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PURCHASING SUBSCRIPTION REFERENCE DATABASES IN THE IOWA ELEMENTARY PUBLIC SCHOOL LIBRARY

A Thesis

Submitted

in Partial Fulfillment

of the Requirements for the Designation

University Honors

Michaela B. Seeman University of Northern Iowa May 2010

This Study by: Michaela Seeman				
Entitled: Purchasing Subscription Reference Databases in the Iowa Elementary Public				
School Library				
has been approved as meeting the thesis requirement for the Designation University				
Honors				
Date Dr. Karla Krueger, Honors Thesis Advisor, Curriculum & Instruction				
Date Jessica Moon, Director, University Honors Program				

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CHAPTER 1

INTRODUCTION

As I was sitting in library reference class a while back, a classmate of mine asked a very excellent question: "What reference materials should I buy for my school? Isn't there an all-powerful list describing this?"

While this all-encompassing list of references to purchase for the elementary school seems ideal in theory, it would prove to be impossible in practice. Every school building, every student body, every community has different information needs to provide their students and teachers with the optimal library experience, such as a collection of materials supporting the fifth grade unit's research project on the United States Civil War. The certified teacher librarian in every Iowa school district is specifically trained to not only observe and evaluate the needs of the library, but to also provide the library with materials that will enhance student education. Students have many research requirements, both for personal inquiry and for assignments requiring students to have quality print and electronic reference materials available. One area of electronic references is subscription reference databases. Through appropriate evaluation and selection, the teacher librarian can purchase and educate students and staff about the subscription reference databases available to them that will allow students to inquire and conduct research. The problem my research addresses is how Iowa public school teacher librarians make purchasing decisions when it comes to subscription reference databases, among other electronic references, specifically in smaller buildings.

Justification

How teacher librarians make purchasing decisions matters a great deal, especially to other teacher librarians faced with the same choices. When it comes to electronic reference materials, some teacher librarians respond with confusion about where to start looking for this specific type of reference material. This confusion may be due to a lack of knowledge of what is available for purchase through vendors, but the uncertainty is more likely a reaction to the feeling of being overwhelmed by the extensive, seemingly endless amount of information available on the Internet for subscription reference database purchasing. I chose to conduct a survey addressing this subject because the Internet is a continuously changing entity, causing it to be overwhelming at times no matter one's generation. I have been blessed growing up with excellent resources at my fingertips thanks to a wonderful teacher librarian who made quality, informed purchasing decisions. However, as I enter into the world of education with a minor in library studies, I wonder how others made these difficult subscription reference database purchasing decisions that I know I will soon be facing. This brought to mind the question of how Iowa public school teacher librarians make decisions about their building(s) needs in purchasing electronic reference materials, especially in the area of subscription reference databases.

The elementary teacher librarian in the public school is an integral element in the management of an elementary school library. This job requires the person in this role to undertake many responsibilities in the area of student learning. While other personnel, including teachers and associates, are trained to perform specific jobs or tasks, certified

teacher librarians are equipped with the education, knowledge, and resources that allow them to perform all of the roles required by their occupation. The American Association of School Librarians and Association for Educational Communications and Technology (1998) addressed these roles in *Information Power: Building Partnerships for Learning*. In the area of technology, the purpose of the teacher librarian is to provide students with access to information that will assist in their education. This entails locating, researching, evaluating, allocating tightly budgeted funds, and finally purchasing the specific reference material.

The American Association of School Librarians (2009) created an updated work entitled *Empowering Learners: Guidelines for School Library Media Programs* that addressed these issues as well. They stated that collection development in the school library must be kept current, including the electronic reference materials available for student and teacher use. Through electronic references, specifically subscription reference databases procured, elementary libraries are able to provide students with upto-date information and continued improvement of the library's collection. These subscription reference databases must be expertly selected by the certified teacher librarian and involve instruction regarding availability and use. The subscription reference database purchased is not helpful unless the students and faculty know that it exists and how to use the newly acquired reference material. In this way, the students are provided with the tools to enhance their educational experience.

Iowa School Library Program Guidelines: Libraries, Literacy and Learning for the 21st Century (Iowa Department of Education, 2007) provided Iowa teacher librarians

with a set of state requirements for the library program. Regulations for library collection, electronic resource computers, and updating resources, among other items, are clearly defined within this work. The state of Iowa requires that at a minimum the library collection should contain a "current and diverse collection of fiction and non-fiction in a variety of formats to support student and curriculum needs" (p. 12). This includes a requirement for improvement to the collection, "current technology," and a plan to keep the collection up-to-date (pp. 12-13). Electronic reference materials, including subscription reference databases, must be provided and used for these requirements to be met and are another essential element in the Iowa school library, enhancing student learning experiences and overall knowledge.

Lanning and Bryner (2004) considered the usefulness of references in student education in their work *Essential Reference Services for Today's School Media Specialists.* Reference materials make it so every student "evaluates information critically and competently" (p. 11). The authors expressed that reference instruction and material availability help teach students how to be involved in "independent learning" and "social responsibility" when it comes to learning and contributing to the good of the whole community (p. 11). Students must have references available to them in order to explore and expand their knowledge. Through this, the student and teacher are partnered in the responsibility of education.

Lanning and Bryner (2004) also discussed the importance of having both print and electronic reference materials available in the library within their work. The authors' opinion is clearly communicated in the statement, "Your student's ability to reach the

nine information literacy standards is certainly aided by your setting up a good print reference collection" (p. 39). This illustrates that quality print reference materials are not only a good idea to include in the library, but are a necessary element in student learning. Many print concepts are addressed, taught, and reinforced through the use of print references. Numerous electronic reference materials, including subscription reference databases, are set up in a way that mimics the print reference that existed first. *Reference and Information Services in the 21st Century: An Introduction* by Cassell and Hiremath (2009) detailed the change that reference is continuing to go through. In doing so, the authors stated, "There will be more emphasis on electronic materials while some older materials will still need to be consulted in print format" (p. 13). While electronic reference materials continue to grow and change, print references will continue to be important in the learning process.

With a variety of reference materials necessary to obtain information, the teacher librarian's role in electronic criteria selection becomes clear. An article by Geller (2006) in *Library Technology Reports* explained that electronic resources require the teacher librarian to examine materials in a different way than print resources, including a different set of criteria. While today the elementary school's selection policy commonly states what type of items are to be selected, there are further variables regarding subscription reference databases to consider, such as comparison of print versus electronic references, student use, easy access, and currency of information, to name a few. In *Selecting and Managing Electronic Resources: A How-To-Do-It Manual for Librarians*, Gregory (2006) listed suggestions for selection criteria. She included in this

list the users or community and their needs, what is being requested by users, where and when the users have access to information, when materials will be used, and what the best method for patrons to gain information requested happens to be. The students must need the information from the electronic reference selected, they must have access to that information, and it must be presented at the level of the user.

Decisions of electronic reference purchasing are based on the budget of the library in discussion, among others. Joshipura (2008) commented upon this adjustment for the budget in the article "Selecting, Acquiring, and Renewing Electronic Resources."

Joshipura stated that with the addition of electronic resources, there may be new items to examine and purchase without a specific budget already assigned to this particular area. Libraries have always worked within a budget. Questions such as what should be purchased and what would be best for the students, teachers, and community are always running parallel to the issue of budgeting. The addition of another medium, subscription reference databases in this case, stretches the already thin budget even tighter.

Deficiencies in Research

While there is little research in the area of subscription reference database purchasing for elementary libraries specifically, there is a plethora of information regarding general academic and public library subscription reference database acquisition. The purpose of the school library, the requirements of a librarian and library, selection criteria, and budgeting affects of subscription reference database purchasing for libraries overall are discussed in depth in research articles and resource materials.

Through examining such works, past and current issues of selection and budget restrictions in Iowa elementary public school libraries can be contemplated.

While ideas and suggestions are made by many authors, there is still a question as to how current teacher librarians are making purchasing decisions in Iowa public elementary schools. Not a single source that I examined made mention of the specific information for which I conducted research.

Significance

This research will help teacher librarians see how the participating Iowa public school teacher librarians with a smaller population of students in their building made purchasing decisions about print and electronic reference materials. There was a specific emphasis on the area of subscription reference databases. Teacher librarians seemed very curious as to how their colleagues were making purchasing decisions that they also had to make. Through my research, teacher librarians will have the opportunity to see and compare these decisions to their current practice, learning from others.

Problem Statement

With so many reference materials to choose from, a teacher librarian may feel overwhelmed at the thought of making purchasing decisions when it comes to print and electronic reference materials. Seeing how others in their field make these decisions, especially when it comes to subscription reference databases, helps relieve some of this stress and concern about providing the best information for students.

Purpose

The purpose of my research project was to explore how subscription reference databases affect purchasing decisions in Iowa elementary public school libraries in buildings with 400 students or less. Through my research, I have informed teacher librarians of how others in their field make purchasing decisions about subscription reference databases and print references and the thought process behind these choices in order for them to make an informed decision regarding their own collections. Through conducting a survey of Iowa public school teacher librarians in schools of this size, I compared the use of print and subscription reference databases available to students and faculty. The knowledge of purchasing decisions and reasoning behind these choices are incredibly important. Decisions made by the teacher librarian regarding budgeting limited funds provided to the library has been an issue through the years, especially for smaller school districts. This research and information will allow these schools to use their limited budgets in a way that best supports the education of every student.

Research Questions

- 1. How does the medium of resources available affect the use of materials? Do students wish to use information from print or electronic resources? Do students use online resources available through the school in order to complete work outside of school?
- 2. Do the resources available to elementary students through the statewide online purchase meet a standard of high quality making them relevant, easily understandable, usable, and age appropriate?

3. What criteria do elementary teacher librarians examine when making selection decisions regarding electronic resources versus non-fiction print or print resources? What affect does the use of materials already owned hold on purchasing decisions made by the teacher librarian?

Definitions

For this particular research study, I have defined elementary schools as school buildings with no higher than sixth grade students. When referring to certified teacher librarians, I am referencing teacher librarians that have obtained or are in the process of obtaining a master's degree or an Iowa endorsement as a teacher librarian. Those obtaining the endorsement hold temporary certification and will be considered certified for the purpose of this study.

Within this work, the term print references are materials used for research, both academic and personal inquiry. These are items that are physically tangible on the shelves of the library. When referring to electronic references, it is meant that these are materials that require an electronic devise, such as a computer, to observe the information available. Examples of these include CD-ROMs, the Internet, and databases.

When subscription reference databases are discussed within this work, it is referring to databases that are selected and purchased for student and staff use. Unlike the free Internet, these materials conform to publication, review, and editing standards by authors, editors, and publishing companies that produce them.

Assumptions and Limitations

With this particular research study, it is assumed that teacher librarians are involved in the selection process of subscription reference databases purchased by the school. It is also assumed that the teacher librarian in each elementary school works in one building at least 20 hours per week, is actively involved in student library instruction, has some level of collaboration with colleagues, and will have observed student use of reference materials.

This research and thesis is set up to report the findings of what the participating certified teacher librarians observe and practice within their own libraries. This is a qualitative study on fifteen specific teacher librarians, not a document to specify how every library should look or be run by the teacher librarian. The open-ended survey conducted included certified teacher librarians that are present in one elementary building at least 20 hours per week. The participants must have been in public elementary school libraries with students no older than sixth grade and 400 students or less within the building.

CHAPTER 2

REVIEW OF LITERATURE

Numerous past research studies have explored the world of technology and its impact on education, but little research has been done regarding subscription reference database acquisition specifically. Through its continuously changing nature, technology has affected school library collection development and management, teaching, and student learning. By exploring this area, teacher librarians can better understand the impact of technology in the school library.

