiles (Actual)

	General Areas	Specific Areas
# of areas indicated	258	204
Mean items per student	1.11	19
Largest # of items per student	15.62	2.05
Lowest # of items per student	.01	.01
1st quartile	.27	.08
2nd quartile	.56	.14
3rd quartile	1.13	.23
4th quartile	15.62	2.05

In order to generalize the scales and make them practical for general usage, the scales were rounded as shown in Table 4.

Table 4. Rounded Emphasis Collection Quartiles

Labels	General Areas	Specific Areas
Fair	00 - .30	00 - .10
Good	.31 - .60	.11 - .15
Superior	.61 - 1.20	.16 - .25
Exemplary	1.21 - 7.00	.26 - 2.00

Note: One school in the 4th quartile had a general emphasis collection so large (15.62 items per student) that it was eliminated when the quartiles were rounded.

Findings of the study

I. Total Collection Sizes Across Schools

After collections for all the participating schools were charted and mapped, the resulting data were analyzed across the schools. As is shown in Table 5, the average collection size ranged from 8,372 in elementary schools to 18,306 in high schools.

Table 5. Average Collection Size, Average Number of Items Per Student, and Average Emphasis Area Size of the Participating Schools

Level	# of Schools	Avg. # of Students	Avg. Coll. Size	# of Items Per Student	Avg. Size of Emphasis Areas
Elementary	37	432	8372	21.16	2680
Junior High	10	891	12521	16.31	2803
High	21	1257	18306	15.79	3571

When compared with the national recommended standard of 40 items per student, the greatest number of elementary schools (14 schools) were in the range of 16 to 23.9 items per student with the rating of "Good," while most of the participating junior high and senior high schools were in the range of 8 to 15.9 items per student with the rating of "Making Progress." Table 6 reports the number of schools in each of the rating categories.

Table 6. The Number of Collections in Five Size Categories

Level	Mediocre	Making Progress	Good	Excellent	Exemplary	Total
Elementary	0	10	14	11	2	37
Junior High	0	6	2	2	0	10
High	1	12	8	0	0	21

Scale: Mediocre = 1 - 7.9 items/student
Making Progress = 8 - 15.9 items/student
Good = 16 - 23.9 items/student
Excellent = 24 - 31.9 items/student
Exemplary = 32 - 40 items/student

II. Emphasis Collections Across Schools

The collection mapping technique provided a unique way of comparing the strengths of collections across schools. Library media specialists were asked to identify emphasis collections which were defined as "topical collection segments larger than a 'typical' school might have." Library media specialists in the 68 schools identified 462 emphasis collections. After eliminating duplication and standardizing terminology, there were 134 discrete emphasis collections identified. Collections related to social science, science, reading and literature predominated. Table 7 itemizes the emphasis areas identified in the study.

Table 7. Emphasis Collections Reported in Participating Schools

Area Name	Frequency	Area Name	Frequency
1. SOCIAL SCIENCE	134	2. SCIENCE	112
U. S. history (general)	20	Animals	44
States	17	Astronomy	11
Indians of North America	14	Science (general)	8
World War I & II	8	Computers	6
Countries	7	Earth science	6
Blacks	6	Biology	5
Holidays	6	Physical science	4
Civil War	5	Insects	3
Geography/travel	5	Mathematics	3
Presidents	4	Medical science	3
World history	4	Plants	3
American government	3	Zoology	3
Economics	3	Botany	2
North America	3	Diseases	2
Middle ages	2	Geology	2
Political science	2	Anthropology	1
Revolutionary War	2	Archeology	1
Social science (general)	2	Construction	1
U.S. history-20th century	2	Horticulture	1
Colonial America	1	Industry	1
Congress	1	Invention & inventors	1
Crime & criminals	1	Natural history	1
Death education	1		
Explorers	1	3. READING	85
Frontiers & pioneers	1		
Pioneer days	1	Folklore & fairytales	22
Political election	1	Picture books	10
Renaissance History	1	Beginning reading	9
Social interaction	1	Biography	9
Social problems	1	Fiction	9
Sociology	1	High/low reading	6
Theodore Roosevelt	1	Children's authors	5
Travel	1	Award winning books	4
U.S. geography	1	Jokes & riddles	2
U.S. foreign policy	1	Mystery & detective stories	2
U.S. history-1856-	1	Science fiction	2
U.S. history (The West)	1	Animal stories	1
Women	1	Historical Fiction	1
		Language arts-junior great bks	1
		Scientific biographies	1
		Young adult authors	1

