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A Content Analysis of Public Elementary School Library Media Program Websites in the State of Wisconsin

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A CONTENT ANALYSIS OF PUBLIC ELEMENTARY SCHOOL LIBRARY MEDIA

PROGRAM WEBSITES IN THE STATE OF WISCONSIN

A Thesis

Submitted

in Partial Fulfillment

of the Requirements for the Designation

University Honors

By

Faye I. Reinhart

University of Northern Iowa

Spring 2006

This Study by: Faye I. Reinhart

Entitled: A Content Analysis of Public Elementary School Library Media Program Websites in the State of Wisconsin

has been approved as meeting the thesis or project requirement for the Designation University Honors

5/5/04 Date

Dr. Barbara Safford, Division of School Library Media Studies Coordinator, Honors Thesis/Project Advisor

Jessica Moon, Director, University Honors Program

Abstract

An article written by Blumbach in 2005 suggested the 28 criteria are "essential elements for any school library media web site." The criteria are named closely similarly to the categories in the current study. Overall, the pattern in Wisconsin is that libraries are not living up the criteria suggested in the field of research for quality website presence. Due to the evidence that a school library media program is strongly influenced by its Internet presence, the purpose of this research was to perform a content analysis of selected public elementary school library media center websites in the state of Wisconsin. This research investigated school library media program websites in the state of Wisconsin and additionally helped to determine how well the library media program websites in Wisconsin meet the current "state of the art" described by previous researchers for this type of website.

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Chapter 1

Introduction

American school districts are rapidly expanding into the world of the Internet. A website allows a school district to augment and expand each of its programs. As a part of this, many school library media programs are attempting to meet the visions and goals of the programs through the connection of a website. Students and teachers have an increasing need to use school library media program websites as the primary step in locating information. In an age where school library media programs are commonly viewed as dispensable in favor of World Wide Web usage, it is essential that school library media programs create and maintain an effective website as an information interface for patrons of all types.

Since the first appearance of the World Wide Web in the 1990s, schools and libraries have taken advantage of websites to provide access to resources, services, and technology for patrons. School librarians select and make available traditional and electronic resources from the Online Public Access Catalog (OPAC), to online for-fee databases, to online free-access websites outside the domain of the school library media program. Interactive services are provided such as live chat rooms, discussion forums, feedback forms, as well as other contact information for personnel of the school library media program. Technology is implemented into collaborative school curriculum efforts as a result of the connections given on the school library media program website pages. Not only does the well-designed, frequently updated school library media program website foster collaboration within the school community, but it broadens the learning horizons for parents and community members with specific resource sections for each. Advocacy takes place on a website that lists volunteer and donation information. For

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these reasons, it is important that researchers in the study of school library media programs look at a discrete set of websites to develop a notion of distinguished and undistinguished websites.

Problem Statement

Elementary school library media programs are struggling to find balance between traditional and virtual library programs. Many do not maintain a school library media program website at all. Others appear to use it only as a means to access the OPAC. Still others leave off other essential content that would otherwise bring program patrons closer to the information sources they need. School library media program websites are not being used adequately to advocate for the program, notify patrons of library activities or news, or to connect school staff with curriculum resources. By and large, the problem is that elementary school library media program websites (if any exist) are not being used to the fullest advantage of the program and its patrons.

Purpose Statement

There is evidence that school library media programs are strongly influenced by an effectual Internet presence. The purpose of this study is to perform a content analysis of selected public elementary school library media center websites in the state of Wisconsin. This research will investigate school library media program websites in the state of Wisconsin to determine the current "state of the art" for this type of website in Wisconsin.

Research Questions

- What content components are present on public elementary school library media program websites in the state of Wisconsin?
- 2. What patterns of excellence emerge from a structured observation of public elementary school library media program websites in the state of Wisconsin?

Definitions

Automated catalog: the catalog of library materials that is available electronically in a searchable database format.

