THE DIGITAL DIVIDE AND ITS EFFECT ON STUDENT LEARNING

by

Tiesa M. Smith

An Abstract
of a research paper submitted in partial fulfillment
of the requirements for the degree of
Master of Science in Library Science and Information Services
in the Department of Educational Leadership and Human Development
University of Central Missouri

August 2015
ABSTRACT

by

Tiesa M. Smith

The digital divide started when computers became available for personal use. The divide describes the gap between those who have access to technology and those who do not. This paper explores the reasons behind the digital divide and the effect this gap has on student learning as well as the role the librarian plays amid the divide. Peer reviewed literature demonstrates how the reasons behind the divide have changed over time and how librarians can be influences to lessen the gap.
THE DIGITAL DIVIDE AND ITS EFFECT ON STUDENT LEARNING

by

Tiesa M. Smith

A Research Paper
presented in partial fulfillment
of the requirements for the degree of
Master of Science in Library Science and Information Services
in the Department of Educational Leadership and Human Development
University of Central Missouri

August 2015
THE DIGITAL DIVIDE AND ITS EFFECT ON STUDENT LEARNING

by

Tiesa M. Smith

July, 2015

APPROVED:

Advisor: Dr. Jennifer Robins

Committee Member: Rene Burress

UNIVERSITY OF CENTRAL MISSOURI
WARRENSBURG, MISSOURI
ACKNOWLEDGEMENTS

I would like to thank my family and friends for their love, support, and encouragement with my kids during this project. I wouldn't have made it through this paper without your help. I would also like to thank Dr. Jennifer Robins for her help, advice, and editing. Another special thanks goes out to Laura Schlueter for being my first reader when my paper was really rough, and a big thank you to Rene Burress for being my second faculty reader.
# TABLE OF CONTENTS

## CHAPTER 1: INTRODUCTION

- Statement of the Problem ................................................................. 1
- Purpose of the Study ........................................................................ 1
- Research Questions .......................................................................... 1
- Limitations of the Study ................................................................. 2
- Definition of Terms .......................................................................... 2
- Research Design ............................................................................. 3
- Conclusion ...................................................................................... 4

## CHAPTER 2: REVIEW OF THE LITERATURE

- Reasons Behind the Digital Divide - Past and Current ................. 5
- Technology in Schools ...................................................................... 11
- The Role of the Librarian and the Digital Divide ......................... 15

## CHAPTER 3: CONCLUSIONS AND RECOMMENDATIONS

- Reasons Behind the Digital Divide ................................................. 19
- Technology in Schools ................................................................... 19
- Role of the Librarian ...................................................................... 20

## WORKS CITED


CHAPTER 1
INTRODUCTION

Statement of the Problem

Technology use in schools is evolving. It has transformed from bulky desktop computers that students used for playing Oregon Trail to portable devices such as iPads and laptops that students are using to not only learn but to become creators and producers of information. Although technology is improving, the digital divide still exists, creating an impact on student learning. The divide has shifted from not having access to a digital device or the Internet to having meaningful knowledge of digital tools.

Purpose of the Study

The purpose of this research was to review the literature on the digital divide. Literature was reviewed on the reasons behind the digital divide. This includes reasons that were more prevalent in the past as well as current causes of the divide. Literature was also reviewed on how technology use in schools affects the digital divide and the role of the school librarian. The results of this study demonstrate that librarians can play a vital role in the digital divide to help lessen the gap in today’s technology-filled world.

Research Questions

The digital divide has been around since computers were introduced for personal and classroom use; however, how it is effecting student learning has changed. To better understand the digital divide and its effect on student learning, the following questions arise:

1. What are the reasons for the digital divide?
2. How does the use of technology in schools affect the divide?
3. What is the role of the school librarian in reducing the digital divide?

Limitations of the Study

The limitations of this study were designated by the timeframe allowed for research and review of the literature on the topic. This study is solely based on existing research and literature. The scope of data was limited to peer-reviewed journals and articles from individuals with knowledge on the digital divide.

Definition of Terms

The following terms are important in understanding the reviewed literature and research and may be unfamiliar to the reader. The definitions provided are general explanations, not actual dictionary definitions.

Blackboard – An electronic learning system used as a way for teachers and students to connect, collaborate, submit, and review work in a virtual setting.

Blog – An online log where an individual writes about personal experiences or interests.