Collection Development and Management

The purpose of library collection development is to provide students with the information necessary for an enhanced education. Several studies have been conducted to analyze collection development trends. One such article was "Impact of the Internet on Collection Development: Where are we now? Where are we headed? An informal study," in which Intner (2001) described the surveys and interviews she conducted. The purpose of her informal study was to see how the Internet had affected collection development in a variety of library settings. The questions addressed through this survey revolved around the idea of the "nature of the Internet" (p. 308). The general questions this work included were, "Is it [internet resource] another type of material? Is it a new service? Is it the same material librarians have always collected but in a different format? Or, is it all the foregoing and something else, as well?" (p. 308). To answer these questions, surveys and interviews were conducted with a variety of library professionals.

Thirty-five librarians who were in charge of making collection development decisions, including those for Internet reference materials, completed this survey. Intner (2004) also did a second related research project in which six library directors at colleges from around the United States were interviewed. The data for the surveys and interviews were collected between November 1999 and May 2000. The surveys were done through an "online discussion list" and the interviews were completed face-to-face or on the phone (p. 308). Both populations were asked open-ended questions that addressed the opinion and observation of each librarian or director.

Intner (2001) found that many of the librarians surveyed saw an increase in student and teacher librarian use of the Internet. A great number of these respondents collected Internet resources for the library, including links and bookmarks. The librarians looked at the Internet as another medium to evaluate and used the Internet to their advantage. When analyzing the library directors' answers to elaborate questions, Intner (2001) found that some of the population did not see a shift from print to electronic reference use happening, while others saw an increased use of electronic references, but a lack of use of print reference materials. Also noted was a trend towards consortial purchasing of subscription reference databases. A general theme seen by both populations was an increase in budgeting for electronic reference materials. This form of reference was becoming more and more popular, requiring a change in collection development, much like with any new media.

Also addressing the important area of collection development was a more recent research compilation of studies and observations by Maxwell (2005) in "Digital Versus

Print: The Current State of Reference Affairs in School Libraries." The purpose of this research was to see how teacher librarians delt with the issue of print versus electronic reference materials when making purchasing decisions for the school library collection. The question that Maxwell (2005) wished to answer through his work was how technology has affected teacher librarians and the library in the area of collection management. Maxwell (2005) used a number of sources, including research articles and his own observations, to gather the information addressed in the article.

Maxwell's (2005) data analysis concluded that schools were continuing to fall behind when it came to technology. The use of print in the library was addressed through the statement, "...print-based materials both reference and otherwise remain an essential part of smaller libraries' collections" (p. 55). Even with the addition of electronic materials, print still remained important in many schools. While print materials stand on their own, requiring only access to the library to get the information the reference materials provide, electronic references rely on technology and electricity to view the materials available. This can lead to a risk of access, both during instruction and student research.

The results of this study and compilation of resources concluded that technology in schools depended on the budget allowances of such purchases, student and staff needs, ease of use, and other factors. Maxwell (2005) expressed one concern of teacher librarians was that the technology they were buying may soon become out-of-date. He concluded that the school library was continuing to fall behind the social norm when it came to technology availability and use.

Technology Influence on Teaching

The goal of education in the United States is to teach students, giving them the skills they can apply elsewhere. Technology has changed how this is happening. Cool (2004) explored this idea in her work "Information-Seeking Behaviors of Children Using Electronic Information Services During the Early Years: 1980-1990," examining past studies that had been conducted. The purpose of Cool's (2004) research was to show how studies between 1980 and 1990 examined how children sought electronic information before and immediately following the invention of the World Wide Web. The questions she wished to answer were how electronic information seeking has changed since the 1980s and what we can learn from this past research to apply it to today and the future. Forty-nine works of literature from between 1980 and 1990 were examined and analyzed. Through this, Cool (2004) examined authors with a variety of learning theories and backgrounds from around the world.

Cool's (2004) analysis and results centered around the fact that teacher librarians in the 1980s had a very vague idea of how to teach technology skills, a new idea that fell under their guidance. She stressed the importance of teaching technology skills to students by stating, "Mancall and Desking (1984) stressed the value of preparing students for the world of tomorrow" (p. 3). This is still the purpose of education in the United States today. Educators prepare students for living and continuing to grow and learn outside of the school environment, including the use of technology in their future occupation. Another important element of analysis that Cool (2004) discovered from her research was that surveys, interviews, and other research that happened around the 1980s

before electronics were introduced into schools focused on whether integrating technology was a good idea. After electronics were introduced into schools, research centered on how technology was influencing student learning and teaching in the library and school.

After the introduction of the Internet, there was a concern for student educational impact. In the article "New Technologies in Reference Services for School Libraries: How Their Use Has Changed the Teaching of Library and Research Skills in North Carolina," Truett (1994) informs the reader of her research study exploring this idea. The purpose of this study was to examine what role technology plays in education, specifically library skills in North Carolina schools. The questions that Truett wished to answer through this research were summed up in her statement,

But today, we need to ask to what extent are these two technologies being used in school libraries, what titles or resources are actually being used, and most importantly, how is this use of technology changing the teaching of library information and research skills? (p. 124)

The role of technology in education has been apparent for years, however technology continues to change and morph into something new and exciting, requiring education to follow along with it.

The population used for this study was 88 North Carolina school library personnel, working in buildings with student grade ranges from elementary to high school, that returned the surveys. This study was conducted in the spring of 1993. The data collection was done through one-page surveys that were mailed to participants. The

questions on the survey were regarding the use of new technology of the time and its role in the school library reference program.

Truett (1994) reported on her results in various tables. The questions revolved around library use of CD-ROMs and videodiscs. Themes that were found included that many schools had CD-ROMs, and those that did not based the purchasing decision on a lack of need or on budgetary concerns. The information gathered also looked at student and teacher librarian use of electronic references. Results included a list of CD-ROM titles that were most popular in these particular North Carolina school libraries. Many of these titles are among those most recommended for reference today in their updated form through subscription reference databases and in print. Within the data, there had been a noticeable change in reference instruction with the addition of new technology. The importance of technology in school libraries is expressed through Truett's (1994) statement, "Apparently electronic reference sources are no longer considered "frills" by the majority of school librarians, at least not in North Carolina, and we can probably safely predict their use will only increase in the future" (p. 141).

Technology Influence on Learning

When faced with a new way of teaching, student learning is impacted. The invention and increased use of technology has changed how students go about learning.

Large (2004) discussed how elementary students use the Internet to find information and at what age they do so in his work "Information Seeking on the Web by Elementary School Students." The purpose of this research and literature analysis was to look at how elementary students were instructed and used the Internet to look at information. This

was done through observations both in the laboratory and the field. Large (2004) examined differences based on use, age, and gender.

Large (2004) found reoccurring themes in the research materials. Students wanted to explore new technology and information, even when overcoming obstacles. Many students often welcome such obstacles, seeing them as a challenge and gaining satisfaction from pushing themselves and succeeding. However, other students felt they should find exactly what they needed for their assignment immediately without much effort. Large (2004) stated, "Many students express frustration if they cannot find the precise information they are seeking" (p. 303). Evaluation skills must be taught in order to provide students with the optimal learning experience.

Nueman (2004) published the work "Learning and the Digital Library." It explored the idea of how electronic materials affected students and their learning. The purpose of analyzing this research was to examine how electronic materials can be part of creating "an optimal environment for learning" (p. 65). The question that Nueman (2004) addressed was how we can obtain the same or higher level of learning with electronic materials. This was done in an analysis of research works from the 1980s through the 1990s.

Through analyzing these works, Nueman (2004) commented upon the trend the electronic material use leading to higher-order thinking skills. Electronics bring a new way for students to think about problems and research, specifically finding information that they would like to use. Looking up "penguin" in the encyclopedia is no longer the assignment. Now they are being asked to pick something specifically related to penguins

that they would like to know more about, such as how penguins feathers work to keep them warm and how they insulate in the water. Nueman (2004) states, "Learning and the digital library' has two distinct components: learning related to accessing, evaluating, and using the information resources available in this environment and learning related to mastering and building upon the ideas embodied within those individual resources" (p. 90). Electronic resources have numerous ways of teaching students, whether it is through information they have chosen to use or by providing them with the opportunity to expand their thinking. The challenge of electronic material use with students continues to expand as the choices for this material, such as subscription reference databases, increase and instruction becomes more complex.

Knowing how technology has been researched in the past, along with findings of researchers, can guide research of today. The Internet has been intensively discussed since it first came out twenty years ago. Before this, other technology and budget concerns were explored and discussed. Now the Internet is an important reference tool and has the potential of being used as a gateway to a wealth of information, the discussion of subscription reference databases versus print or other information sources can begin.

While many research studies have been done regarding school libraries and technology use, the specific impact on subscription reference databases has yet to be fully examined. Exploring how others have conducted research about collection development and management when it comes to electronic materials, technology's influence on teaching, and technology's influence on learning was an important step in furthering my

research. Collection management and technology have created concern about budget and purchasing decisions in the library for electronic and print references (Intner, 2004; Maxwell, 2005). The teacher librarians were justified in their hesitation to follow the newest technologies, since what is considered "new technology" seems to change every minute. However, many electronic reference materials are still used today, making their purchase incredibly worthwhile. Teacher librarians have been concerned about the impact of teaching when using technology (Cool, 2004; Truett, 1994). As the time between 1993 and 2010 has shown the world of education and school libraries, Truett's prediction about incorporating technology into education has definitely been shown to be accurate. Technology has become an integral element in education, influencing what and how students learn. Using these new technologies has prepared students for their unknown future (Large, 2004; Nueman, 2004). Technology has definitely changed how teaching and learning happens. Through time and growing resources, teacher librarians are able to make educated decisions on the technologies to purchase, promote, and use in their school libraries.

CHAPTER 3

METHODOLOGY

Research Design

The research for my inquiry resulted in numerous questions for teacher librarians. This influenced my decision to create a survey for Iowa public elementary school teacher librarians to complete. A survey best encompassed the idea of the information I wanted to explore. I wished to know how current teacher librarians were making purchasing decisions about subscription reference databases and what they were seeing students use in their own libraries. This led me to ask current teacher librarians about what they had observed in the library and what they do when it comes to collection development purchasing decisions. Surveys have been conducted with similar research projects. Both Intner (2001) and Truett (1994) used a survey in order to conduct research, although each had their own modified version fitting to their specific questions. Given my questions, I felt that a survey would best illustrate the information that I wished to gather. A copy of this survey can be found in Appendix A.

Population

The population that my survey included was certified or in the process of being certified teacher librarians in Iowa public elementary schools in which the student population was 400 students or less in 2008. Those obtaining the endorsement hold temporary certification and will be considered certified for the purposes of this study. The teacher librarian must also be in the elementary building at least 20 hours per week. The elementary buildings could include up to sixth grade students. The completed

surveys were from Iowa elementary schools across the state. My analysis of the data is based on what these participating teacher librarians have done, but other than teaching in Iowa, their location or district was not an influential factor in this analysis.

Data Gathering Instrument

Through observation of past research studies of this nature and given the questions that I wished to answer, I selected the form of a survey to gather my information (see Appendix A). I composed this survey by beginning with my initial questions, then writing possible survey questions relating directly to teacher librarians. I narrowed down and combined many questions, fine-tuning the survey with my advisor. I also piloted the survey with a current teacher librarian who would not be participating in the survey in order to make sure all of the questions made sense and were applicable to the elementary library. All data collection was done through email. The survey was composed of nine questions relating to teacher librarian observations of student reference use, teaching practices, and opinions. It focused on many items including opinions regarding the statewide online purchase, budget availability for purchases, criteria of selecting materials, and types of reference looked at first when replacing materials. In the area of criteria for purchasing decision, teacher librarians were asked, "What things do you consider when making selection decisions regarding electronic subscription databases versus print non-fiction or print references?" Through the use of specific questions and by giving scenarios, the teacher librarians were able to express their observations and opinions on each topic.