Domain: a series of alphanumeric strings separated by periods, such as *www.hmco.com*, that is an address of a computer network connection and that identifies the owner of the address (American Heritage Dictionary of the English Language, 2000)

Elementary school: this term shall be used to include schools that are categorized on the Wisconsin Department of Public Instruction Public School Directory in the area of "School Type" as "elementary." Other School Types were elementary/secondary, middle, junior high, and high school. These categories were given a separate label in the directory. While most schools included only schools serving the primary and intermediate grade levels, a few schools also included grades seven and/or eight. Any school responsible for teaching grades K-8 or any set of grades within these boundaries set by the Wisconsin Department of Public Instruction are considered as "elementary" schools for the purposes of this research, keeping in mind that the majority of services are provided to primary and intermediate grade level students. **Internet:** an interconnected system of networks that connects computers around the world using the TCP/IP protocol (American Heritage Dictionary of the English Language, 2000)

OPAC: Online Public Access Catalog; and interface for locating the bibliographic and subject data for all materials in a school library media program traditional (and sometimes virtual) collection

Protocol: a standard procedure for regulating data transmission between computers (American Heritage Dictionary of the English Language, 2000)

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Text: any works of art, images, maps, sounds, signs, symbols, or numerical records in traditional content analysis (Krippendorf, 2004, p. 19). In this research, "text" will be a convenient term to mean any content present in the websites.

Website: a collection of web pages with the same domain and maintained by the same person or entity

Web page: a single HTML or other protocol file within a website

Assumptions

The researcher assumes that public elementary school library media program websites are available and linked to other websites in the state of Wisconsin. The method of finding school library media program websites involved locating school district websites in the state of Wisconsin and navigating from those through links to elementary school websites. Then, school library media program websites were found through links on their schools' homepages. In some cases, a school district website would have a link to the school library media program website through departmental organization or other linking method. If no links were present through any of these approaches, it was assumed that no school library media program website existed for that school.

Limitations

This research is limited in that it only looks at public elementary school library media program websites in Wisconsin. A ten percent sample of all public elementary school library media program websites was used to draw patterns about the content of all websites of this type in the entire state of Wisconsin. Any time a sample is used, some patterns that exist may not be evident, which sets boundaries for the conclusions that can be drawn from the resulting data. Additionally, these conclusions will not necessarily be applicable to other geographical areas. In future studies, this data will be useful mainly for the purposes of comparative analysis with other geographical areas of interest.

Significance

This research will be significant in determining content present on public elementary school library media program websites in the state of Wisconsin. It will additionally provide some idea of the "state of the art" for school library media program websites in elementary schools in Wisconsin. Such information will be useful for website developers who have created, or who will create, a website for their elementary library media program in Wisconsin. In comparing one's own library media program website to those that exist, it is anticipated that more effective library media program websites will be created in the future in the state of Wisconsin.

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Chapter 2

Literature Review

Researchers have already begun to develop sets of criteria for evaluating school library media program websites. Laurel A. Clyde began to investigate school library media program websites of all grade levels in August 1996 with a content analysis of 50 school library websites from nine countries. She originally identified websites using two international school library media program website directories (1) Peter Milbury's "Network of School Librarian Web Pages" (formerly "School Library and School Librarian Web Pages") (2) Linda Bertland's "School Libraries on the Web." When links were no longer available for the original sample, Clyde used Internet search engines such as Yahoo! in her 1999 longitudinal comparison study of the same sites. In the 2002 update of the longitudinal study, Clyde also utilized instruments such as Google to aid in her location of sites that had changed location. The first study in 1996 yielded 26 basic criteria ranging from "name of school and library" to "research skills information" to "the library rules". In 1999, Clyde offered 28 additions to the original 1996 list, and, by the 2002 revisions, there were 66 total criteria listed for evaluating school library media program web pages internationally. Some of the more pertinent criteria listed in the 2002 update are "access to online databases and services from home as well as school," "web page hosting for library users," "site search form," and even "welcome message from the librarian." Clyde's study shows the changes in school library media program website purpose, development, and content. Several of her criteria will be useful in the study of the current researcher.