Broadband – Internet access that transfers information quicker than the traditional dial-up method.

Common Core State Standards – A set of standards that outline what a student should be able to know by the end of a grade level.

Digital citizenship – The appropriate behavior when using technology.

Digital divide – The gap between those who have access to technology and those who do not.

E-book – A book that is read electronically.

E-Learning – Learning through the use of electronics.
Electronic resource librarian – A librarian who has expertise in the fields of library science and technology.

Filtering – The blocking of Internet resources such as certain images, Web sites, and videos based on content that is deemed inappropriate.

Floppy disk – A flexible, plastic disk used primarily in the 80s and 90s that held data or software for a computer.

Hardware – The machine and external components of technology devices.

Ning – A community-based Web site that is similar to other social media sites but primarily used for educational or business purposes.

PowerPoint – A Microsoft software program that allows users to create a slideshow presentation.

Social media – Web sites that allow users to share such things as thoughts, information, pictures, and videos with others.

Software – Programs used by a computer or other digital devices.


Wiki – A collaborative Web page that allows users to edit information on the page.

YouTube – A video-sharing Web site.

Research Design

This research study collected previously published information pertaining to the digital divide and its influence on student learning and the librarian. There was no attempt to conduct new research for this study. Instead, existing literature related to the topic was reviewed.
Articles were retrieved from the following databases: *Academic Search Complete, Digital Commons at University of Nebraska-Lincoln, Education Research Complete, ERIC, Library Literature and Information Science Full Text, and ProQuest Central*. Search terms included: “digital divide,” “digital divide in US schools,” “technology in schools,” “library digital divide,” “digital devices in schools,” “e-books in schools,” and “e-Learning in schools.”

**Conclusion**

This study includes three chapters addressing the digital divide and its impact on student learning. The next chapter is a review of the literature. Chapter three provides answers to the questions posed in chapter one as well as a conclusion and recommendations.
CHAPTER 2
REVIEW OF THE LITERATURE

This research examines the evolving problem of the digital divide and its effect on schools today. The digital divide was defined as “the gap in equality between those who have access to computers and the Internet and those who do not” (Bernard). With technology becoming more available and affordable, students have greater access to it. Therefore, the divide has shifted from not having access to having meaningful access. The digital divide still exists and impacts students’ education. This issue of the changing digital divide involves three areas. The research will first provide the reasons for the digital divide. Next, it will discuss the how technology use in schools affects the divide. Last, the research will examine the role of the school librarian amid the digital divide.

Reasons for the Digital Divide - Past and Current

Research shows that while the United States has made large increases in bridging the divide, it is still ranked lower in Internet usage than other comparative countries. According to research, “under the Bush Administration, the US declined from the world’s 4th highest rate in 2001 to 15th in 2007, and Americans pay much higher prices than do their counterparts in South Korea and Japan” (Warf 10). Identifying the reasons for the divide is a starting place for closing the gap. This section will explore the following reasons for the divide: income level, age, gender, race, complexity of tools, inoperable equipment, filtering, and prohibiting personal devices. While some reasons for the divide have lessened over time, some of them are still issues that create a division that has a direct effect on students in K12 schools.

One of the biggest and most continuous reasons for the divide is income level. Even though the price of computers and other digital devices has dramatically
decreased over the last two decades, some families still have a difficult time affording them. Grants and tax incentives given to businesses have put more computers in low-income communities and schools (Attewell 252). Computers, however, are just a portion of the cost. Home Internet access is another expense. Past telecommunications acts and federal funding made Web access more affordable for schools and libraries (Children 6). However, if families are unable to afford devices or Internet access at home, they may be at a disadvantage compared to those families who can afford the digital tools, hence creating a divide between students.

While income-level of the user is one reason for the divide, research shows that mobile smartphones and other portable devices bridge the divide for many. While some people choose to stick with a cheaper phone and rate plan that avoids the extra charge for data, many more opt for smartphones that allow them to access the Internet, check email, access a variety of applications, and converse on social media. One U.S. report shows an increase of four million smartphone subscribers in one month’s time from June 2011 to July 2011 (Yelton). Because the Internet is accessible through mobile smartphones and tablets, more people are gaining access to the World Wide Web. Cell phone companies also provide money-saving bundles that allow families to have more lines and share data, in result lessening the divide in the affordability gap. With Internet compatible devices in the hands of students at young ages, the hope is that schools will allow students to use these devices for learning rather than viewing them as a distraction. In 2013, 51 percent of high school students brought a smartphone with them to school every day (Grunwald 14). Groups like the iSchool Initiative are advocating for
educational reforms like using personal devices in class, in hopes to bridge the divide that is affecting school age students (ISchool Initiative).