Table 7. Cont.

Area Name	Frequency	Area Name	Frequency
4. LITERATURE	41	8. SPORTS	12
Poetry	12	Sports	7
Mythology	6	Games	3
Shakespeare	6	Ball games	1
American literature	5	Recreation	1
Drama	4		
American poetry	2	9. VOCATIONAL EDUCATION	10
American authors	1		
American plays	1	Agriculture	1
Authorship	1	Careers	9
English literature	1		
Short stories	1	10. HOME ECONOMICS	7
Theater	1		
		Cookbooks	4
5. ART	20	Food	2
		Home economics	1
Art	5		
Music	4	11. PROFESSIONAL COLLECTION	5
Crafts	2		
Drawing	2	Prof. coll. (general)	4
ART-Western	1	Teacher aids	1
Cartoons	1		
Colors	1	12. PSYCHOLOGY	5
Costume	1		
Handicraft	1	Exceptional children	2
Painters & painting	1	Applied psychology	1
Puppets	1	Child development	1
		Para-psych. & psych.	1
6. HEALTH	13		
		13. REFERENCE	2
General health	4		
Nutrition	3	Reference (general)	2
Drugs	2		
Alcohol	1	14. LANGUAGE ARTS	1
Fitness	1		
Personal growth	1	Creative writing	1
Sexuality	1		
		15. RELIGION	1
7. LANGUAGE	12		
		Religion (general)	1
English language	3		
Dictionaries	2	16. OTHERS	1
Foreign languages	2		
German	1	Controversial knowledge	1
Grammar	1		
Latin	1		
Linguistics	1		
Sign language	1		

Table 7 is instructive because it reflects the diverse curriculum areas included in the schools. High frequency of collections in topics such as U.S. history, states, Indians of North America, animals, folklore & fairy tales, picture books, poetry, and astronomy indicates that those are the most common curriculum areas in the country which are well supported by library media resources. Those areas might also be the collection targets that current library media specialists tend to build constantly. A comparison of topics missing on the list but included in a school's curriculum would indicate neglect in the collection building policy. In this case, the library media specialist might make an analysis of the reasons for collection overlap and collection neglect. Topics which are unique in one of the 68 collections give an idea of collection breadth. Schools that have large collections of Renaissance history, costume, horticulture, etc. are important in resource sharing networks. These are the collections which could be shared effectively among the schools in a network. Resource sharing is advantageous among schoo's if collections are diverse. To summarize Table 7, the emphasis areas were combined further into 15 central curricular subjects and ranked. Table 8 gives these rankings.

Table 8. Number of Emphasis Areas Grouped According to Curriculum Topics

Curriculum Topics	Total # of Areas Mentioned	# of Discrete Areas
Social Sci.	134	38
Science	112	22
Reading	85	16
Literature	41	13
Art	20	11
Health	13	7
Language	12	9
Sports	12	4
Voed.	10	2
Home Ec.	7	3
Prof. Coll.	5	4
Psychology.	5	2
Reference	2	1
Lang. arts	1	1
Religion	1	1
Others	1	1
Total	462	134

An analysis of Table 8 reveals that emphasis areas dominate in social studies, science, and collections dealing with reading and literature. These are the curriculum areas which w.ll be served best by the "typical" school library media collection.