Janice A. Webb is another researcher who has identified criteria to discern an effectual school library media program website in her 2000 study entitled *Using the Internet to Promote the School Library Media Center*. Dividing criteria relevant to her study using an approach

coined as the "ACID" scale, Webb looks at advocacy, content, interactivity, and design as appropriate categories of decisive factors in her data collection. A few advocacy criteria correlated with the study of the current researcher include the media specialist's job description, promotion of the media center's services and products, promotion of the media specialist as an information professional, and information about the media center team. Content criteria consist of such items as the OPAC, media center and media specialist's schedules, links (both organized and unorganized), facilities collaboration, and parent, community, teacher, and student resources. Interactivity was determined using factors like name and mailing address, email address, form(s) for feedback, chat forum, or no interactivity. Additional standards for design evaluation included the presence of a search engine, frames, flashing text, specific software requirements, navigation, and other visual elements

A third source was referenced in the development of criteria for the current study. "The School Library Media Center Web Page: An Opportunity Too Good to Miss," published by Donna Baumbach in a 2005 issue of *Knowledge Quest*, emphasizes the importance of school library media program website developers determining their own criteria for "an effective and visually pleasing site (Baumbach, 2005)." Her study reached 100 working websites with 32 elementary school library media program websites representing other combinations of grade levels. She suggests 28 criteria for consideration as "essential elements for any school library media web site." Baumbach argues that every school library media program website should have, at minimum, basic information about the program, a mission statement, and any resources that will support the mission of the school library media program website (Baumbach, 2005).

The current researcher selected from among the criteria in these studies and molded these criteria into a list that is relevant for evaluating school library media websites in the state of Wisconsin. Criteria were compiled that show value to public elementary school library media program websites, in particular.

Chapter 3

Methodology

The purpose of this study was to examine the content present on public elementary school library media program websites in the state of Wisconsin to find out if there are patterns of excellence in websites of this type. The research examined what type of content is present on the websites in the sample and resulted in the compilation of a list of categories under which the website content falls. The websites were subjected to a content analysis in order to discover the patterns of an excellent public school library media program website.

This research was conducted with a quantitative approach, using content analysis. According to Klaus Krippendorff, "Content analysis is a research technique for making replicable and valid inferences from texts (or other meaningful matter) to the contexts of their use (p. 18)." Content analysis is "an empirically grounded method, exploratory in process, and predictive or inferential in intent (p. xvii)." Content analysis of "texts" is expandable to include the content of website files that give meaning to the user in the same way that a written text gives meaning to the reader.

Librarians and researchers in the field of library science have been using content analysis since 1973. Content analysis was chosen for its advantages in exploring the researcher's questions. First, content analysis allows the researcher to analyze the large volume of data that need be collected in the methods of the current research. According to the United States General Accounting Office Program Evaluation and Methodology Division, the systematic nature of the content analysis design allowed the current researcher to gather data more consistently than if the same text was being read casually. (U.S. G.A.O., 1996). Along with the benefits of using a content analysis approach, some constraints are also relevant to the use of this research approach.

Content analysis only looks at the content of a source and at no other features. Design, interactivity, and advocacy, stated by Webb (2000), are also important features in evaluating school library media program websites. These features were not evaluated in the limitations of this research.

Once again, the United States General Accounting Office's Content Analysis: A Methodology for Structuring and Analyzing Written Material provides useful insights saying:

Because content analysis is systematic, sufficient human resources must be committed to it and rigorously applied to it. This may mean, for some evaluation applications, that the benefits may not outweigh the cost of the resources. Moreover, while content analysis has safeguards against distortion of the evidence, evaluators must use judgment in coding the data.

This statement may be applied to the current research, as well. A single researcher collected and evaluated all data to avoid the human error in coding the data. The researcher applied consistent cognitive procedures in recording content of the websites.

Though content analysis need not always be quantitative in nature, this approach best answers the questions of the current research. The researcher's questions were answered by counting the number of times certain content components appear on public elementary school library media program websites after a data gathering instrument was designed to code this information accordingly. A data gathering instrument was designed that allows for the recording of content categories and its presence on each website in the sample. Preliminary study of the websites in the sample gave a list of content features for all websites in the sample. Then, all websites were re-checked for these categories of content. The procedures this researcher used to gather data about the public school library media program websites are described in more detail below.

The researcher analyzed only public elementary school library media program websites that have been selected through the following steps. The list of public school districts was populated using the Public School Directory available from the Wisconsin Department of Public Instruction website (http://www.dpi.state.wi.us). From this list, 2,219 schools were identified and contact information is given. The schools on this list were categorized into five main "School Types." These were the following: elementary, elementary/secondary, middle, junior high, and high school. Of these, the schools were further categorized by "Agency Type." The agency types identified in this directory are "public" and "nondistrict charter". A convenience sample based on certain criteria was used to identify patterns in content for public elementary school library media program websites in the state of Wisconsin.