Procedures

To begin my research project, I decided to explore the topic of subscription reference database purchasing decisions in Iowa public elementary school libraries. I formed questions I wished to answer through my research. From this, I wrote a survey that would be answered by Iowa teacher librarians addressing specific situations they were likely to encounter or asking specific information regarding professional decisions made. I wrote the proposal to my research study project and it was approved for continuation and completion.

I obtained names of teacher librarians from the Iowa Department of Education's 2008 library survey raw data available online through the Iowa Department of Education's School Library website (http://www.iowa.gov/educate/). From this list of names, I sorted and found that 19 teacher librarians fit the original criteria for my research, being that of teacher librarians from schools with 199 students or less. I proceeded to obtain Institutional Review Board (IRB) approval from the University of Northern Iowa's IRB committee. On January 15, 2010, I emailed the 19 participants requesting their assistance in my research project. By February 2, 2010, I had received 2 of the 19 surveys back, requiring me to widen my range of participants.

I attained IRB approval to widen my participant criteria to teacher librarians in elementary schools with 400 students or less. Immediately following IRB approval to my changes on February 8, 2010, I emailed the additional 184 possible participants. I received a total of 15 surveys back by February 16, 2010. All of my survey participants, along with those who did not participate, will remain anonymous.

Data Analysis

In my data analysis, I combined my survey answers to look at patterns and differences in how teacher librarians describe student use of subscription reference database in relation to print reference use and how this impacted purchasing decisions made by the teacher librarian. The questions were designed to be open-ended. In this way, teacher librarians were able to expand on their thoughts and observations. I read through each individual survey response for meaning, making notes about interesting responses that caught my attention. Most individuals appeared to have understood and responded to the questions, showing me they were able to interpret my questions. Next, I totaled the frequency of responses for the questions that allowed for this. For survey question 2, I tallied the frequency of responses for "print" or "electronic" and compared the data. After this, I examined all open-ended responses. In doing so, I noticed that many responses were similar, allowing me to categorize the data collected. When looking at survey question 3, I put "extra hours for library computer use" into categories of 130 minutes outside of school, 30 minutes outside of school, none, and no answer. Another example of this categorization was how I analyzed survey question 7. In response to this question, teacher librarians gave a variety of answers, but many overlapped. Through writing down all answers and tallying the number of times the response was given, I was able to determine which of the criteria was used most among this particular group of teacher librarians. Through categorizing these responses, I was able to summarize the teacher librarian responses. To examine all survey responses, see Appendix B.

CHAPTER 4

ANALYSIS OF RESEARCH COLLECTED

Introduction

Through the analysis of data I collected through a survey of current teacher librarians, both of their opinions and practices, I learned about the current use of subscription reference databases and print references in Iowa elementary school libraries. Using an open-ended question format for this survey allowed responses to include more than just a "yes or no" answer. Through this, I was able to further analyze the use of print and electronic reference materials in the elementary school library and the way in which the teacher librarian makes purchasing decisions regarding subscription reference databases

Research Questions

Questions that I wished to answer through the survey included:

- 1. How does the medium of resources available affect the use of materials? Do students wish to use information from print or electronic resources? Do students use online resources available through the school in order to complete work outside of school?
- 2. Do the resources available to elementary students through the statewide online purchase meet a standard of high quality making them relevant, easily understandable, usable, and age appropriate?
- 3. What criteria do elementary teacher librarians examine when making selection decisions regarding electronic resources versus non-fiction print or print

resources? What affect does the use of materials already owned hold on purchasing decisions made by the teacher librarian?

Data Collected

The first question posed to the 15 teacher librarians who completed the survey was, "In what grades in your elementary school do students explore, learn, and use electronic subscription databases (such as AEA online)? To what extent do they use these reference materials?" (see Appendix A). While answers varied given the open-ended question, there were many similarities among responses. Three teacher librarians start working with students on electronic subscription reference databases starting as early as first grade. This was the exception with many starting instruction around third grade. Even without starting intense instruction until this age, many teacher librarians started discussing and encouraging students to explore the databases early on, sometimes as early as kindergarten or first grade.

Teacher librarians have also noticed a use of these references by classroom teachers, making the audience not just elementary students, but also the staff that need information for lessons and activities. There was a noticeable increase in use by teacher librarians for instruction as student age increased. Most use of these subscription reference databases was indicated as being for classroom research projects and the basic inquiry process.

Two teacher librarians mentioned classroom teachers did not have enough time in the school day to incorporate research projects, so the use of the subscription reference databases was limited. However, one teacher librarian mentioned that he or she conducts subscription reference database instruction in collaboration with students' classroom teachers. The teacher librarian stated, "In some of their classes I will collaborate with the teacher and co-teach using the databases." This showed an interest and application of working with other teachers toward teaching 21st Century skills to elementary students for future use.

The top three databases used that were mentioned without a prompt by the teacher librarians included World Book Online mentioned nine times, general AEA resources mentioned seven times, and EBSCO mentioned four times within the 15 survey responses, as shown in Figure 1. According to this data, Iowa AEA resources are used fairly heavily in these 15 elementary libraries.

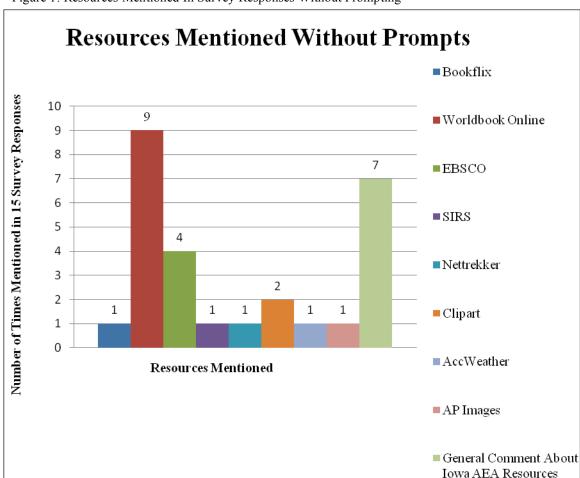


Figure 1: Resources Mentioned In Survey Responses Without Prompting

The second question posed to teacher librarians who completed the survey was, "Would you say that your elementary students prefer to use print or electronic subscription databases?" (see Appendix A). While the open-ended nature of the survey allowed for expansion on information given, it also proved to be a difficult task to sort through the responses from the teacher librarians. Of the responses, 11 teacher librarians felt students preferred using electronic subscription databases. One said the students enjoyed using both, one did not know, one did not see a preference for either, and one gave an unclear answer that could not be applied to this particular question. This data is shown in Figure 2.

Overall patterns that were seen from this data showed teacher librarians observed that elementary students prefer to use computers in their research gathering. An example of this was one teacher librarian's comment, "They also enjoy using computers (simply because it is technology and they associate it with gaming)." However, this particular teacher librarian did not see this same enthusiasm once information searching began.

Several teacher librarians also felt that the students were wasting time exploring subscription reference databases, especially in regards to looking at pictures.

Numerous teacher librarians commented that the students may need to print the article out and highlight or make notes, essentially taking the electronic reference material and putting it into paper form for personal, easy use. Many classroom tasks did not allow for choice between print and electronic references, since inquiry and searching tools were usually teacher or teacher librarian defined. Several teacher librarians

expressed a concern regarding student comprehension of the material available through the Iowa AEA and other databases.

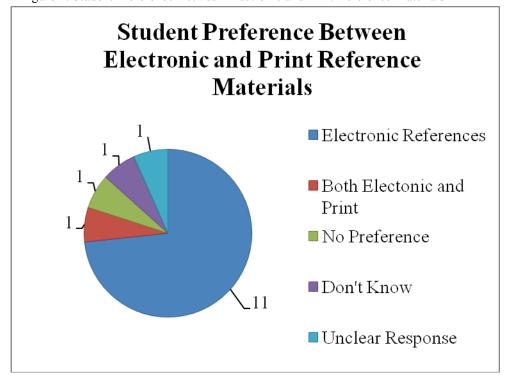


Figure 2: Student Preference Between Electronic and Print Reference Materials

The third question posed to teacher librarians who completed the survey was, "Are your elementary students expected to complete work using electronic subscription databases outside of the school day? Are there extra hours for students to use school computers outside of the school day?" (see Appendix A). Not a single teacher commented that students were required to complete work using any form of the Internet outside of school, given the inconsistent availability of technology at home for students. Of the responses, 13 teacher librarians stated that students were not required to complete work requiring access to electronic subscription databases outside of the school day, one did not give an answer, and one stated that these reference materials were not used very

much anyway. This is shown in Figure 3. As to library access during extra hours, two teacher librarians expressed that their library computers were available 130 minutes outside of each school day, one stated that computers were accessible 30 minutes outside of the school day, five did not give an answer, and seven stated that computers were not available for use outside of the school day, as shown in Figure 4.

From the data collected, it appears that of these 15 teacher librarians, none assumes Internet access availability at home, therefore assigning the use of electronic subscription reference databases in a way that would require use of them for homework completion was not done. An example of such a comment was stated, "Most of our students have Internet access, however in fairness to those who do not, it is never required." Along these lines, another teacher librarian remarked, "Those who do [have access to Internet at home] are not discouraged from working outside the school day." In this way, students were able to use these reference materials at home but use was not required. Although Internet use at home or for homework is not required, one teacher librarian mentioned that an option for working on research projects outside of school was borrowing information books overnight. With this option, the students were able to continue working on their project without the need of technology at home.

Figure 3: Students Expected to Complete Work Using Electronic Subscription
Databases Outside of School Day

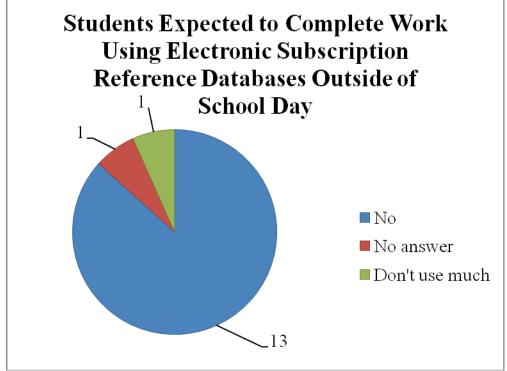
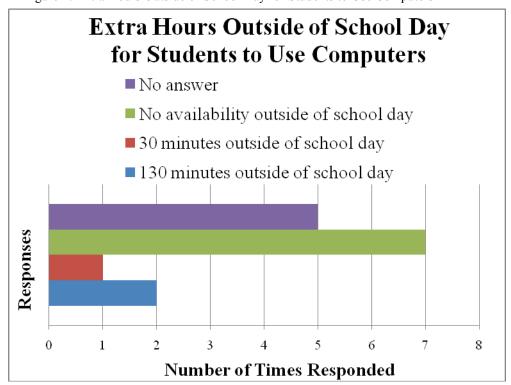


Figure 4: Extra Hours Outside of School Day for Students to Use Computers



The fourth question posed to teacher librarians who completed the survey was, "Do the electronic subscription databases available to elementary students through the statewide online purchase meet a standard of high quality making them relevant for elementary students? Is the information easily understandable by elementary students? Can the information be easily used by elementary students? Is the information provided age appropriate for the students?" (see Appendix A). In response to the first of these four questions, 10 teacher librarians answered that they felt electronic subscription reference databases available to elementary students through the statewide online purchase were relevant for elementary students and one did not, as shown in Figure 5. In regards to if information was easily understandable, five teacher librarians responded yes, three said no, and one said the information is sometimes easily understandable depending on the specific reference database in discussion. This is shown by Figure 6. In terms of easy use, six teacher librarians responded it was easy for students to use, while three stated it was not, as shown in Figure 7. In the area of age appropriateness for elementary students, five teacher librarians commented that it was age appropriate, one stated it was not, and two stated it was age appropriate sometimes depending on the specific reference database in question. This is shown in Figure 8.

Many teacher librarians felt that statewide online purchases were of high quality and relevant for their population of elementary students, but they each had mixed feelings about the ease of use, understandability, and age appropriateness of the same material.