Another reason for the divide is the age gap. Most students who went to school in the nineties or later had the privilege of using computers at least while at school; however, those who went to school before the nineties were more acquainted with the typewriter rather than a computer. Therefore, the unfamiliarity with computers and other technology devices exists because of age. For example, one study shows that while some senior citizens have both access and the income to use digital devices, they cannot find a meaningful way technology can benefit them in their current lifestyle (Marrall). Between the years of 1995 to 2010, Internet usage among the 65+ age group only increased by 40 percentage points whereas all other age groups had increases of 60-70 percentage points (Warf 7). One study shows that 6.6 million minor age children in the U.S. are being raised by a grandparent. Twelve percent are African-American, six percent Hispanic, and four percent are Caucasian (Storm 911). Studies found that many grandparents were concerned about what teachers expect from them in regards to supporting learning in the classroom. Because of the increased use of technology, grandparents may feel uncertainty due to the digital divide (Storm 916).

Past studies show that males tend to use computers and access the Internet more than females, thus making gender another reason for the digital divide. As early as the 1980s, surveys showed that school-age boys were more attracted to computers and showed a more positive attitude towards using them. Further research conducted in 2003 found that girls became more interested in computers but still used and preferred them less than boys (Cooper 321). Although this prior research favors boys
and their technology skills, recent studies show that girls are more proficient in using technology. The studies tested the following areas: technology operations and concepts, constructing and demonstrating knowledge, communication and collaboration, independent learning, and digital citizenship. In all of these categories, females outscored males (Ritzhaupt 298, 300). The research for the gender gap also shows a difference in the purpose of using technology. Boys tended to use computers and devices for gaming and Web surfing whereas girls tended to use them more for homework and research. Research showed that students needed better parental supervision at home to decrease entertainment use and increase use for learning (Vigdor 24-5). The gender gap has shifted since the 1980s. As a result, girls can use technology more successfully for educational purposes. Boys, on the other hand, while still able to navigate a computer proficiently, seem to use technology for entertainment purposes.

Reports show that race is another factor in the digital divide. While the white population had the highest percent of Internet users in 2003, the rankings for 2010 changed for all races except the black population, who held the lowest percentage in both surveyed years. The Hispanic population was the top users with 84 percent versus 78 percent for Caucasian and 66 percent for African-American (Warf 7). In 2001, Henry Louis Gates, Jr. compared African-American inequalities to the racial gap in the digital divide saying, “Blacks are facing a new form of denial to the tools of literacy, this time in the guise of access to the digital-knowledge economy” (qtd. in Attewell 252). While research shows that many of the urban and poorer community schools received technology through school funding and grants, some minorities still struggle to maintain
Internet access at home, which affects students in the educational system (Attewell 253, 257). Research also shows a race gap when it comes to obtaining Internet at home on a computer versus on a cell phone. Fifty-five percent of Hispanics have a home broadband connection compared to 58 percent of African-Americans and 75 percent of Caucasians. For those using a cell phone only to access the Internet, African-Americans had the highest percentage with 51 percent compared to Hispanics at 40 percent and Caucasian at 34 percent (Magagnini).

Race, gender, and income level were all significant reasons for the digital divide in the past, and while they still contribute to the divide, other factors have more recently come into play. Research shows that the complexity of tools is also a reason for the divide. While some find navigating the Internet or editing videos to be easy, others struggle using even the basic functions of technology. An example of this was found in an experimental study on learning where two patrons of similar age had very different capabilities when using technology. One young patron was able to both film and edit short videos on the computer whereas the other individual struggled while navigating YouTube (Marrall). It has also been noted that some types of e-learning systems are too complicated for basic computer users to navigate, making the complexity of tools a reason for the divide as it relates to learning (Johnson 133-4).