Of the 2, 219 schools present on the Wisconsin Department of Public Instruction Public School Directory, 1252 were labeled as "elementary" only schools. The remaining schools were recorded in the category of "School Type" as elementary and secondary schools, middle schools, junior high schools, or high schools. Eleven schools are additionally recognized as "nondistrict charter" agencies. The method of accessing websites for these schools, described below, necessitated removal of these eleven schools from the list of schools eligible for the sample. This left the list from which to choose the sample at 1241 public elementary schools in the state of Wisconsin.

A ten percent sample was taken from the 1241 schools identified as public elementary schools. This is an appropriate amount of data to see patterns of content for all school library

media program websites in the state of Wisconsin. A ten percent sample includes schools with a variety of unique characteristics, resources, and needs affecting the decisions of the school library media program that develops the website. One hundred twenty-four schools were in the sample. The schools are part of 61 small, medium, and large size school districts in Wisconsin.

Of these 124 schools, some did and some did not have school library media program websites. The standard first step in determining the presence of an elementary school library media program website was visiting each school district's website. Non-district charter agencies were removed from the sample as they do not have similar-enough organization as school districts to be compared with the same criteria in mind.

The school district homepages were visited when a link was provided on the Wisconsin Department of Public Instruction's Public School District Directory. District homepages were visited until 124 schools were identified that met the criteria of "public elementary" schools. If no direct link was provided or if the link for the district was not functional, that school district homepage was not visited for the collection of data. This is considered a limitation of the current research.

If the school district had a homepage that was accessible from the Wisconsin Department of Public Instruction School District Directory, specific procedures were followed to identify elementary schools from the district homepage. The researcher checked all district homepage links to find direct links to the elementary school(s) of that district. The schools were matched against the "School Type" and "Agency Type" criteria on the Wisconsin Department of Public Instruction's Public School Directory to ensure that they were labeled as "public" and as "elementary." If no link was given from the district website to the elementary school's homepage, then no attempt is made to locate the elementary school website (if any) from other sources. This is a second limitation of the current research.

When each elementary school website of a district is found, it was visited and checked for a link to the school library media program website (if any). In the case that no school library media program website link exists to any extent, no attempt was made to locate a school library media program website from other sources. The researcher assumes at this point that no school library media program website exists in the same domain of the elementary school for the purposes of this research. This is an additional limitation of the current research. It was found that 64 of the 124 schools had school library media program websites linked from the elementary school's homepage. These 64 schools were part of 34 school districts.

After all public elementary school library media program websites from the sample schools in the state of Wisconsin were located using these procedures; data was created using the data gathering instrument that was designed to collect information first about what content was on school library media program websites. Then, this data was analyzed in consideration of the criteria of similar research with the current researcher's modifications. Elementary school library media program websites were also compared to one another in the sample to find patterns of excellence among elementary school library media program websites in the state of Wisconsin.

Chapter 4

Data Analysis

The first research question that the researcher answered was the following: What content components are present on public elementary school library media program websites in the state of Wisconsin? Only sixty-four of the one hundred twenty-four schools had websites for the school library media program. While gathering data from the 64 schools that had elementary school library media program websites, categories were identified that best described the content of the websites that were analyzed.

Seventeen categories resulted from the unique features of each of the 64 school's websites. The categories are these in no specific order of occurrence: 1) Librarian's name; 2) Librarian's e-mail address; 3) Online catalog link; 4) Schedule, hours, or calendar of the library media program; 5) Introduction or mission statement of the program; 6) Parent resources; 7) Teacher resources; 8) Biography of the librarian; 9) Subscription database links; 10) Useful or interesting website links; 11) Library news or description of activities and programs; 12) Volunteer or donor information; 13) Library policies; 14) Full contact information including mailing address and phone number; 15) Search engine links; 16) Student media projects; and 17) Broken links. Each of these pieces of content was present on at least one website from the sample.

The first piece of content located on public elementary school library media program websites in the state of Wisconsin was the librarian's name. Although no determination was able to be made from the content of the websites about the qualifications of the persons running the school library media program, an attempt was made to identify the name of a person affiliated with managing the school library media program. Of the 64 schools that had school library media program websites, 28 included the name of at least one librarian. Some sites also listed the names of paraprofessional or media aide support personnel, though no indication of this was made in the data. In 43.8 percent of websites, the data gave evidence that there was indeed a person who ran the school library media program and created or maintained the program's website.