Overall, more felt the statewide online purchases were excellent for their students, but it depended on the specific reference database they were addressing. One teacher librarian

commented that library instruction time does not always allow for the depth of instruction that he or she wished to give on these subscription reference databases. This is apparent in the comment, "There is just not enough time when a librarian is split between two schools to do as much as I would like to do with all the other time and curriculum restrains on the students." Passwords were mentioned as something reducing ease of use, since these can be difficult to navigate, especially with younger students.

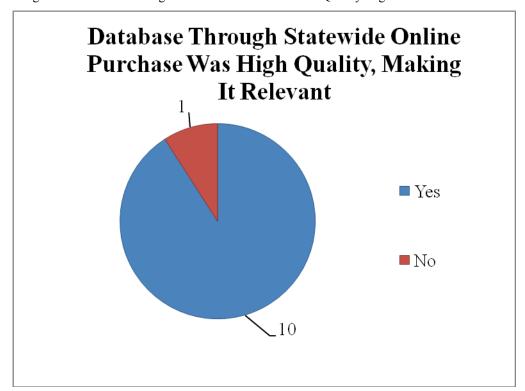


Figure 5: Database Through Statewide Online Purchase Quality High and Relevant

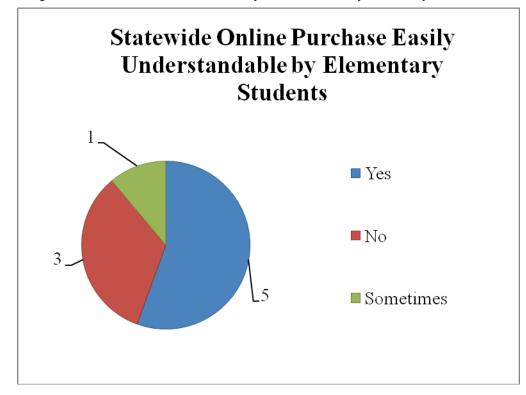
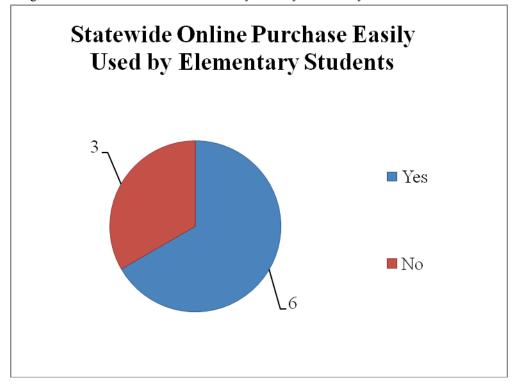


Figure 6: Statewide Online Purchase Easily Understandable by Elementary Students

Figure 7: Statewide Online Purchase Easily Used by Elementary Students



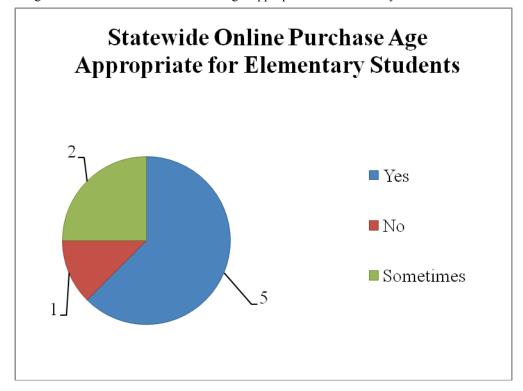


Figure 8: Statewide Online Purchase Age Appropriate for Elementary Students

The fifth question posed to teacher librarians who completed the survey was, "Given a topic normally researched by elementary students (such as animals), do students typically use print non-fiction, print reference, or electronic subscription databases to complete their research? Is this because it is required by the teacher or through the choice of the student?" (see Appendix A). In response to these questions, 10 teacher librarians stated students typically use print non-fiction, seven said students use print reference, and six said students use electronic subscription reference databases to do research, as shown in Figure 9. Of these, six teacher librarians commented that the specific reference materials used were chosen because students were required by the classroom teacher to do so, while none stated it was by student choice.

Several teacher librarians commented on the use of print and electronic references or texts by the students. However, a quote from one teacher librarian addressed the issue differently, emphasizing that student research extends beyond report writing.

First, we do not encourage traditional "animal reports" where students are asked to simply regurgitate facts. We want our students to research "how and why" questions or examine comparison and contrast situations. We want to hear the students' voice in their research. What is their opinion on the facts that they have discovered on their topic? This will prepare our elementary students to understand what is a good thesis statement which by 8th grade they should know how to effectively construct.

With the use of research and information seeking, these particular teacher librarian and classroom teachers were able to set students up for further learning that would allow their research skills to grow throughout the years of their education. Many teacher librarians specified that students started with print reference materials and gradually moved to electronic reference databases available as complexity of these databases allowed. Several teacher librarians also mentioned collaboration with classroom teachers in the area of research project uses and information seeking instruction.

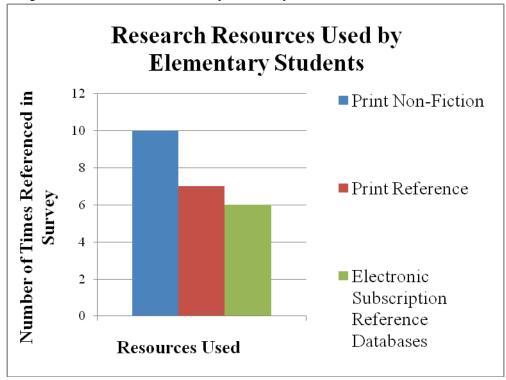


Figure 9: Research Resources Used by Elementary Students

The sixth question posed to teacher librarians who completed the survey was,

"Think back to the last few years. What percentage of your annual budget goes towards purchasing electronic subscription databases? Print references?" (see Appendix A). This question was phrased in this manner given recent restrictions on school budgets, including library purchasing. In response to the amount of library budget that goes towards electronic subscription reference database purchases, 11 teacher librarians answered that none of their budget went towards this type of purchase, two stated very little went towards electronic reference purchasing, one was not sure, and one used other funding from an outside source to purchase such materials for the elementary library. These outside sources included the booster club and the school's technology budget.

This information is shown in Figure 10. In the area of print reference materials, nine

teacher librarians stated they used some of their budget for updating materials, one stated they use very little of their budget for this task, one was not sure, one stated he or she spent none of the budget on updating print references, and three commented that they used outside sources for funding purchases, including grants, Box Tops for Education funds, Parent Teacher organization funding, and Book Fair funds. This information is shown in Figure 11.

Most of the teacher librarians commented that their school library depends heavily on the Iowa AEA electronic reference materials alone, with only two stating that they purchase Tumble Books outside of the Iowa AEA reference materials available. Most libraries did not have budget money allocated for electronic reference purchasing because of their reliance on Iowa AEA resources. The majority of budgets went toward purchasing print materials, although not necessarily print references. Numerous libraries used funds from outside sources to provide them with more materials than the school budgeted funds allowed.

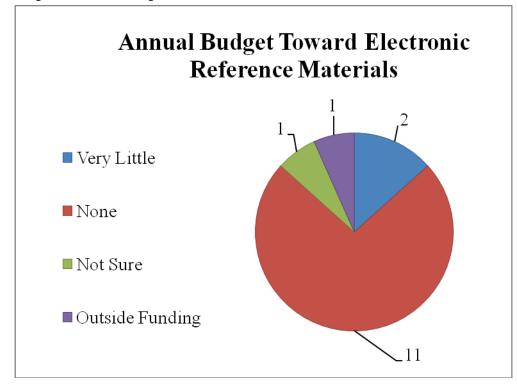
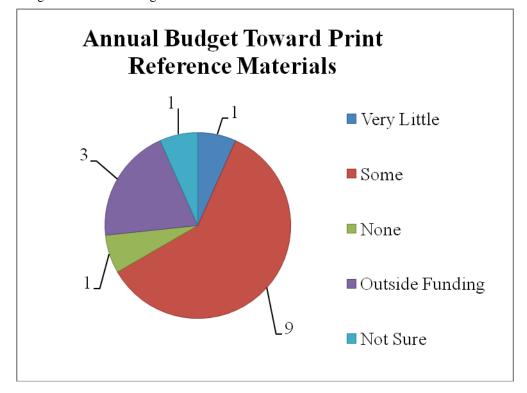


Figure 10: Annual Budget Toward Electronic Reference Materials

Figure 11: Annual Budget Toward Print Reference Materials



The seventh question posed to teacher librarians who completed the survey was, "What things do you consider when making selection decisions regarding electronic subscription databases versus print non-fiction or print references?" (see Appendix A). A variety of answers were given for this particular question. Overall, the comments of purchasing decisions rested on several factors. Numerous teacher librarians only used the electronic subscription reference databases provided by the Iowa AEA, so no purchasing decision was made in these particular cases other than to not purchase any other databases. Budgeting was also a major theme among the responses. The issue of cost and question of where the money to support the purchasing decision would come from was a factor in decisions made. This issue of cost also connected with how long the item would be available for student use. If the reference were bought in print form, it would be one singular purchase while a subscription reference database could be an annual cost for the library budget.

Curriculum support, student and staff needs and demands, and student interests were also reasons for purchasing decisions. In regards to what form to purchase various information in, age appropriateness and reading ability levels were considered. Other databases available, such as the Iowa AEA resources, were contemplated as well. Finally, six teacher librarians commented they did not have the budget to even consider this question.

The eighth question posed to teacher librarians who completed the survey was, "When you go to replace out-dated reference material, would you look first at an electronic subscription source or print resource (assuming that it is available in either form)?" (see Appendix A). Of the responses received from teacher librarians, five said they would look at print references first, four stated they would look at electronic subscription reference databases first, two stated they would not be replacing references, two said they would look at both print and electronic, and one did not answer. This is shown in Figure 12.

Five of the teacher librarians felt they would look at print for the elementary level first, although four stated they would look at electronic references first, so there were conflicting opinions among the teacher librarians in this research study. The teacher librarians who commented that they would not be replacing any references suggested this was because they would instead rely on subscription reference databases available through the Iowa AEA.

One teacher librarian stated, "When replacing out-dated reference material I look at both since we have such a vast range of learning styles and reading levels." In this, the teacher librarian expressed his or her considerations when it came to print and electronic references. While one may be best for some students, what is best for the entire population or those who will be using the reference materials most must also be considered.

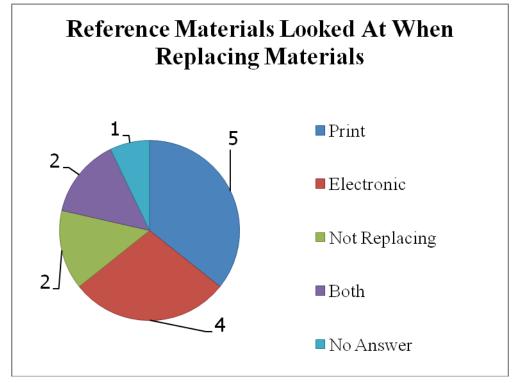


Figure 12: Reference Material Looked At When Replacing Materials

The ninth question posed to teacher librarians who completed my survey did not directly apply to my inquiry, but requested feedback on whether the teacher librarian would like a copy of my final project including the responses of other teacher librarians. Of the 15 survey responses, 13 stated that they would like a copy of the final report, one said no, and one did not answer the question.

Research Question Results

In regards to research question 1 from my original inquiry, I found that the medium of resources available influences the use of materials based on teacher specifications, as indicated by survey question 5 responses. Thirteen of 15 survey results stated that students are not normally given a choice as to what medium (print or electronic) they would like to use during research project. Twelve survey responses

stated that students prefer to use electronic reference materials, as survey question 2 responses indicated. However, students are often required to have a certain number of print and electronic references for research assignments, as survey question 5 responses stated. Thirteen teacher librarians indicated that students are not required to use online resources to complete work outside of the school day, as specified in survey question 3 responses. However, one teacher librarian answered this survey question with his or her library's option of checking out print reference materials overnight to give students a chance to work on research outside of the school day.

