

Drexel Library Quarterly

**A publication of the
College of Information Studies
Drexel University**

Spring 1985

Vol. 21

No. 2

**Measures of Excellence
for School Library Media Centers**

David V. Loertscher

Issue Editor

Editorial Board

Guy Garrison, Professor, Chairman
Thomas Childers, Professor
Howard D. White, Associate Professor
Elizabeth Aversa, Assistant Professor

Publication Staff

Anne B. Tanner, Managing Editor
Loraine Carapellucci, Editorial Assistant

Drexel Library Quarterly, Anne B. Tanner, Managing Editor, is published by Drexel University, Philadelphia, PA. Issued four times a year in winter, spring, summer, and fall.

Copyright 1986 by College of Information Studies, Drexel University, Philadelphia, PA 19104. Orders for subscriptions and single issues may be addressed to *Drexel Library Quarterly* at this address. Subscription rates: \$30 a year. Add \$5 for postage and handling outside USA. Single copies, \$10 each; add \$1 outside USA.

The following code: 0012-6160/86/2102-0001 \$1.00/0 indicates the copyright owner's consent that copies of an article may be made beyond those permitted by Sections 107 or 108 of the US Copyright Law provided that copies are made only for personal or internal use, or for the personal or internal use of specific clients, and provided that the copier pays the stated per-copy fee through the Copyright Clearance Center, 21 Congress St., Salem, MA 01970. This consent does not extend to other kinds of copying, such as copying for general distribution, for advertising or promotional purposes, for creating new collective works, or for resale.

Claims for missing numbers will not be allowed if received more than 6 months from the date of mailing.

The *Quarterly* is indexed or abstracted in *Current Index to Journals in Education*, *Information Science Abstracts*, *Library Literature*, *Library & Information Science Abstracts*, *PAIS Bulletin*, *Current Contents*, and *Social Sciences Citation Index*.

Library of Congress catalog card number: 65-9911. Microfilm editions are prepared annually by University Microfilms Inc., 300 North Zeeb Rd., Ann Arbor, MI 48106. Out of print issues and reprints of single articles are also available from University Microfilms International. ISSN 0012-6160. CODEN: DRLQBK.

Collection Mapping: The Research

May Lein Ho and David V. Loertscher

The mapping of a school library media collection is based on the philosophy that a collection in a school should serve the curriculum. Since the Dewey Decimal System does not organize a collection of materials to match the modern curriculum of a school, the technique of collection mapping was designed to serve as a bridge between curricular structure and materials organizational structure. In addition, collection mapping was designed to help build collection segments rather than selecting materials to add to an aggregate. The purpose of this study was to field test collection mapping as a technique and to amass enough data so that an individual school could compare its own collection against a national pool of school collections.

As the research was designed, two central questions emerged. What are the characteristics of school library media collections today when they are mapped? How do the collections in schools compare to nationally recommended lists such as *Elementary School Library Collection*,¹ *Junior High Library School Catalog*,² and *Senior High School Library Catalog*.³ The following research report is divided into two segments for answering those two basic questions. Section one deals with collection mapping and section two compares school collections to nationally published basic materials lists.

Collection Mapping Research

The central question of exploring the characteristics of school library media collections using collection mapping was divided into several important sub-questions. 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? Do charting techniques hold up under close scrutiny? Can a national data pool be developed which will allow school library media specialists to compare their collections with a national sample?

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

There were four sections in the questionnaire. In part 1, the respondent provided school name and address, the grade levels in the school, and the number of students. In part 2, the respondent was to provide the total number of items in each of the Dewey Decimal segments of the collection (000, 100, 200 . . .). Questions in parts 3 and 4 asked library media specialists to identify general and specific emphasis collections, if there were any, and the total number of items in each of these subject collections.

A computer program written in BASIC by May Lein Ho analyzed the data. The program generated a collection map and a collection chart for each school (see tables 1 and 11 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 size of 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 there are specialty collections for dinosaurs, frontier and pioneer life, and Indians of North America.