The second category identified was librarian's email address. Twenty of 64 websites for school library media programs included this way of contacting the person who managed the library program. Often, the email address was present as a hyperlink to send a message immediately to the librarian.

The third matter of content that was found on school library media program websites in Wisconsin was a link to the library's catalog online. Most automated library systems have the option of public access through the library's own website. Overall, only 16 library websites had a link to their automated catalog directly through the library's website. It was observed in the preliminary stages of research that some schools had the link to the library catalog on the school's website and not on the library website or in place of a library website completely. Two reasons that are certain for the lack of connection to the library's catalog online are a lack of funding to support the purchase and maintenance of this option from the library automation company or lack of an automated catalog system altogether. Other reasons exist that only 25 percent of libraries made their catalog available from their website.

The next content that was found on school library media program websites was the library's schedule, hours, or calendar. All of these factors give an indication to patrons of the library program of when the library will be providing services for patrons. Twelve of 64 school library media programs gave this information on their website. On some of the library media program websites was found an introduction to the program. This category of introduction on the website could include a few things. A general welcome message from the librarian, a mission or vision statement of the school library media program, or a general introduction to services were all considered an introduction to the website. Introductions of this sort were present on 27 percent of school library media program websites in Wisconsin.

The sixth category was named "parent resources" by this researcher. Parent resources included any link that was identified as such on the library media program website. It typically included a collection of website links, a tie to materials of interest to parents from online subscription databases, a connection to this section of resources in the online library catalog, or a bibliography of materials available in the library media center. The link had to be specifically named "Parent resources" to be included in this category. Twelve of 64 library media program websites had this content on their website.

The next category is defined similarly to the previous one, only this one was "teacher resources." This included any resources deemed by the creator of the library website to be appropriate for persons in the teaching profession. It also included content items that were a collection of website links, a link to teacher resources on available subscription databases, a tie to the part of the online catalog where teacher resources can be most quickly accessed, or a bibliography of materials available from the school library media center. The link had to be specifically named "Teacher resources" to be considered a part this category. Thirteen of 64 school library media program websites had teacher resources.

On 5 sites was present the biography of the librarian. This is a noteworthy feature for a few reasons. Some of these 5 sites had only the biography of the librarian and no other

information or resources available through the school library media program website. It is understandable that only 7.8 percent of websites had this information because it is considered personal in nature and some may fear the availability of this information will hurt privacy. One reason that some sites had this information, and in some cases only this information, is that the library media program website was a link from the name of the librarian in the staff directory. Others that were not linked in this way also included this information.

Twenty-four out of 64 sites included a link to subscription databases. One collection of subscription databases maintained for access of all school libraries in the state of Wisconsin was called *Badgerlink*. This was available to all school library media programs, though not all with websites included it on their website. School library media programs with subscriptions other than those on *Badgerlink* were also marked in this category.

The next feature that was present on school library media program websites was a category named "useful or interesting website links." This section does not include the separately mentioned links to search engine websites. Website links in this category could be found in any number of organization systems on various websites. Some arranged links by grade level appropriateness, others by terms like "fun sites" or "homework help," and yet others by "research help." This category saw the greatest presence with 67.2 percent of the 64 websites having links to any sort of resource on the Internet.

The twelfth content category that was found was information about library news and activities. Twenty-seven out of 64 school library media program websites included this information for patron access. Webb (2000) stated that this information was useful for advocacy of the school library media program.

Volunteer and donor information was found on only one school library media program website in the sample. This library website gave information for students who wish to become involved or who are currently involved in "Library Helpers Club." No other websites had any similar information.

The next area where much content was located on school library media program websites was policies or rules. Thirteen of 64 programs chose to include this information on their website. These included a variety of policies and rules from how many books the patron could check out, how long the circulation period for materials is, and how one should behave while in the library media center to policies for using the Internet and working on library computers.

Full contact information for the person running the school library media program was only found on 5 library media program websites. In some cases, it was a part of the contact information accessible through the automated catalog portion of the library media program website. In other cases, it was located on the homepage of the library website.

Search engine links were on only 28.1 percent of school library media program websites. The multitude of search engines included varied greatly in age-appropriateness, complexity, and scope. Any site that included at least one search engine link was included in this category.