In response to question 2 from my original set of questions, ten teacher librarians indicated that resources available to students through the statewide online purchase do meet a standard of high quality, making them relevant for elementary students, as indicated by survey question 4 responses. Five teacher librarians responded that resources were often easily understandable, although one stated that it depended on the specific reference in question. Three teacher librarians responded that such references were not easily understandable by elementary students. Six teacher librarians indicated that statewide online purchases were easy to use, however three responded that they were not easy for elementary students to use. Accessibility sometimes limited ease of use. Five teacher librarians stated the statewide online purchases were age appropriate, two said they were sometimes age appropriate, and one teacher librarian replied they were not age appropriate for elementary students. All of this information was found in response to survey question 4. Three teacher librarians stated they began working with students as early as first grade, three commented they began instruction in second grade, six in third

grade, and four indicated they start subscription reference database instruction in fourth grade. Survey question 1 responses stated this information.

In regards to question 3 from my original questions, there were a number of criteria used by teacher librarians for materials selection, as indicated by survey question 7 responses. This included cost, curricular support, student and staff needs, demands, and interest, length of information availability, age appropriateness, reading ability level, funding source, and currency of information. Materials already owned and used well would influence these decisions, including this aspect in the criteria. In the criteria of budget, 11 teacher librarians indicated that none of their annual budget goes toward electronic reference materials purchases. Two commented very little is used for this purpose and one used outside funding for electronic reference purchases, as indicated by survey question 6 responses. Nine teacher librarians stated they use some of their annual budget for print material purchases. In consideration of criteria when making purchasing decisions in replacing reference materials, five teacher librarians stated they would look at print first, four indicated they would look at electronic references first, two said they would not be replacing references, and two indicated they would look at both print and electronic reference materials. This information is specified by survey question 8 results.

CHAPTER 5

CONCLUSIONS

Summary

With so many reference materials available for the elementary public school library, making subscription reference database purchasing decisions can be an overwhelming task. The purpose of this research study was to examine how the 15 participating Iowa teacher librarians made subscription reference database purchasing decisions and the use they observe of various reference materials by students and staff influencing these decisions. To answer these questions, I conducted a survey asking Iowa public elementary school teacher librarians how they decided what to purchase and criteria they used for examining reference materials such as subscription reference databases. The population used for this study was certified Iowa teacher librarians who were working in the elementary library at least 20 hours per week.

In analyzing the data results of the 15 survey responses, I discovered answers to my initial research questions. In respect to research question 1, 13 of 15 responses indicated that teachers or teacher librarians specified the use of reference material medium, as shown by survey question 5. Twelve of 15 responses stated students prefer using electronic references, as indicated by survey question 2. Thirteen of 15 teacher librarians stated students are not required to use online resources outside of the school day, as indicated by survey question 3. In regard to research question 2, 10 of 11 responses indicated that statewide online purchases were of high quality, five of nine stated that statewide online purchases were easily understandable by elementary students,

six of nine said statewide online purchases were easy to use, and five of eight responded that statewide online purchases were age appropriate, as indicated by survey question 4. In respect to research question 3, the criteria examined by teacher librarians most often included cost, curricular support, students and staff needs, length of availability, age appropriateness, reading level, funding sources, and currency of information, as indicated by survey question 7. Eleven of 15 responses indicated that none of the budget goes toward electronic reference material purchases while nine stated some of the budget goes toward print purchases, as indicated by survey question 6. Five of 15 teacher librarians stated that when replacing reference materials, they would look at print first, while four indicated they would look at electronic references available first, as indicated by survey question 8. This information has led me to make several conclusions regarding my data.

Conclusions

Teacher librarians seem to hold Iowa AEA reference materials in high esteem, even when the same teacher librarian does not necessarily think the Iowa AEA references are the best for their young students. I found this incredibly interesting, but it coincides with many opinions the teacher librarians had about using and teaching about print references to the younger students and adding subscription reference databases gradually as students can handle gathering information from technology in order to complete inquiry research projects for class.

Many teacher librarians indicated that they began subscription reference database use around 3rd grade, which caused me to wonder what is being used with elementary students that is not at their reading level. Perhaps there something in these same Iowa

AEA reference materials at a lower reading level with similar information that could be used instead. In one response from a teacher librarian, a "read-aloud option in World Book" was mentioned, which may begin to address this issue. This option within World Book could help students who do not have as high of a reading level as the information presented or students who retain information better when it is heard, as long as the students have individual headphones available.

Another conclusion I have come to is while many teacher librarians express student enjoyment of subscription reference database use, responses indicated that most of the library budgets of these 15 teacher librarians did not allow for additional subscription reference database purchasing past what is provided through the Iowa AEA. With the need to keep print materials current, the pressure to purchase additional subscription reference databases seems to be less pressing. Many teacher librarians even went as far as saying that the Iowa AEA provided "sufficient" references given the budget restrictions. In most cases of additional subscription reference database purchasing, the funds to make the purchase were provided by an outside source, such as a Booster Club or grant money acquired by the teacher librarian.

This understanding of budget restrictions and the reliance on Iowa AEA Online resources leads me to conclude that teacher librarians are in need of more budget funding to increase their subscription reference database purchasing that is necessary for the increase demand in the digital age or to shift funding within purchasing funds to allow for additional purchases to be made. It also stresses to me the importance of quality

subscription reference databases provided by the Iowa AEA since many libraries cannot afford to purchase any other subscription reference databases.

Another conclusion that I have made from my research study is that print references are still widely used in Iowa public elementary schools. From my results, I have concluded that teacher librarians often use print references and other print works from the library to teach basic research information starting as early as first grade for future use of print and electronic references. Up-to-date print references and print non-fiction are necessary to build student knowledge in this way.

Along these lines, I found it odd that when looking at replacing reference materials, the opinions of teacher librarians were almost evenly divided between electronic and print references. Even with student enthusiasm for subscription reference databases, teacher requirements and print reference basics are also heavily considered. This influences the criteria for purchasing decisions made, such as curricular needs and student interests. In order to develop and enhance students reading abilities, the library must provide these resources for students and staff.

As indicated by my results, teacher librarians tend to make few subscription reference database decisions given the limit on library budgets. With more funding, these purchasing decisions might be possible. Both print and electronic reference materials are being heavily used in the Iowa public elementary school. Teacher librarians are making the best purchasing decisions for their community based on their expert knowledge, but limits are still in place despite the desire to purchase subscription reference databases other than those provided by the Iowa AEA.

Recommendations for Further Study

Further exploration in a similar study both in Iowa and other states would add more information that could be compared my findings, showing teacher librarians on an even a wider scale of how subscription reference database purchasing decisions are, or are not, being made. The open-ended survey allowed for extra explanation and information, but it also left room to not actually answer the question that was asked. If I were to conduct this survey again, I would write a few of the questions with only specific options, perhaps using check boxes.

Other factors I would recommend for further study would be if more budget funds were to become available. This type of change would impact the results of the survey drastically. With the ever-changing nature and progression of technology and references available, updated information in the future would also be recommended and helpful for teacher librarians. Another possible further study would be to conduct a qualitative non-survey study regarding why these purchasing decisions are made. This could explore the question of why teachers continue to use print reference heavily in this digital age.

Several teacher librarians commented that students often print out information found on subscription reference databases and make notes on the printed version of the reference. An additional further study could look at how students use these subscription reference databases. It could also examine how printing information found on subscription reference database changes information gathering in the digital age. Further study in this area would be a great benefit for elementary teacher librarians.

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APPENDIX A

SURVEY

- 1. In what grades in your elementary school do students explore, learn, and use electronic subscription databases (such as AEA online)? To what extent do they use these reference materials?
- 2. Would you say that your elementary students prefer to use print or electronic subscription databases?
- 3. Are your elementary students expected to complete work using electronic subscription databases outside of the school day? Are there extra hours for students to use school computers outside of the school day?
- 4. Do the electronic subscription databases available to elementary students through the statewide online purchase meet a standard of high quality making them relevant for elementary students? Is the information easily understandable by elementary students? Can the information be easily used by elementary students? Is the information provided age appropriate for the students?
- 5. Given a topic normally researched by elementary students (such as animals), do students typically use print non-fiction, print reference, or electronic subscription databases to complete their research? Is this because it is required by the teacher or through the choice of the student?
- 6. Think back to the last few years. What percentage of your annual budget goes towards purchasing electronic subscription databases? Print references?
- 7. What things do you consider when making selection decisions regarding electronic subscription databases verses print non-fiction or print references?
- 8. When you go to replace out-dated reference material, would you look first at an electronic subscription source or print resource (assuming that it is available in either form)?
- 9. Would you like me to email you a copy of the final report after it is completed? In what format would be easiest for you to read (.doc, .pdf, etc.)?

APPENDIX B

SURVEY RESPONSES

Survey Response 1

- 1. In what grades in your elementary school do students explore, learn, and use electronic subscription databases (such as AEA online)? To what extent do they use these reference materials?
 - We purchase Bookflix from Scholastic, which we use with Pre-K through 3rd graders. They use Bookflix fairly frequently at school. Some students have mentioned using it at home, but I would guess not very many students take advantage of that option. Our fourth and fifth graders use World Book online, but probably only twice a year. I introduce EBSCO and SIRS to the 6th graders, and they use it for at least 2 assignments.
- 2. Would you say that your elementary students prefer to use print or electronic subscription databases?

 Our elementary students love being on computers and prefer working on them, but the material on the databases isn't easily understood by most of them.
- 3. Are your elementary students expected to complete work using electronic subscription databases outside of the school day? Are there extra hours for students to use school computers outside of the school day?

 Our elementary students are not expected to complete work on the databases outside of the school day. Students may use computers for 45 minutes before school and 45 minutes after school daily.
- 4. Do the electronic subscription databases available to elementary students through the statewide online purchase meet a standard of high quality making them relevant for elementary students? Is the information easily understandable by elementary students? Can the information be easily used by elementary students? Is the information provided age appropriate for the students? The databases available through the statewide online purchase are high quality databases in my opinion, but don't suit elementary students well. The information is not easily understood by them, nor is it organized for their easy use. It is also not age appropriate for elementary students; many of our 6th graders struggle to find articles that they readily understand.
- 5. Given a topic normally researched by elementary students (such as animals), do students typically use print non-fiction, print reference, or electronic subscription databases to complete their research? Is this because it is required by the teacher or through the choice of the student?

- Students quite often use both print and electronic information for research, but their electronic sources normally come from Google, not the subscription databases. Teachers usually require some print sources.
- 6. Think back to the last few years. What percentage of your annual budget goes towards purchasing electronic subscription databases? Print references? Very little of my budget goes to either subscription databases or print reference sources. A fair amount goes to print non-fiction, especially books that specifically relate to curriculum. We did purchase Bookflix this year, but that was done with a grant from our parent organization.
- 7. What things do you consider when making selection decisions regarding electronic subscription databases verses print non-fiction or print references? With print, you keep it forever, whereas subscription databases expire. ... we have on-site access to all ... databases, so purchasing more seems unnecessary, at least for now. Obviously the database information is more current, which can figure into decision-making.
- 8. When you go to replace out-dated reference material, would you look first at an electronic subscription source or print resource (assuming that it is available in either form)?