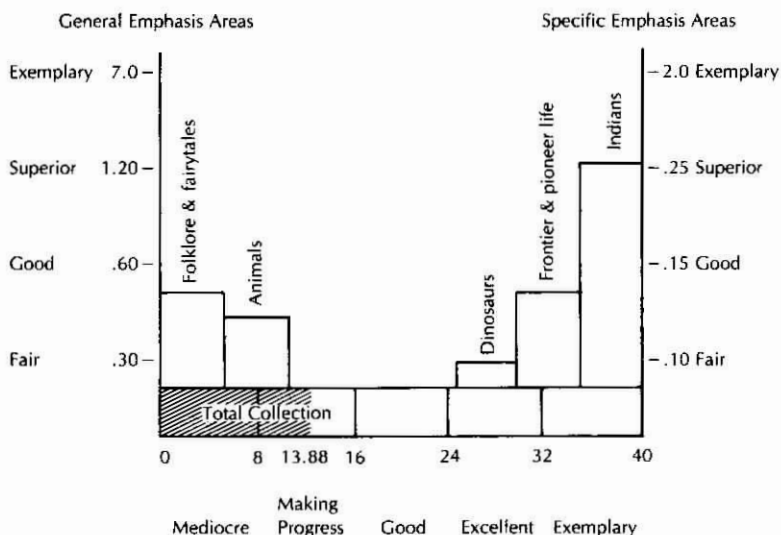
The collection map below shows collection strengths of an elementary library media collection in terms of size. Collection quality is not pictured on the sample map but can be measured as described in the previous article. Social studies, science and literature have been emphasized in this collection. There are enough materials about Indians to merit a superior rating; this school, therefore, might be recognized by other schools in the district as a source for supplementary materials.

Collection Mapping: The Research

Table 1
Collection Map

School name:
 Number of students: 597
 Total collection: 8,289
 Number of total collection items per student: 13.88

	Number of items	Number 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



Note: All numbers charted in items per student

Creating the Collection Map Scales

Three of the major purposes of the study were to establish the scales for the collection map segments, to give the scales reliability, and provide a comparative picture across many schools. For the total collection graph running horizontally at the base of the map, the national standard of 40 items per student was used as a guide. Five incremental and judgmental labels were selected to

denote progress in building collections: "Mediocre," "Making Progress," "Good," "Excellent," and "Exemplary." All segments of the collection were to be charted in items per student. Table 2 shows the five labels and the number of items designated for each label.

Table 2
Scale for the Total Collection Graph

Label	Items/student
Mediocre	0-7.9
Making progress	8-15.9
Good	16-23.9
Excellent	24-31.9
Exemplary	32-40.0

The creation of labels and scales for 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, 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.

These 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. In order to generalize the scales and make them practical for general usage, the scales were rounded as shown in table 4.⁴

Comparison of Total Collection Sizes across Schools

After collections for all participating schools were charted and mapped, the resulting data were analyzed across the schools. As

Collection Mapping: The Research

Table 3
Emphasis Collection Quartiles (Actual)

	General Areas	Specific Areas
Number of areas indicated	258	204
Mean items per student	1.11	.19
Largest number of items per student	15.62	2.05
Lowest number 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

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

shown in table 5, the average collection size ranged from 8,372 in elementary schools to 18,306 in high schools.

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

Level	No. of Schools	Avg. No. of Students	Avg. Coll. Size	No. of Items per Student	Avg. Size of Emphasis Areas
Elementary	37	432	8,372	21.16	2,680
Junior High	10	891	12,521	16.31	2,803
High	21	1,257	18,306	15.79	3,571

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 = 0–7.9 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

Comparison of 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 is instructive because it shows the overlap, breadth, and frequency of emphasis collections built by school library media specialists. Overlap of collections, including topics such as states, Indians, animals, and folklore & fairy tales, indicates the most common units of instruction in the country which are supported by library media resources. On the other hand, topics which are unique to one of the 68 collections give an idea of collection breadth. Schools that have large collections in Renaissance history, costume, horticulture, etc., are important in resource-sharing networks. These are the collections which could be shared effectively among the schools within a network. Resource sharing is advantageous among schools if collections are diverse. Table 7 indicates that if these 68 schools were linked, they would have a tremendous pool of materials upon which to draw. If the schools