III. Library Media Collection and National Selection Lists

In this study, the collections of the 68 participating schools were compared w.th the nationally recognized selection lists: <u>Elementary School Library Collection</u>, <u>Junior High School Library Catalog</u>, and <u>Senior High School Library Catalog</u>. The current editions of the recommended lists contain titles which are considered representative in many topical areas, but some areas predominate. Table 9 lists the percentages of materials in each of the Dewey Decimal classes.

Table 9.   Recommended List Percentages

Dewey Area	Elementary	Junior High	High
Ref.	1.82	3.00	3.00
000	0.82	1.59	1.32
100	1.08	1.82	1.81
200	1.08	1.10	1.71
300	5.09	10.63	13.74
398.2	6.11	0.00	0.00
400	0.80	1.73	1.87
500	10.29	11.55	4.60
600	6.70	9.73	7.15
700	6.31	13.65	7.93
800	2.50	1.84	13.85
900	5.45	13.45	15.89
B	3.47	10.12	12.60
Fic	23.52	15.27	9.42
SC	1.13	2.35	2.61
Easy	15.87	0.00	0.00
Period.	1.64	0.50	0.50
Prof.	6.32	2.00	2.00
Total	100.00	100.00	100.00

Interpretation: 1.82% of the titles included in the elementary list are reference materials.

Note: None of the Wilson lists have a separate reference or professional collection. The researchers

had to estimate the size of these collections through careful analysis of each Dewey section.

In a practical sense, Table 9 suggests that a library media specialist might use the national list percentages as purchasing guidelines. A number of specialists have had such purchasing targets, but such a practice has dubious value. It is, however, helpful to compare a school's collection against the standard list as a preliminary step in collection mapping. The library media specialist who is new to a collection might create a chart like Table 10 to assist in the identification of emphasis collections. The library media specialist examining Table 10 would examine the Reference section, 500's, 900's, Biography, and Easy sections first in order to identify emphasis collections. The total collection chart, however, would not help identify emphasis collections which would span several Dewey classes.

Table 10   Total Collection Chart

School Name:

No. of Students: 597

Total Collection: 8289

No. of Total Collection Items Per Student: 13.88

Dewey Area	Recommende List	\d	Actually Have	Discrepancy	Likely Emphasis Area	Areas That May Need Purchase
Ref.	1.82 %	151	259	108	*	
000	0.82 %	68	86	18		
100	1.08 %	90	39	-51		
200	1.08 %	90	56	-34		
300	5.09 %	422	407	-15		
398.2	6.11 %	506	305	-201		*
400	0.8 %	66	110	44		
500	10.29 %	853	1112	259	*	
600	6.7 %	555	499	-56		
700	6.31 %	523	516	-7		
800	2.5 %	207	247	40		
900	5.45 %	452	981	529	*	
B	3.47 %	288	496	208	*	
Fic	23.52 %	1950	1343	-607		*
SC	1.13 %	94	61	-33		
Easy	15.87 %	1315	1641	326	*	
Period.	1.64 %	136	19	-117		*
Prof.	6.32 %	524	112	-412		*

13A

When all the schools in the study were compared to their respective national list, some interesting data were generated. Table 11 compares all the elementary collections in the study to the Elementary School Library Collection percentages.

Table 11. Distribution of Collections - Elementary Schools

Dewey Area	% in School Collections	Recommended List %	Difference in %
Ref.	1.72	1.82	-0.1
000	1.02	0.82	0.2
100	0.54	1.08	-0.54
200	0.61	1.08	-0.47
300	6.58	5.09	1.49
398.2	3.43	6.11	-2.68
400	0.73	0.8	-0.07
500	12.91	10.29	2.62
600	6.29	6.7	-0.41
700	5.84	6.31	-0.47
800	2.67	2.5	0.17
900	10.31	5.45	4.86
B	5.23	3.47	1.76
Fic	21.20	23.52	-2.32
SC	0.62	1.13	-0.51
Easy	18.22	15.87	2.35
Period.	0.28	1.64	-1.36
Prof.	1.71	6.32	-4.61
Total	99.91	100.0	