 That would depend on the importance of currency to the subject matter. At this point, I would look to print first.
- 9. Would you like me to email you a copy of the final report after it is completed? In what format would be easiest for you to read (.doc, .pdf, etc.)? *Yes, please, in .doc format.*

- 1. In what grades in your elementary school do students explore, learn, and use electronic subscription databases (such as AEA online)? To what extent do they use these reference materials?
 - In 3^{rd} - 4^{th} grade, we make a few visits to World Book and EBSCO, for one research project a year limited use
 - In 5^{th} - 6^{th} grade, kids are directed, and learn to use independently, Nettrekker, EBSCO, World Book about 4 times a year, for more extended use.
- 2. Would you say that your elementary students prefer to use print or electronic subscription databases?
 - 3^{rd} - 4^{th} grades they don't really know how to read from a screen and then record notes. We have to print out, highlight, and then take notes. They are better at using print. 3^{rd} - 4^{th} might think the "prefer" online, but they are not reading and comprehending online.
 - 5^{th} - 6^{th} students prefer online resources, and are more proficient at reading and using info from electronic resources.
- 3. Are your elementary students expected to complete work using electronic subscription databases outside of the school day? Are there extra hours for students to use school computers outside of the school day?
 - No, they are not expected to use them outside of the school day. I make them aware, and encourage them to, but only a handful of self-motivated students actually do. We have a higher poverty population, with families that generally give little support for their children's' education, so I don't assign that kind of work outside of the school day.
- 4. Do the electronic subscription databases available to elementary students through the statewide online purchase meet a standard of high quality making them relevant for elementary students? Is the information easily understandable by elementary students? Can the information be easily used by elementary students? Is the information provided age appropriate for the students?

 I think that the "understandable" factor is key here. Most AEA Online resources are used at a rudimentary level. There is a lot kids don't understand. We use EBSCO "primary search" and "World Book Kids" and "World Book Student." Some of Nettrekker is accessible to 5th-6th.
- 5. Given a topic normally researched by elementary students (such as animals), do students typically use print non-fiction, print reference, or electronic subscription databases to complete their research? Is this because it is required by the teacher or through the choice of the student?
 - Students mostly use print non-fiction, because the teachers and I require it to be used as the first resource. It's reliable information. Then we move to online resources.

- For 3^{rd} - 4^{th} , I have them print off (as described above), and 5^{th} - 6^{th} are more adept at searching and reading online.
- 6. Think back to the last few years. What percentage of your annual budget goes towards purchasing electronic subscription databases? Print references? *I don't purchase any subscription databases; the AEA does that. I don't buy any extra. So I guess you'd say I use 100% for print references.*
- 7. What things do you consider when making selection decisions regarding electronic subscription databases verses print non-fiction or print references? Well, I may be able to purchase some electronic subscriptions with ... settlement money, because the money is there and can only be spent on a limited list of things. But if I had to decide to purchase out of MY library budget, I really hesitate to spend, say, \$1,000.00-plus on something we get for one year. If I spend \$1,000.00 on books I get to keep them! The price would have to come WAY down for a small elementary school to be able to buy yearly subscriptions.
- 8. When you go to replace out-dated reference material, would you look first at an electronic subscription source or print resource (assuming that it is available in either form)?

 I would look first at print. I would compare pricing with the subscription. Again, I hate to spend that kind of money for one year, and have to keep spending year after year. I don't think it's practical. I have more in my library budget than a lot of schools, but when you only get to spend \$3,500.00 a year on books, how could you justify spending nearly half of it on a subscription that lasts only one year?
- 9. Would you like me to email you a copy of the final report after it is completed? In what format would be easiest for you to read (.doc, .pdf, etc.)? *Sure, send a report. Pdf or doc are OK*.

- 1. In what grades in your elementary school do students explore, learn, and use electronic subscription databases (such as AEA online)? To what extent do they use these reference materials?
 - Students in our school start using AEA in about 3rd grade. We don't use it that much in elementary school. I know the elementary teachers use it to show videos and etc.
- 2. Would you say that your elementary students prefer to use print or electronic subscription databases?

Print it is easier for the kids to navigate through

- 3. Are your elementary students expected to complete work using electronic subscription databases outside of the school day? Are there extra hours for students to use school computers outside of the school day?

 No. not for elementary school
- 4. Do the electronic subscription databases available to elementary students through the statewide online purchase meet a standard of high quality making them relevant for elementary students? Is the information easily understandable by elementary students? Can the information be easily used by elementary students? Is the information provided age appropriate for the students? *I believe so*
- 5. Given a topic normally researched by elementary students (such as animals), do students typically use print non-fiction, print reference, or electronic subscription databases to complete their research? Is this because it is required by the teacher or through the choice of the student?
 - Print reference and print non-fiction (they are the same)
- 6. Think back to the last few years. What percentage of your annual budget goes towards purchasing electronic subscription databases? Print references? *I am not sure*
- 7. What things do you consider when making selection decisions regarding electronic subscription databases verses print non-fiction or print references? We do not purchase any electronic subscription what is available through AEA is what we get.
- 8. When you go to replace out-dated reference material, would you look first at an electronic subscription source or print resource (assuming that it is available in either form)?

no

9. Would you like me to email you a copy of the final report after it is completed? In what format would be easiest for you to read (.doc, .pdf, etc.)? *no that is fine*

- 1. In what grades in your elementary school do students explore, learn, and use electronic subscription databases (such as AEA online)? To what extent do they use these reference materials?
 - Grades four, five, and six use AEA Online. It is introduced in fourth grade and reinforced in fifth grade. Each grade differs as to frequency with fifth and sixth grade using it for several research projects.
- 2. Would you say that your elementary students prefer to use print or electronic subscription databases?
 - They definitely enjoy using the electronic databases and realize that the most up to date information is found there. Last week a student was using World Book Online for a report on Haiti. It had the information about the earth quake that happened in January.
- 3. Are your elementary students expected to complete work using electronic subscription databases outside of the school day? Are there extra hours for students to use school computers outside of the school day?

 Not all of our students have Internet at home, so this would not be expected. The computer lab is not open to students outside of the school day.
- 4. Do the electronic subscription databases available to elementary students through the statewide online purchase meet a standard of high quality making them relevant for elementary students? Is the information easily understandable by elementary students? Can the information be easily used by elementary students? Is the information provided age appropriate for the students? EBSCO and World Book are the two main databases that we use. They are very relevant and easy to understand for my students. Both of these databases offer age appropriate and reading level limiters.
- 5. Given a topic normally researched by elementary students (such as animals), do students typically use print non-fiction, print reference, or electronic subscription databases to complete their research? Is this because it is required by the teacher or through the choice of the student?

 One print non-fiction is usually required and then they can use other print non-fiction, print reference, or the electronic databases as they choose.
- 6. Think back to the last few years. What percentage of your annual budget goes towards purchasing electronic subscription databases? Print references? None. The AEA Online databases are very sufficient for what we need. Since we have these electronic databases, there is no need to have print encyclopedias. I recently purchased a class set of dictionaries and thesauruses but the PTA paid for them.

- 7. What things do you consider when making selection decisions regarding electronic subscription databases verses print non-fiction or print references? *I don't purchase electronic databases*.
- 8. When you go to replace out-dated reference material, would you look first at an electronic subscription source or print resource (assuming that it is available in either form)?
 - I will not be replacing print reference material. Hopefully, the AEA will continue to purchase the databases. If not, hopefully our district will purchase them.
- 9. Would you like me to email you a copy of the final report after it is completed? In what format would be easiest for you to read (.doc, .pdf, etc.)? *PDF*, *please*

- 1. In what grades in your elementary school do students explore, learn, and use electronic subscription databases (such as AEA online)? To what extent do they use these reference materials?
 - I work in 3 elementary schools—serving TK-4th graders. Each year I send about 3 letters/notices/bookmarks home with each child advertising AEA online databases. Students start exploring these sources in 2nd grade, and then I teach 3rd graders more specifically. Students in 3rd and 4th grades use the resources on and off through the year—but not to a great extent. At this point, the elementary curriculum is very strict—90 minutes of reading, 60 minutes of math, etc. Teachers really don't have much time to stray and spend time on research projects. I'm hoping that the Iowa Core Curriculum will change the structure of the day so there will be more time to dig in and to work on projects (that require the databases, i.e.).
- 2. Would you say that your elementary students prefer to use print or electronic subscription databases?

 When they need this type of information, students definitely prefer electronic

resources. Our print reference sources never get used (including encyclopedias). We have moved almanacs and some other previously "reference" sources into the regular collection.

- 3. Are your elementary students expected to complete work using electronic subscription databases outside of the school day? Are there extra hours for students to use school computers outside of the school day?

 No and No
- 4. Do the electronic subscription databases available to elementary students through the statewide online purchase meet a standard of high quality making them relevant for elementary students? Is the information easily understandable by elementary students? Can the information be easily used by elementary students? Is the information provided age appropriate for the students?

 The quality of the databases provided through the AEA, I believe, is high. However, other than World Book Online, I don't believe the sources are relevant for this age. Teachers use DE Streaming and Learn 360, so students enjoy them in this second-hand type of way. Just getting the students to type in the username and password is like pulling teeth sometimes. It is definitely easier to just "Google." From our district home page, it takes 3 clicks and then entering the username and password before a database can be used. Maybe it would be easier with a simpler username and password. I find myself teaching the process to the students, but there is never time to repeat the process over and over—so when the databases are needed a few months later, everything has to be re-taught.
- 5. Given a topic normally researched by elementary students (such as animals), do students typically use print non-fiction, print reference, or electronic subscription

databases to complete their research? Is this because it is required by the teacher or through the choice of the student?

Often it seems to be print non-fiction books. The teachers work on non-fiction text features while doing the research (for the "test"). Teachers will grab animal books in a series—so the format is the same.

- 6. Think back to the last few years. What percentage of your annual budget goes towards purchasing electronic subscription databases? Print references? My budget includes money for books and money for magazines. The past two years, budgets have been frozen part-way into the school year—so I've gotten a few books—none of them reference.

 At one school, the Booster Club did purchase a subscription to Tumblebooks. This is used by students daily.
- 7. What things do you consider when making selection decisions regarding electronic subscription databases verses print non-fiction or print references?

 I've never had the opportunity to make selection decisions for either.
- 8. When you go to replace out-dated reference material, would you look first at an electronic subscription source or print resource (assuming that it is available in either form)?

 I just don't think I would spend money on reference sources. I would probably

compile a folder for the desktop with links to FactMonster, World Almanac for Kids, etc.—all of which are free.

9. Would you like me to email you a copy of the final report after it is completed? In what format would be easiest for you to read (.doc, .pdf, etc.)? *Yes--.pdf Thanks!*

- 1. In what grades in your elementary school do students explore, learn, and use electronic subscription databases (such as AEA online)? I cooperative teach a lesson to third grade students. The teachers lead the students to the World Book for kids. We don't talk about it being a database, teachers call it the "computer." I teach the databases to 4th and 5th grades. We talk about them being databases and explore the ones that are age appropriate. The students use them for teacher directed classroom assignments and some will choose to use them for other assignments. I would love to introduce the World Book to 2nd grade but cannot do this due to the lack of computers in my library. To what extent do they use these reference materials? Most are teacher directed. "here is the assignment, this is where we are going to go to find the information"
- 2. Would you say that your elementary students prefer to use print or electronic subscription databases?

 They prefer the databases because it is "working on the computer."
- 3. Are your elementary students expected to complete work using electronic subscription databases outside of the school day? Are there extra hours for students to use school computers outside of the school day? *Expected to no. At the elementary level No.*
- 4. Do the electronic subscription databases available to elementary students through the statewide online purchase meet a standard of high quality making them relevant for elementary students?

 Each year, the databases are getting better about leveling their material. I use the
 - Each year, the databases are getting better about leveling their material. I use the World Book online at its various levels to differentiate my notetaking lesson. I can print the same article at three different reading levels. The lower students show better participation and learning when the reading is not so intimidating. Is the information easily understandable by elementary students? This depends on the topic. I think 4th and 5th grade students can handle many aspects of the material. I do not do SIRS as I feel that the topics are too intense for these grade levels. Can the information be easily used by elementary students? Once the students are shown where to find certain pieces of information through a teaching lesson, the students seem to be able to glean the information independently when given a similar assignment. Is the information provided age appropriate for the students? I do not use SIRS, Atomic Learning, and DE Streaming for this age group. I don't think they would understand these. They love looking at the pictures in AP Images. I do not teach how to download them at this level.
- 5. Given a topic normally researched by elementary students (such as animals), do students typically use print non-fiction, print reference, or electronic subscription databases to complete their research?