Inoperable equipment is another reason for the digital divide. While some schools have computers, Internet, and other digital devices, problems stand in the way for their use. A five-year study at one junior high school showed how inoperable equipment and lack of technology assistance created a gap in student learning. This school had computers that were outdated and slow. Other computers were on a work
order list to be fixed for up to three months. The network was configured in a way that
cased teachers to login to a different server depending on whether they were printing,
entering grades, or searching the Web. With all these problems, students and teachers
felt that it was easier to not use technology. The research concluded that in order for
schools to successfully use technology and impact students in a positive manner
indicated a need for the following; hardware and software purchases for the classroom,
teacher training and workshops on the hardware and software, the development of
teacher interest and desire for using technology, and ongoing technology support
(Banister). Having inoperable equipment and unreliable Internet connectivity plays a
role in the divide and impacts student learning.

Another cause in the divide for many is the filtering of certain Web sites and Web
tools. Some school districts block a large variety of Web 2.0 tools such as social media
sites, blogs, and wikis while other districts want students to participate in collaborative
learning and teach with these tools. Because of the various levels of filtering, a new
form of divide now exists (Rosenfeld 6). Students with less censorship have an
advantage over others who are unable to access and learn from a variety of new
educational tools. Students with more access can use and apply skills and learning to
experiences and coursework. This does not mean that school districts should be lax in
their security, but should become knowledgeable about the types of Web sites and tech
tools that can produce effective student learning (Rosenfeld 6).

Some schools prohibit students from using personal devices for learning, which
can also contribute to the digital divide. The iSchool Initiative originated with the
confiscation of one high school student’s personal device. Travis Allen was reprimanded
for using an iPod Touch to take notes in class, and because of that censorship wanted to reach out to educators on the need for change of the use of technology in schools (ISchool Initiative). If schools are struggling to move to one-to-one computers or are otherwise unable to provide the adequate number of devices to meet the demand for student learning, allowing students to bring personal devices to school is a way of narrowing the digital divide that has a direct effect on student education.

Technology in Schools

Although the digital divide has evolved, it still exists and affects the way students learn. With the growing use of technology at school, more educators include digital resources in their lessons. Since technology use in schools is increasing, it is crucial for the divide to decrease. This section will explore the issues that are impacting schools in regards to the use of digital tools and the Internet, in particular: the Common Core State Standards, and the growing use of e-books. Problems related to making technology meaningful and learning effective are also addressed.

With Common Core State Standards being adopted in many states, schools are having to modify current lessons and in many instances are using technology to do this. Districts are using technology such as iPads and computers to administer state Common Core tests. Therefore, students need to know the basic operating functions of a device to just take the test. On top of that, this new set of standards brings higher learning expectations, which is causing many districts to increase both the rigor and relevance of lessons. Technology is used as a tool to facilitate and expand student learning to meet these higher standards (Marcoux 65).
Not only are administrators pushing for the use of technology, but they are also aiming to save money and space, and stay tech savvy with the use of e-books. E-books are a way to start bridging the gap in the divide and have a direct effect on students. E-books are typically cheaper than physical, hard copy books. The extra space used to house books can be transformed into something more useful. Schools also look at the other benefits of electronic reading books and textbooks. Gone would be the days of the excuse, “I left the book at school and couldn’t do the homework.” Martinez-Estrada and Conaway found that the majority of students in their study reported having an improved learning experience and would recommend using a Kindle or an e-book device over traditional printed materials (131-2).

Although school districts are pushing for technology and students seem to be receptive to learning with it, one may ask if the technology is helping student performance. One research study suggests that student achievement in math and reading scores did not increase just because students had home computers. It was suggested that more parental supervision during homework and study time might have provided better results (Vigdor 30). Therefore, if students fall victim to distractions, such as surfing the Web or playing games, they will spend less time working on the intended assignment, resulting in lower scores. On the other hand, a different case study showed that using electronic reading devices proved no threat to reading rate or ability. Most experiments showed that using e-books, students perform just as well or better than using a printed paper copy of a reading (Grzeschik 300).

With technology in schools and knowing that the divide does still exist, questions are arising on whether technology is helping and whether there are dangers from too
much computer use. Former elementary principal Jane Healy wrote a book arguing the potential dangers from too much technology usage. The perils ranged from bad posture and vision problems to less physical activity and subverting the intended learning. Instead of focusing on the learning target, students become distracted by the technology itself or become more focused on the presentation rather than the skill. One of the biggest concerns was that children learning from computers receive not only less intervention from adults but also there is less supervision on what the students are doing (Attewell 254-5).