Table 11 shows that more than 62 percent of an average elementary school's library holdings were in 4 categories. These categories in ranking order were: Fiction (21.20%), Easy (18.22%), 500's (12.91%), and 900's (10.31%). When compared to the recommended list percentages, an average elementary school maintained more materials in 900's, 500's, and easy sections than the recommended list. Practically, this means that the national list is not as helpful in some areas as it might be. For example, a library media specialist who needs hundreds of easy books to assist beginning readers will find very little help in the list. The specialist would also need additional bibliographies to develop the 900's and 500's collections further.

The Brodart list contained more materials in the areas of the Professional collection, 398.2's and Fiction than the schools in the study. This means that library media specialists needing to build large collections in these areas could use the recommended list to good advantage.

Table 12 compares the collections in the junior high schools of the study with <u>Junior High School Library Catalog</u>.

Table 12. Distribution of Collections - Junior High Schools

Dewey Area	% in School Collections	Recommended List %	Difference in %
Ref.	6.27	3.0	3.27
000	1.05	1.59	-0.54
100	0.81	1.82	-1.01
200	0.85	1.1	-0.25
300	8.46	10.63	-2.17
400	1.28	1.4	-0.12
500	10.75	11.55	-0.8
600	7.71	9.73	-2.02
700	8.61	13.65	-5.04
800	3.82	1.84	1.98
900	14.54	13.45	1.09
B	5.60	10.12	-4.52
Fic	26.96	15.27	11.69
SC	1.52	2.35	-0.83
Period.	0.35	0.5	-0.15
Prof.	1.40	2.0	-0.60
Total	99.98	100.00	

In the junior high school collections, the top
ranking categories were: Fiction (26.96%), 900's
(14.54%), and 500's (10.75%). Table 12 indicates that
Fiction collection in an average junior high school was
significantly larger than that suggested in <u>Junior High
School Library Catalog</u>. The reference collection was
also larger. On the other hand, <u>Junior High School
Library Catalog</u> provided many more titles in 700's,
Biography, 300's, and 600's.

Table 13 compares the collections of the 21 high
schools in the study to <u>Senior High School Library
Catalog</u>.

Table 13. Distribution of Collections - High Schools

Dewey Area	% of Total Coll.	Recommended List %	Difference in %
Ref.	5.82	3.0	2.82
000	1.5	1.32	0.18
100	1.7	1.81	-0.11
200	0.97	1.71	-0.74
300	12.44	13.74	-1.3
400	1.46	1.87	-0.41
500	8.5	4.60	3.9
600	7.63	7.15	0.48
700	7.83	7.93	-0.1
800	9.88	13.85	-3.97
900	15.99	15.89	0.1
B	6.12	12.60	-6.48
Fic	17.12	9.42	7.7
SC	1.69	2.61	-0.92
Period.	0.45	0.5	-0.05
Prof.	0.89	2.0	-1.11
Total	99.99	100.00	

In the high school collections, more than one
third of the collection in the average high school was
devoted to two categories: Fiction and 900's. The
third largest section was the 300's. The schools had
significantly more materials in Fiction, 500's, and
Reference, while the recommended list was stronger in
Biography and 800's.

Conclusions and Recommendations

The main purposes of this study were to test the
collection mapping technique and to compare collections
of materials in schools with nationally published

recommended lists. The research provided evidence that collection mapping is a viable and effective technique for collection analysis and collection management. It provides a different picture of a collection rather than just size figures. The mapping procedure is simple enough to be done without extensive training and the res   ing graphic representation of a collection is not only a representation of collection strengths but also charts strength against a national sample of schools.

The collection mapping technique, as tested in this study, works well in schools with student populations of 500 - 1000. Schools with smaller and larger student bodies would need altered scales. Large schools should have fewer items per student needed for excellence ratings and small schools need more items per student.