Collection Mapping: The Research

Table 7
Emphasis Collections Reported in Participating Schools

Area Name	Frequency	Area Name	Frequency
1. SOCIAL SCIENCE	134	2. SCIENCE	112
US 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
US 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	Folklore & fairytales	22
Pioneer days	1	Picture books	10
Political election	1	Beginning reading	9
Renaissance history	1	Biography	9
Social interaction	1	Fiction	9
Social problems	1	High/low reading	6
Sociology	1	Children's authors	5
Theodore Roosevelt	1	Award-winning books	4
Travel	1	Jokes & riddles	2
US geography	1	Mystery & detective stories	2
US foreign policy	1	Science fiction	2
US history—1856—	1	Animal stories	1
US history (The West)	1	Historical fiction	1
Women	1	Language arts—junior great books	1
		Scientific biographies	1
		Young adult authors	1

in the study were to weed their collections so that they matched the curricula of their schools, then table 7 would be a true reflection of curriculum areas of the United States which were well supported by library media resources. As it is, table 7 only indi-

Table 7 (continued)

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

cates what emphasis collections schools currently own. Sometimes a school will invest in an emphasis collection and then the curriculum will change. In this case, the library media collection and the curriculum will be mismatched.

To summarize table 7, the emphasis areas were combined further into central curricular subjects and ranked. Table 8 gives these rankings.

An analysis of table 8 reveals that emphasis areas dominate in social studies, in collections dealing with reading and literature, and in science. These are the curricular areas which will be served best by the "typical" school library media collection. The data also suggest that there is a tremendous bias built into the collections of school library media centers toward certain segments of the curriculum. High frequency of collections in topics such as states, Indians, poetry, animals, astronomy, and picture books show these biases. 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.

Table 8
Number of Emphasis Areas Grouped According to Curriculum Topics

Curriculum Topics	Total No. of Areas Mentioned	No. 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
Voc. ed.	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

Library Media Collection and National Selection Lists

The second major component of the research study was to compare the collections of the 68 participating schools with the nationally recognized selection lists: *Elementary School Library Collection*, *Junior High School Library Catalog*, and *Senior High School Library Catalog*.

The purpose of the Brodart *Elementary School Library Collection*, according to the editor, is to "serve as a resource to assist in the continuous maintenance and development of existing collections, . . . to implement elementary school curricula, and to be of interest and appeal to elementary school-aged children."⁵ However, the editor warns: "While the list offers recommendations for elementary schools in a wide variety of settings and at differing levels of collection development, it remains the work of the library media specialist to adapt any basic list to local needs, to select for special curricular projects, and to keep the collection fresh through continuous evaluation and judicious weeding."⁶

The editors of the Wilson lists make little reference to purpose or function of their list in the current edition, but the 1957 edition of *Standard Catalog for High School Libraries* stated the purpose as follows: "to provide a list of books, both fiction and nonfiction, whose usefulness in senior and junior high schools is vouched for by a representative group of experienced librarians and specialists in literature for young people . . . hence the books entered in the Catalog may be said to be of tested usefulness."⁷

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.⁸

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.

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	1.40	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.

The library media specialist examining table 10 would examine the Reference section, 500s, 900s, Biography, and Easy sections first in order to identify emphasis collections. The total collection chart, however, would not help identify emphasis collections that would span several Dewey classes.

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 shows that more than 62 percent of an average elementary school's library holdings were in four categories. These categories in ranking order were: Fiction (21.20%), Easy (18.22%), 500s (12.91%), and 900s (10.31%). When compared to the recommended list percentages, an average elementary school maintained more materials in 900s, 500s, 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

Table 10
Total Collection Chart

School name:
Number of students: 597
Total collection: 8,289
Number of total collection items per student: 13.88

Dewey Area	Recommended List Percentage	Should Have	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		*

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 900s and 500s collections further.

The Brodart list contained more materials in the areas of the Professional collection, 398.2s 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 *Junior High School Library Catalog*.

In the junior high school collections, the top ranking categories were: Fiction (26.96%), 900s (14.54%), and 500s (10.75%).

Table 12 indicates that the fiction collection in an average junior

Collection Mapping: The Research

Table 11
Distribution of Collections—Elementary Schools

Dewey Area	Percentage in School Collections	Recommended List Percentage	Difference in Percentage
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 12
Distribution of Collections—Junior High Schools

Dewey Area	Percentage in School Collections	Recommended List Percentage	Difference in Percentage
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	

high school was significantly larger than that suggested in *Junior High School Library Catalog*. The reference collection was also larger. On the other hand, *Junior High School Library Catalog* provided many more titles in 700s, Biography, 300s, and 600s.

Table 13 compares the collections of the 21 high schools in the study to *Senior High School Library Catalog*.