The sixteenth category in which content on school library media program websites fell is student media projects. One responsibility of many school library media specialists is to help students create projects using digital media. One website included students' electronic slide show presentations. These were viewable directly on the school library media program website without the need for an additional download.

Although this is a nontraditional category for content, broken links was included as the last category as a way to describe school library media programs websites with errors in coding during development. Six websites had at least one broken link. This prevented the researcher from seeing what content might have been on the pages that were linked incorrectly. Also, if the person who created the website intended to have that material available, it prevents access to the sources by library patrons.

Overall, the average number of content areas found on the school library media program websites was 4 categories out of 17. The second research question was, "What patterns of excellence emerge from a structured observation of public elementary school library media program websites in the state of Wisconsin?" This is answered by saying that the more content that was available, the higher the quality of the website and the more effective it will be in supporting the mission of the elementary school library media program. The most categories that any of the 64 websites completed were 9 out of 17. These are not all the categories, however, for which previous researchers have suggested school library media program websites should contain.

An article written by Blumbach in 2005 suggested the 28 criteria are "essential elements for any school library media web site." The criteria are named closely similarly to the categories in the current study. A show of 9 out of 28 criteria is still a poor figure when looking at the possibilities for school library media program websites. Some things that even the best websites of the bunch were missing included the following list: online catalogs for the library media program and for libraries outside of the school, reference assistance, curriculum connections, literacy connections, general information about the library media program, volunteer and donation information, descriptions of school reading programs, study tips, book reviews by patrons, and lists of new books and materials (Blumbach, 2005). This is not an extensive list, but rather a beginning sample of the possibilities for school library media program websites. Overall, the pattern in Wisconsin is that libraries are not living up the criteria suggested in the field of research for quality website presence.

Chapter 5

Summary, Conclusion, and Recommendations

Due to the evidence that a school library media program is strongly influenced by its Internet presence, the purpose of this research was to perform a content analysis of selected public elementary school library media center websites in the state of Wisconsin. This research investigated school library media program websites in the state of Wisconsin and additionally helped to determine how well the library media program websites in Wisconsin meet the current "state of the art" described by previous researchers for this type of website.

The research gave data about common content components of public school library media program websites in the state of Wisconsin. A diversity of content features was found. A list of all components found on public elementary school library media program websites in the state of Wisconsin was populated that includes the following: 1) Librarian's name; 2) Librarian's e-mail address; 3) Online catalog link; 4) Schedule, hours, or calendar of the library media program; 5) Introduction or mission statement of the program; 6) Parent resources; 7) Teacher resources; 8) Biography of the librarian; 9) Subscription database links; 10) Useful or interesting website links; 11) Library news or description of activities and programs; 12) Volunteer or donor information; 13) Library policies; 14) Full contact information including mailing address and phone number; 15) Search engine links; 16) Student media projects; and 17) Broken links. The list is a complete representation of what was present on websites in the sample.

The data collected about the components of public elementary school library media program websites was evaluated based on previous recommendations in literature about criteria for having an effective school library media program website. It was found that the sample of school library media program websites analyzed were a poor representation of what content has been found in prior studies of other geographic areas.

Recommendations for Further Study

Future researchers can use the findings from this study to develop gather more research about public elementary school library media program websites. It may be of interest to future researchers to analyze private elementary school library media program websites and compare them to the state of public elementary school library media program websites. Another suggestion is to look at school library media programs that serve other age levels in the same geographic areas to populate a list of content present on those sites and to evaluate the effectiveness of library media programs for other patronages.

Additionally, future researchers might follow a recommendation for evaluating public elementary school library media program websites in Wisconsin for design, functionality, and interactivity features that add to the effectiveness of a website overall. Studies might also be done to survey the patrons of school library media programs about their opinions of the school library media program website and the way they use it.

It would be of additional interest to contact the school districts employing the library personnel to gather information about the qualifications and certifications of the person(s) running and operating the school library media programs in the state of Wisconsin. Complementing this would be to see what people are actually developers of the school library media program websites.

Another outcome of this research is that it will provide data on the person(s) or entity responsible for designing and maintaining the school library media program website. The researcher will draw conclusions about the certification of library media specialists and its

relation to the content of public elementary school library media program websites in the state of Wisconsin.