The study gave added evidence of the breadth and depth of school library media collections in the country. The library media specialists identified 431 emphasis collections in the 68 schools covering 134 distinct topics. These collections provide sufficient diversity to support a network of resource sharing. The potential to share collections as evidenced in this study is one of the nation's richest untapped resources.

The 1975 national guidelines recommend a minimum of 20,000 items or 40 items per student for every school over 500 students. The guidelines also state that library media specialists in large schools may not wish to achieve the ration of 40 items per student. The schools in this study (which are typical according to national statistics) show that elementary schools have more items per student but smaller collections than secondary schools. In this study, the average collection size for elementary schools was 8,372; for junior highs, 12,521 and 18,306 for high schools. More research needs to be done to establish minimal collection sizes, not just for total collections but for collections to support units of instruction and courses of study. Perhaps size standards for curriculum blocks would be a direction to investigate.

The 1975 guidelines did not specify guidelines for building professional collections. Very few of the schools in this study had sizeable professional collections. In some districts, library media specialists noted that professional materials were held at the district level rather than the school. In others, these collections were very small or non-existent.

The second aspect of the study, the comparison of collections to nationally published lists, provided new insights into the composition of the recommended lists vs. actual collections of materials. Library media specialists generally build collections to support supplementary reading and subject oriented collections which serve social studies, literature and science. It is not surprising that school library collections and services only appeal to a part of the total curriculum and teaching staff in a school.

The study clearly pointed out that school library media specialists build different collections than national lists recommend. National lists contain emphasis collections which have developed over a period of time which need re-examination in light of current school curriculum. The orientation of national lists toward what publishers publish is as troubling as the narrow focus of the collections in schools.

If school collections are to support the total curriculum, library media specialists need to map their collections and create acquisition targets which match their curriculum--then channel their money into those areas. Publishers of national lists need to re-assess their lists regularly and adjust the scope to truly reflect the curriculum of the nation's schools. H. W. Wilson, for example, hasn't yet discovered that audiovisual media are as basic as books in an educational institution. Considering the current curriculums and the availability of computer technology, perhaps it is time to suggest that both H.W. Wilson and Brodart rethink the "raison d'etra" and the methodology of creating their publications. Perhaps core titles and emphasis collections could be made available on floppy disks on a subscription basis and/or on-line. Such a data base could be under continuous revision and could expand far beyond the current efforts toward core materials only. If printed books continue to go out of print as has happened in the past few years, the value of a printed list is questionable.

Perhaps the best advice to library media specialists from this research is to build collections in topical segments rather than just buying "things." Nationally published core lists may be useful in building a few basic materials in a topical area but to build strength and depth into a collection requires a different approach.

REFERENCES

Aaron, Shirley L. and Pat R. Scales, editors. 1983.
    School Library Media Annual. Volume One.
    Littleton, Colorado: Lib.aries Unlimited.

Bogart, Gary L. and Richard H. Isaacson. 1980. Junior
    High School Library Catalog. 14th ed. New York:
    The H. W. Wilson Co.

Bogart, Gary L. and Richard H. Isaacson. 1982. Senior
    High School Library Catalog. 12th ed. New York:
    The H. W. Wilson Co.

Loertscher, David V., Blanche Woolls, and Janet G.
    Stroud. 1985. Evaluating School Library Media
    Programs. Neal Schuman.

Loertscher, David V. October, 1985. "Collection
    Mapping: An Evaluation Strategy for Collection
    Development," Drexel Library Quarterly.

Mancall, Jacqueline C. and Christopher C. Swisher.
    1983. "Developing Collections for the Eighties and
    Beyond." In School Library Media Annual. Volume
    One. Edited by Shirley L. Aaron and Pat R. Scales.
    Littleton, Colorado: Libraries Unlimited.

Winkel, Lois, ed. 1984. The Elementary School Library
    Collection: A Guide to Books and Other Media.
    14th ed. Phases 1-2-3. Williamsport,
    Pennsylvania: Brodart Co.