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

The comparative analysis of percentages and topical areas shows that schools build different collections than these lists recommend. While definite conclusions about the reasons for these differences are difficult, a few possibilities might be suggested. If library media specialists who are close to their teachers and the curriculum are buying for the needs of their schools, then their collection strengths should serve as models that publishers and national list editors should follow. In many instances, this might

Table 13
Distribution of Collections—High Schools

Dewey Area	Percentage of Total Col.	Recommended List Percentage	Difference in Percentage
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	

be true. For example, it seems clear that the Brodart list provides an overabundance of titles in folklore and fairytales and that biography collections are overly strong. The art and biography collections in the junior high list are extra large. The high school list emphasizes biography unduly. However, the large proportion of fiction in the junior high and senior high collections is worrisome—not because large fiction collections are bad, but when funds are limited, it would seem wiser to concentrate purchases in non-fiction areas. It seems that the lingering emphasis on building a collection for “supplementary reading” is still being followed. Some hard questions deserve attention: Are library media specialists building collections out of sync with the “video generation” of youth as well as their curricula? Are editors of national lists following too many publishing trends rather than curricular trends?

Conclusions and Recommendations

The two purposes of this study were: 1) to test the collection mapping technique and establish confidence in its picture of a school library media collection, 2) to compare collections of materials in schools with nationally published recommended lists.

The research provided evidence that collection mapping is a viable technique for collection analysis and collection management. The mapping procedure is simple enough to be done without extensive training, and the resulting graphic representation of a collection is not only a representation of collection strengths but also charts strength against a national sample of schools. Three important collection segments were identified and charted:

- 1 The size of the total collection is charted against the national standard of 40 items per student. This charting represents collection size and breadth.
- 2 The size of general emphasis collections which support courses of study is charted and compared to collections of the same type in the nation.
- 3 The size of specific emphasis collections which support individual units of instruction is charted and compared to collections of the same type in the nation.

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 would 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 ratio 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.

One glaring oversight of the 1975 guidelines was the lack of 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 nonexistent.

The second aspect of the study, the comparison of collections to nationally published lists, provided new insights into the composition of the recommended lists versus 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. Na-

tional lists contain emphasis collections which have developed over a period of time and which thus 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.

A major problem of collection building in schools became very evident during the study. Library media specialists complain that high quality materials are not available in many curricular areas. Publishers tend to publish high-demand materials. Standard lists include what is published. Review periodical coverage includes mostly fiction and other literary works. Library media specialists buy from recommended lists and reviews. This cyclical phenomenon needs revamping if school collections are to support the total curriculum.

All segments of the market need to cooperate if change is to take place. Library media specialists need to map their collections and create acquisition targets that 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. Review periodicals need to have better coverage of curricular materials.

The present research has called into question the role of a nationally published list of "basic" materials for school library media centers. Perhaps there will always be a need for a core list of titles needed in most schools, but considering the current curricula and the availability of computer technology, perhaps it is time to suggest that both H. W. Wilson and Brodart rethink the "raison d'être" and the methodology that go into creating their publications. Perhaps core titles and emphasis collections could be made available on floppy disks on a subscription basis and/or online. Such a database could be under continuous revision and could expand far beyond the current efforts toward core materials only. If 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 that this research offers 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 building strength and depth into a collection requires a different approach.

Notes

- 1 Lois Winkel, ed., *The Elementary School Library Collection: A Guide to Books and Other Media*, 14th ed., (Williamsport, PA: Bodart Co., 1984).
- 2 Gary L. Bogart and Richard H. Isaacson, eds., *Junior High School Library Catalog*, 14th ed., (New York: The H. W. Wilson Co., 1980).
- 3 Gary L. Bogart and Richard H. Isaacson, eds., *Senior High School Library Catalog*, 12th ed., (New York: The H. W. Wilson Co., 1982).
- 4 One school in the 4th quartile had an emphasis collection so large (15.62 items per student) that it was eliminated when the quartiles were rounded.
- 5 Lois Winkel, p.v.
- 6 Ibid.
- 7 Dorothy Herbert West and Marion L. McConnell, eds., *Standard Catalog for High School Librarians*, 7th ed., (New York: The H. W. Wilson Company, 1957), p.v.
- 8 Readers will note that none of the Wilson lists has a separate reference or professional collection. The researchers had to estimate the size of these collections through careful analysis of each Dewey section.