When it is an assignment that I co-op teach, we use all three types of sources. If it is an assignment that the students work on independently from a classroom teacher, they will choose google.

- (5) Is this because it is required by the teacher or through the choice of the student? They use databases only when required by the teacher. They will use google when working independently because the think it is "faster." They don't have to log in.
- 6. Think back to the last few years. What percentage of your annual budget goes towards purchasing electronic subscription databases? *Zero*
- (6) Print references?

 Zero. My budget is very limited. Most of my funds come from the Box Tops for Education money. This is what I use to update most of my nonfiction & print reference collection.
- 7. What things do you consider when making selection decisions regarding electronic subscription databases verses print non-fiction or print references? I only have the databases that the AEA provides. Until the students and staff are utilizing the current databases regularly, I would not consider purchasing more. When it comes to print non-fiction, I purchase items that support the district curriculum themes. When these are supported sufficiently, I select non-fiction items of student interest. I only purchase World Book Encyclopedias because they have excellent pictures plus are more user friendly for younger students.
- 8. When you go to replace out-dated reference material, would you look first at an electronic subscription source or print resource (assuming that it is available in either form)?

 I only purchase new encyclopedias for the elementary since that is the only building that still utilizes the print format. The databases support my reference material at all other levels.
- 9. Would you like me to email you a copy of the final report after it is completed? In what format would be easiest for you to read (.doc, .pdf, etc.)? Yes, please send me a copy. Either PDF or doc format is fine.

- 1. In what grades in your elementary school do students explore, learn, and use electronic subscription databases (such as AEA online)? To what extent do they use these reference materials?
 - I start introducing these (AEA Online) at the 2^{nd} grade level and then build upon it each year. We typically begin with World Book Kids at the 2^{nd} grade level. The better readers are encouraged to look at World Book Student and a couple of the others.
- 2. Would you say that your elementary students prefer to use print or electronic subscription databases?
 - *Electronic. I think it's the way their brains are hard-wired these days.*
- 3. Are your elementary students expected to complete work using electronic subscription databases outside of the school day? Are there extra hours for students to use school computers outside of the school day?

 Typically, no. Most of our students have Internet access, however in fairness to those who do not, it is never required. If students have a research project to complete, they are allowed to come in over their recess times and after school for about 30 minutes.
- 4. Do the electronic subscription databases available to elementary students through the statewide online purchase meet a standard of high quality making them relevant for elementary students? Is the information easily understandable by elementary students? Can the information be easily used by elementary students? Is the information provided age appropriate for the students? Yes, recent additions/changes to these have made them more easy to use (ex: the read-aloud option in World Book). Ebsco is still a bit baffling for the elementary crowd and for teachers. I would like to see this more user-friendly.
- 5. Given a topic normally researched by elementary students (such as animals), do students typically use print non-fiction, print reference, or electronic subscription databases to complete their research? Is this because it is required by the teacher or through the choice of the student?

 I collaborate closely with teachers on research projects and I encourage the requirement of using at least one print resource and one electronic resource. I encourage the use of the online databases and "kid"-friendly search engines. In fact, I go so far as to ban just Googling everything.
- 6. Think back to the last few years. What percentage of your annual budget goes towards purchasing electronic subscription databases? Print references? Funding is quite limited, so I rely heavily on Iowa AEA Online. We do subscribe to TumbleBooks (electronic books) only because I was able to work out a very good deal for our building. I probably spend roughly anywhere from \$500 to \$1,000 on print references.

- 7. What things do you consider when making selection decisions regarding electronic subscription databases verses print non-fiction or print references?

 The annual cost of a subscription, from where the funding will come, and will the staff use it. The latter being the most important. If there is enough demand, we'll find a way to fund it.
- 8. When you go to replace out-dated reference material, would you look first at an electronic subscription source or print resource (assuming that it is available in either form)?

 This will be the first year that I will really take a hard look at choosing between the
 - This will be the first year that I will really take a hard look at choosing between the two. In the past, the money for an annual subscription just wasn't there. Now that my print collection has improved quite a bit, I can take a closer, critical look at adding an electronic subscription. When I came into my position four years ago, my first priority was to address the dismal print collection.
- 9. Would you like me to email you a copy of the final report after it is completed? In what format would be easiest for you to read (.doc, .pdf, etc.)? *Yes, pdf would be great.*

1. In what grades in your elementary school do students explore, learn, and use electronic subscription databases (such as AEA online)? To what extent do they use these reference materials?

Our students begin using electronic databases in 4th grade when they do research in the library. They mainly use World Book online (Kids version) but also have access to (Student and Advanced versions). In addition to World Book online, our 5th grade students also use Clipart.com for photos for their research powerpoint projects on weather and the American colonies.

2. Would you say that your elementary students prefer to use print or electronic subscription databases?

They enjoy using print books as the reading level is at their comprehension level and the pictures are very informational. They also enjoy using computers (simply because it is technology and they associate it with gaming) but when they are asked to use the online databases I think they then realize research is work and then it's not perhaps as enjoyable at first until they become excited about their topic.

- 3. Are your elementary students expected to complete work using electronic subscription databases outside of the school day? Are there extra hours for students to use school computers outside of the school day?

 No, our students are not expected to complete their work at home using electronic databases as not every child has access to a computer. Students are provided time.
 - databases as not every child has access to a computer. Students are provided time during school hours to research using electronic sources. They are also provided with informational books that they can take home to work on their project.
- 4. Do the electronic subscription databases available to elementary students through the statewide online purchase meet a standard of high quality making them relevant for elementary students? Is the information easily understandable by elementary students? Can the information be easily used by elementary students? Is the information provided age appropriate for the students?
 - **Some** of the electronic subscription databases, such as World Book online, meet a very high standard for our elementary students. In the case of World Book online, it provides three reading levels (Kids, Student, and Advanced). It also allows students to hear the text read aloud if needed. It provides language translation as well.
- 5. Given a topic normally researched by elementary students (such as animals), do students typically use print non-fiction, print reference, or electronic subscription databases to complete their research? Is this because it is required by the teacher or through the choice of the student?
 - First, we do not encourage traditional "animal reports" where students are asked to simply regurgitate facts. We want our students to research "how and why" questions or examine comparison and contrast situations. We want to hear the students' voice

in their research. What is their opinion on the facts that they have discovered on their topic? This will prepare our elementary students to understand what is a good thesis statement which by 8^{th} grade they should know how to effectively construct.

Students are asked to use all three types of sources in their research: print, non-print, and online. As in the case of World Book, we also have a print set of World Book in the library in addition to the electronic version. I rotate the print sources with the students when we have the whole class in the library as we have only 10 stations and our class sizes range from 21 (elementary) to 39 (Intermediate). Research periodicals are only available online through our subscription to Ebsco, but few of our elementary students use this database as the reading level is too high. I miss our Iowa subscription to Electronic Library as it was a nice database for the younger reader.

- 6. Think back to the last few years. What percentage of your annual budget goes towards purchasing electronic subscription databases?

 0% (AEA9 pays for them.)
- (6) Print references?

 0% (Grant money pays for them.)

I do not buy very many reference books in print. Our main reference materials are electronic databases from AEA9 or through our partnership with our local area public libraries. We are a very small budgeted library and depend on grants to supplement our curriculum budget. I have written and received three grants in the last three years for the library. Therefore, I do not purchase online resources through curriculum money but instead am dependent on AEA9 databases (which are wonderful!).

Our reference books are also purchased through grant money as again we do not have a budget that can afford expensive print sources. We are a K-8 library and receive only \$4000 for the library. Of that, only \$2000 is spent on books as we must also pay for AV equipment and repair, and AV equipment supplies for the classrooms (such as ENX bulbs for the overheads). We buy over 60 ENX bulbs a year out of the library budget. Thus, the library curriculum budget for books is insubstantial so I write grants to support our students.

7. What things do you consider when making selection decisions regarding electronic subscription databases verses print non-fiction or print references? *Budget, currency of sources, and reading ability.*

8. When you go to replace out-dated reference material, would you look first at an electronic subscription source or print resource (assuming that it is available in either form)?

Electronic reference first.

9. Would you like me to email you a copy of the final report after it is completed? In what format would be easiest for you to read (.doc, .pdf, etc.)? Doc and pdf formats are both fine.

- 1. In what grades in your elementary school do students explore, learn, and use electronic subscription databases (such as AEA online)? To what extent do they use these reference materials?
 - I begin to show students the AEA databases and how to access them in 1st grade. We explore them briefly, ie. World Book and AccWeather. We continue to explore them and learn to use them in 2nd and 3rd grades. Students will use EBSCO and World Book for looking up information for reports. During 4th grade library exploratory we spend more time on each database and learn to use them for research. 5-8 students are required to use at least one source from the database page for their research. In some of their classes I will collaborate with the teacher and co-teach using the databases.
- 2. Would you say that your elementary students prefer to use print or electronic subscription databases?

 Elementary students like using the electronic databases for the color images and the awe of using the computers. They seem to waist time not looking for information, but pictures. They find more information using the print sources because they are more focused.
- 3. Are your elementary students expected to complete work using electronic subscription databases outside of the school day? Are there extra hours for students to use school computers outside of the school day?

 No. Next year our 5-8 graders will be getting their own laptops. Our high school students have been using 1 to 1 laptops for two years. Some teachers assign students work before they come to class...streaming, reading articles, etc. So I in-vision students in the lower grades will begin using the databases in this way also outside of school.
- 4. Do the electronic subscription databases available to elementary students through the statewide online purchase meet a standard of high quality making them relevant for elementary students? Is the information easily understandable by elementary students? Can the information be easily used by elementary students? Is the information provided age appropriate for the students?

 I think the subscription databases meet a standard of high quality and are relevant for elementary students. If students are taught the basic skills they need to access information at their level they can understand and use the information provided. Many of the elementary students can read and use the information and yes, it is age appropriate.
- 5. Given a topic normally researched by elementary students (such as animals), do students typically use print non-fiction, print reference, or electronic subscription databases to complete their research? Is this because it is required by the teacher or through the choice of the student?

- Students at our school in the elementary doing animal research will use print non-fiction sources first and then use the World Book database. I try and encourage students to use both resources to expand their learning.
- 6. Think back to the last few years. What percentage of your annual budget goes towards purchasing electronic subscription databases? Print references? My annual budget goes towards purchase of only print material. We have used the databases provided to us by the AEA and have not purchased additional ones. This next year I am looking at expanding my databases because of the 1 to 1 laptops so some of my budget money will go towards the purchase of different databases than the ones provided by the AEA.
- 7. What things do you consider when making selection decisions regarding electronic subscription databases verses print non-fiction or print references?

 With a computer in every students hands it makes sense to have more electronic resources available because that is where students will want to look. I also look at the curriculum and what is available in print/online that would best help teachers and students.
- 8. When you go to replace out-dated reference material, would you look first at an electronic subscription source or print resource (assuming that it is available in either form)?
 - I would look for electronic subscription sources before a print source.
- 9. Would you like me to email you a copy of the final report after it is completed? In what format would be easiest for you to read (.doc, .pdf, etc.)? Yes, thanks...I'm curious to see what your survey shows! Pdf is fine.

1. In what grades in your elementary school do students explore, learn, and use electronic subscription databases (such as AEA online)? To what extent do they use these reference materials?

The students I work with start using the subscription databases a lot in third grade. They use then for different projects in the classroom. For example 4th grade works on state projects and uses these databases a lot.

2. Would you say that your elementary students prefer to use print or electronic subscription databases?

The students I work with prefer to use search engines such as Google or Yahoo and I work with them to use the databases offered by the AEA. When looking at print items they have a hard time realizing their information may be in a book with a broader topic. For example they want to learn about a specific dog, but they want a book with that dog name in the title and are reluctant to look at a general dog book that contains information about several different breeds.