An additional study currently being completed analyzes school library media program websites in the state of Iowa. The results of this research will be useful in a future study that could be completed in comparing school library media program Internet presence in typical Midwestern states.

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APPENDIX

Criteria Coded

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C1	Librarian's name
C2	Librarian's e-mail address
C3	Online catalog link
C4	Schedule, hours, or calendar
C5	Introduction or mission statement
C6	Parent resources
C7	Teacher resources
C8	Biography of librarian
C9	Subscription database link(s)
C10	Useful or interesting website link(s)
C11	Library news or description of activities and programs
C12	Volunteer or donor information
C13	Library policies
C14	Full contact information including mailing address and telephone number
C15	Search engine links
C16	Student media project
C17	Broken links

Categories of Content on Wisconsin Public Elementary School Library Media Program Websites Arranged Hierarchically with the Websites Containing the Most Categories First

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#	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16	C17	TOTAL
47	1	0	1	1	1	1	1	0	1	1	0	0	0	0	0	1	0	9
34	1	1	1	1	0	0	0	1	0	1	1	0	1	0	0	0	1	8
80	1	1	0	1	0	1	0	0	0	1	1	0	0	0	1	0	0	7
11	0	0	0	0	1	1	1	0	0	1	0	0	1	0	0	1	1	6
14	0	0	0	0	0	1	1	0	1	1	1	0	0	0	0	1	0	6
15	0	0	0	0	0	1	1	0	1	1	1	0	0	0	0	1	0	6
16	0	0	0	0	0	1	1	0	1	1	1	0	0	0	0	1	0	6
17	0	0	0	0	0	1	1	0	1	1	1	0	0	0	0	1	0	6
18	0	0	0	0	0	1	1	0	· 1	1	1	0	0	0	0	1	0	6
19	0	0	0	0	0	1	1	0	1	1	1	0	0	0	0	1	0	6
20	0	0	0	0	0	1	1	0	1	1	1	0	0	0	0	1	0	6
21	0	0	0	0	0	1	1	0	1	1	1	0	0	0	0	1	0	6
23	1	0	0	0	0	1	1	0	0	1	1	0	0	0	0	1	0	6
29	1	0	0	0	1	0	0	1	0	1	1	0	1	0	0	0	0	6
81	1	1	0	1	0	0	0	0	0	1	1	1	0	0	0	0	0	6
115	0	0	0	1	1	0	0	0	1	1	1	0	1	0	0	0	0	6
116	0	0	0	1	1	0	0	0	1	1	1	0	1	0	0	0	0	6
124	1	1	0	0	0	0	0	0	1	1	1	0	0	0	0	1	0	6
7	0	0	0	1	1	0	0	0	0	1	0	0	1	0	0	1	0	5
32	1	1	1	0	1	0	0	0	0	1	0	0	0	0	0	0	1	5
36	1	1	0	1	0	0	0	0	0	0	1	0		0	0	0	0	5
39	1	1	0	0	0	0	0	0	1	1	0	0	0	0	0	1	0	5
67	1	1	0	0	0	0	0	0	1	1	0	0	0	0	0	1	0	5
100	1	0	0	0	1	0	0	0	0	1	1	0	1	0	0	0	0	5
123	0	0	0	1	0	0	1	0	1	1	0	0	1	0	0	0	0	5
37	1	1	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	4
54	1	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1	1	4
66	1	1	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	4
73 75	1	1	1	0	0	0	0	0	0	0	0	0	0	0	<u>1</u> 1	0	0	4
75	1	1	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	4
					_					-								
79 90	1	0	1	0	0	0	0	0	0	0	1	0	0	0	1 0	0	0	4
103	0	0	1	1	0	0	0	0	0	1	0	0	1	0	0	0	0	4
118	1	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	4
25	1	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	3
41			0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	3
43	0	0	ō	0	0	ō	0	0	1	1	0	0	0	0	0	1	0	3
44	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	1	0	3
74	0	0	1	0	0	0	0	0	1	0	1	0	0	0	0	0	0	3
92	0	0	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	3
93	0	Ō	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	3
102	1	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	3
104	1	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	3
105	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1	0	3
112	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	3
		<u> </u>	<u> </u>			<u> </u> ·		1	. <u> </u>	L	L	<u> </u>	<u>~</u>		-

* "#" sign indicates the number assigned to the website in the sample * "C#" indicates number assigned to the criteria in the Criteria chart

Categories of Content on Wisconsin Public Elementary School Library Media Program Websites Arranged Hierarchically with the Websites Containing the Most Categories First

113	0	0	0	1	1	0	0	0	0	0	0	0	1	0	0	0	0	3
1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
12	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	2
28	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	2
33	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
65	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	2
69	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	2
72	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	2
78	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
86	0	0	0	0	0	0	0	0	· 0	1	1	0	0	0	0	0	0	2
91	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	2
106	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	2
111	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	2
114	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2
121	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	2
40	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
42	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
76	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1

* "#" sign indicates the number assigned to the website in the sample * "C#" indicates number assigned to the criteria in the Criteria chart

#	DL	SD	DLL	SN	DD	SDR	LL
1	1			2	3		4
2	1			2		-	0
3	1			2			0
4	1			2			0
5	1			2			0
6	1			2			0
7	1			2			2
8	1			2			0
9	1			1			0
10	1			2			0
11	1					2	5
12	1		2				3
13	1			2			0
14	1	2		3			4
15	1	2		3			4
16	1	2		3			4
17	1	2		3			4
18	1	2		3			4
19	1	2		3			4
20	1	2		3			4
21	1	2		3			4
22	1	2		3			0
23	1	2		3		4	5
24	1	2		3			0
25	1	2		3		4	5
26	1	2		3			0
27	1	2		3			0
28	1	2		3			4
29	1	2		3		4	5
30	1	2		3			0
31	1	2		3			0
32	1	2		3			4
33	1	2		3			4
34	1	2		3		4	5
35	1	2		3			0
36	1	2		3		4	5
37	1	2		3		4	5
38	1	2					0
39	1			2			3
40	1			2			3
41	1			2			3
42	1			2			3

Order of Links Followed in Navigating to Schools' Library Media Program Websites in Elementary Schools in the State of Wisconsin

** "#" sign indicates the number assigned to the website in the sample

* DL indicates district website link

- * SD indicates the directory of schools found on the district website * DLL indicates district library media program website link
- * SN indicates school name link
- * DD indicates a school's department directory website link
- * SDR indicates the school's staff directory
- * LL indicates the school's library media program website link

43			2		3
44	1		2		3
45	1		2		0
46	1		2		0
47	1		2		3
48	1	2	3		0
49	1		2		0
50	1	2			0
51	1	2			0
52	1	2			0
53	1	2			0
54	1				2
55	1				0
56	1				0
57	1				0
58	1	2	3		0
59	1	2	3		0
60	1	2	3		0
61	1	2	3		0
62	1	2	3		0
63	1	2	3		0
64	1	2	3		0
65	1				2
66	1	2	3		4
67	1				2
68	1	2	3		0
69	1	2	3		4
70	1	2	 3		0
71	1	2	3		0
72	1	2	3		4
73	1	2	3		4
74	1	2	3		4
75	1	2	3		4
76	1	2	3		4
77	1	2	3		4
78	1	2	3		4
79	1	2	3	-	4
80	1	2	3		4
81	1	2	3		4
82	1		2		0
83	1		2		0
84	1		2		0
85	1		 2		0

Order of Links Followed in Navigating to Schools' Library Media Program Websites in Elementary Schools in the State of Wisconsin

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Order of Links Followed in Navigating to Schools' Library Media Program Websites in Elementary Schools in the State of Wisconsin

86	1		2	3		4
87	1	2		3		0
88	1			3		0
89	1	2		3		0
90	1		2	3		4
91	1		2	3		4
92	1				2	3
93	1				2	3
94	1					
95	1		-	1		 0
96	1			2		0
97	1	2		3		0
98	0					
99	1			2		0
100	1		2			3
101	0					
102	1			2		3
103	1	2		3		4
104	1			2		3
105	1			2		3
106	1			2		
107	1			2		0
108	1			2		 0
109	1			2		0
110	1			1		0
111	1			2		3
112	1			2		 3
113	1			2		3
114	1			2		 3
115	1	2		3		4
116	1	2		3		4
117	1			2		 0
118	1		2			 2
119	0					
120	1			2	ļ	 0
121	1			2		 3
122	1			2		 0
123	1		2			 3
124	1		2			2

** "#" sign indicates the number assigned to the website in the sample

- * DL indicates district website link
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