- 3. Are your elementary students expected to complete work using electronic subscription databases outside of the school day? Are there extra hours for students to use school computers outside of the school day?

 Our computer labs at the two schools I work at are not available outside the normal school day for students.
- 4. Do the electronic subscription databases available to elementary students through the statewide online purchase meet a standard of high quality making them relevant for elementary students? Is the information easily understandable by elementary students? Can the information be easily used by elementary students? Is the information provided age appropriate for the students? When there is time to teach these resources to the students I can answer yes to all these questions. There is just not enough time when a librarian is split between two schools to do as much as I would like to do with all the other time and curriculum restrains on the students. I see students want to use Google unless they are directly told to use the AEA resources, that is what they use.
- 5. Given a topic normally researched by elementary students (such as animals), do students typically use print non-fiction, print reference, or electronic subscription databases to complete their research? Is this because it is required by the teacher or through the choice of the student?
 - This is usually outlined by the teacher and what the teacher requires.
- 6. Think back to the last few years. What percentage of your annual budget goes towards purchasing electronic subscription databases? Print references?

We don't have any budget for electronic subscription databases. For library expenses total I had \$4,000.00 the last two years and this year I only have \$2000.00. If it were not for the AEAs we would not have access to any of these.

- 7. What things do you consider when making selection decisions regarding electronic subscription databases verses print non-fiction or print references? Since we do not have the money it is not something I have to consider.
- 8. When you go to replace out-dated reference material, would you look first at an electronic subscription source or print resource (assuming that it is available in either form)?

I usually look at books or what is already offered to us through the AEA. I would like to have access to Bookflix, that would be one I would like to add.

9. Would you like me to email you a copy of the final report after it is completed? In what format would be easiest for you to read (.doc, .pdf, etc.)? *Sure, I guess .doc would be easiest. Thank you.*

- 1. In what grades in your elementary school do students explore, learn, and use electronic subscription databases (such as AEA online)? To what extent do they use these reference materials?
 - Our students begin with World Book Online in 3rd grade library. They also do it in 4th grade library. Then in 5th grade library they use EBSCO to find magazine articles. My TAG students in grades 3-6 use World Book Online, AP Images, & Clip Art. I know they use Clip Art in keyboarding. I'm not sure if they use any of the other ones anywhere else.
- 2. Would you say that your elementary students prefer to use print or electronic subscription databases?

 They seem to prefer the electronic ones.
- 3. Are your elementary students expected to complete work using electronic subscription databases outside of the school day? Are there extra hours for students to use school computers outside of the school day?

 I don't think they use them much for assignments. The computers are available from 8:00-4:30 M-F.
- 4. Do the electronic subscription databases available to elementary students through the statewide online purchase meet a standard of high quality making them relevant for elementary students? Is the information easily understandable by elementary students? Can the information be easily used by elementary students? Is the information provided age appropriate for the students? Yes, yes, and yes!
- 5. Given a topic normally researched by elementary students (such as animals), do students typically use print non-fiction, print reference, or electronic subscription databases to complete their research? Is this because it is required by the teacher or through the choice of the student?

 They usually use print non-fiction books, which is what the teachers ask of them.

 Also, they use the internet to "google" topics a lot. I don't think our students do enough research.
- 6. Think back to the last few years. What percentage of your annual budget goes towards purchasing electronic subscription databases? Print references?

 None of our budget goes for electronic resources because they are already supplied.

 I try to update the references every 5-7 years with book fair money. There is no room in my budget for that, either.
- 7. What things do you consider when making selection decisions regarding electronic subscription databases verses print non-fiction or print references?

 I consider cost and use.

8. When you go to replace out-dated reference material, would you look first at an electronic subscription source or print resource (assuming that it is available in either form)?

Probably print for elementary.

9. Would you like me to email you a copy of the final report after it is completed? In what format would be easiest for you to read (.doc, .pdf, etc.)? *Yes, in .doc format*

1. In what grades in your elementary school do students explore, learn, and use electronic subscription databases (such as AEA online)? To what extent do they use these reference materials?

I demonstrate how to use AEA databases to gr. 2-5. The older students use them quite a bit. I use other data bases with PrepK to 2^{nd} grade. They can use them in their classrooms and at home. I don't know how much they do that.

2. Would you say that your elementary students prefer to use print or electronic subscription databases?

Electronic because it is new to them. But, they want to print it out. What they often don't realize is that they have to read no matter what the format.

3. Are your elementary students expected to complete work using electronic subscription databases outside of the school day? Are there extra hours for students to use school computers outside of the school day?

I don't think the classroom teachers give assignments where students must use the databases outside of school. I don't have extended hours, but I have had teachers open the lab after school for students.

4. Do the electronic subscription databases available to elementary students through the statewide online purchase meet a standard of high quality making them relevant for elementary students?

Yes

- (4) Is the information easily understandable by elementary students? *Yes, depending on the grade and reading ability of the student.*
- (4) Can the information be easily used by elementary students? *Again it depends on the grade and ability.*
- (4) Is the information provided age appropriate for the students? *yes*
- 5. Given a topic normally researched by elementary students (such as animals), do students typically use print non-fiction, print reference, or electronic subscription databases to complete their research?

When researching, students are given instructions that they must have at least one print and one electronic resource.

(5) Is this because it is required by the teacher or through the choice of the student? *teacher*

- 6. Think back to the last few years. What percentage of your annual budget goes towards purchasing electronic subscription databases?

 We use the AEA databases, so none of the \$ is from my budget. This year I purchased a subscription to a database out of grant money. Print references? 100%
- 7. What things do you consider when making selection decisions regarding electronic subscription databases verses print non-fiction or print references?

 Age appropriate, need, cost
- 8. When you go to replace out-dated reference material, would you look first at an electronic subscription source or print resource (assuming that it is available in either form)?
 - For reference I would look at electronic first.
- 9. Would you like me to email you a copy of the final report after it is completed? In what format would be easiest for you to read (.doc, .pdf, etc.)?

- 1. In what grades in your elementary school do students explore, learn, and use electronic subscription databases (such as AEA online)? To what extent do they use these reference materials?
 - Students in grades $3^{rd} 5^{th}$ grade learn to explore and use the electronic resources. Grades 4 and 5 uses them the most during units that require research/information or data collection. World Book is the most used resource because many of the other resources are not elementary student friendly.
- 2. Would you say that your elementary students prefer to use print or electronic subscription databases?
 - If students had a choice, I'm not sure which they would prefer. When they are working on a project many teachers require they use printed resources first. Later in fifth grade, students are given a choice. The philosophy is to learn to use the printed materials first because finding materials on a student's reading level is easier to locate.
- 3. Are your elementary students expected to complete work using electronic subscription databases outside of the school day? Are there extra hours for students to use school computers outside of the school day?

 Students are not expected to complete work using the databases outside of the school day mostly because many do not have access to the internet at home. Those who do are not discouraged from working outside the school day.
- 4. Do the electronic subscription databases available to elementary students through the statewide online purchase meet a standard of high quality making them relevant for elementary students? Is the information easily understandable by elementary students? Can the information be easily used by elementary students? Is the information provided age appropriate for the students?

 The electronic databases available to the elementary students are of high quality, relevant to the curriculum and age appropriate. However, they are not easy for our younger learners to navigate and the many times it is difficult to locate material at their reading level.
- 5. Given a topic normally researched by elementary students (such as animals), do students typically use print non-fiction, print reference, or electronic subscription databases to complete their research? Is this because it is required by the teacher or through the choice of the student?
 - As stated in question #2, the philosophy is to start with printed materials because the ability to locate materials on students' reading levels. Then students are move to the electronic resources. With our online catalog (Destiny) we subscribe to the WEBPATH EXPRESS. Here student can locate age appropriate websites. This is usually their first choice after the print resources.

- 6. Think back to the last few years. What percentage of your annual budget goes towards purchasing electronic subscription databases? Print references? My library budget does not purchase the electronic databases. Since it is used by all students and teachers the district purchases this through their Technology budget. With that said, my budget is used to purchase print references and any video/DVD materials that align with the curriculum and our standards and benchmarks.
- 7. What things do you consider when making selection decisions regarding electronic subscription databases verses print non-fiction or print references? When purchasing any resources my decisions are based on if it is age appropriate, reading levels, and how and where it will align with the curriculum and our standards and benchmarks.
- 8. When you go to replace out-dated reference material, would you look first at an electronic subscription source or print resource (assuming that it is available in either form)?

 When replacing out-dated reference material I look at both since we have such a vast range of learning styles and reading levels.
- 9. Would you like me to email you a copy of the final report after it is completed? In what format would be easiest for you to read (.doc, .pdf, etc.)?

 I would be interested in reading your final report. It does not matter which format your e-mail it to me.

- 1. In what grades in your elementary school do students explore, learn, and use electronic subscription databases (such as AEA online)? To what extent do they use these reference materials?
 - 4th and 5th grade, but they do not use them much
- 2. Would you say that your elementary students prefer to use print or electronic subscription databases? *electronic*
- 3. Are your elementary students expected to complete work using electronic subscription databases outside of the school day? Are there extra hours for students to use school computers outside of the school day?

 No and No
- 4. Do the electronic subscription databases available to elementary students through the statewide online purchase meet a standard of high quality making them relevant for elementary students? Is the information easily understandable by elementary students? Can the information be easily used by elementary students? Is the information provided age appropriate for the students?

 Some is okay for elementary use, but more of it is better suited to MS and HS.
- 5. Given a topic normally researched by elementary students (such as animals), do students typically use print non-fiction, print reference, or electronic subscription databases to complete their research? Is this because it is required by the teacher or through the choice of the student?

 Print non-fiction as specified by the teacher
- 6. Think back to the last few years. What percentage of your annual budget goes towards purchasing electronic subscription databases? Print references? \$0 to electronic and \$1000 to print
- 7. What things do you consider when making selection decisions regarding electronic subscription databases verses print non-fiction or print references? We only use the electronic sources provided by the AEAs
- 8. When you go to replace out-dated reference material, would you look first at an electronic subscription source or print resource (assuming that it is available in either form)?
 - Many times I use my print reference budget to add to my nonfiction collection.
- 9. Would you like me to email you a copy of the final report after it is completed? In what format would be easiest for you to read (.doc, .pdf, etc.)? *Sure*, .pdf

1. In what grades in your elementary school do students explore, learn, and use electronic subscription databases (such as AEA online)? To what extent do they use these reference materials?

grades 4-6 when doing research

2. Would you say that your elementary students prefer to use print or electronic subscription databases?

I don't see a preference

3. Are your elementary students expected to complete work using electronic subscription databases outside of the school day? Are there extra hours for students to use school computers outside of the school day?

No

No

4. Do the electronic subscription databases available to elementary students through the statewide online purchase meet a standard of high quality making them relevant for elementary students? Is the information easily understandable by elementary students? Can the information be easily used by elementary students? Is the information provided age appropriate for the students?

The statewide online sources do meet our needs

5. Given a topic normally researched by elementary students (such as animals), do students typically use print non-fiction, print reference, or electronic subscription databases to complete their research? Is this because it is required by the teacher or through the choice of the student?

It is required by teachers and me that student use print, and non-print materials. Students need to know how to locate and access both forms of materials.

- 6. Think back to the last few years. What percentage of your annual budget goes towards purchasing electronic subscription databases? Print references? Budget for electronic - NONE Print - 90%
- 7. What things do you consider when making selection decisions regarding electronic subscription databases verses print non-fiction or print references?

 I buy most of materials to supplement the curriculum
- 8. When you go to replace out-dated reference material, would you look first at an electronic subscription source or print resource (assuming that it is available in either form)?

At the elementary level -print

9. Would you like me to email you a copy of the final report after it is completed? In what format would be easiest for you to read (.doc, .pdf, etc.)? *Yes, doc*.