To make sure that student computer use is not just for entertainment schools seek to ensure that educators are making learning through digital devices meaningful. Haycock notes that more technology is causing the divide to take a new complex turn; “The digital divide is now less about basic access to equipment and the Internet than meaningful access to relevant content by technologically literate young people with great digital opportunities” (34). Jennifer Light explains that forms of current media such as the radio, television, and cable were once expected to be the next big tool in educational technology; however, they quickly became merely forms of entertainment. With the Internet providing video, gaming, and social media sites, the use of educational Web 2.0 tools in a meaningful way can keep the World Wide Web from becoming solely entertainment like the preceding forms of technology (725-6). To make technology meaningful, educators use it as a tool to enhance the lesson and increase the learning, not as just a finishing touch on a lesson (Marcoux 65).

With technology in schools, educators are looking for learning to be both meaningful and effective. Many universities and some secondary schools are using e-
learning as an option for coursework. A popular type of e-learning can consist of virtual classrooms where students submit work, communicate with teachers, and discuss with classmates solely online. One study stated that while e-learning is not better than a traditional classroom setting, it does provide students with more tools and possibilities (Worm 5). Another study found that e-learning is most effective when incorporated with some face-to-face teaching (Johnson 144). Another study noted that although technology is not new to students, better results are achieved in the classrooms where teachers gave step-by-step guidance on specific e-learning programs (Henderson 157). The complexity of tools and their unfamiliarity can make learning more difficult for some students. This is another way the digital divide affects student learning. Demonstrating and interacting with the students much like in a traditional classroom, rather than just posting information online and setting the students free, makes the incorporation of technology effective.

When looking at types of e-Learning sites, research is helpful. For example with courseware applications such as Ning and Blackboard, research shows that 81 percent of students gave Ning a positive rating (4 and above) while Blackboard only received a positive rating of 38 percent. Students felt that Ning had similarities to social networking sites, giving a more comfortable and inviting environment. Ning allows users to upload various items, add a personal touch to pages, and communicate in a quicker more visible way. It was easier for students to become more actively involved, resulting in more student learning and discussion (Chen 55-57).

While some may argue that so much technology in schools is too much, research shows that computer literate students have advantages later in life. Former President
Bill Clinton said that, “educating more Americans to use computers will help to link children and adults to a lifetime of learning, to provide access to distant medical care, to empower parents, to assist job-seekers, to enhance safety, and foster economic development” (qtd. in Light 710). Technology is not decreasing; therefore, students are going to have more experience with it the higher they climb in their education and careers. To be successful, students need meaningful and effective experiences with technology. One study explored the theory that even the students who used technology mostly for the purpose of entertainment would still have the basic knowledge of computer functions and navigation to use later in life, whether it be for online resources or job opportunities (Vigdor 30). The digital divide has an effect on students that can follow them past their educational years.

The Role of the Librarian and the Digital Divide

The librarian can play an essential role in both the implementation of technology and bridging the gap in the digital divide. Elizabeth Marcoux notes that while the digital divide is increasing, many schools are deciding to do away with the school librarian when budget cuts arise. She argues that there is a problem when schools are doing away with a teacher who is trying to prevent the gap in the current digital divide (65). Therefore in a time when technology use is growing, and the digital divide is still present, school librarians are needed on the forefront. This section will address the following ways in which librarians bridge the divide, and make a positive impact on students: adopting technology campaigns, providing access to resources, and offering instructional programs that benefit the school community.
In 2001, libraries, nonprofit organizations, and media and Internet companies started a campaign to decrease the gap in the digital divide. Working together they focused on providing information and services to help low-income and minority youth obtain Internet access. They created brochures, public service announcements, directories, and information hotlines that provide teens with information on the importance of computer literacy and how to find places that provide free Internet access. Materials were also made available in a bilingual format to accommodate the Spanish-speaking population (Anonymous 61-2). The Bill and Melinda Gates Foundation has provided grants for free Internet access in U.S. public libraries since 1997. With much success in U.S. libraries, the foundation has extended opportunities to make the library initiative global (Global Libraries).

Besides providing information on services and access to the Internet, librarians confront the issue of the digital divide through collection development (Salinas 134). This includes more than just providing computers and equipment. Collection development now includes computer networks, literacy, instruction, and outreach (132). Collection development consists of both print and e-books and other materials that are available for checkout as well as database and online subscriptions to fit the needs of the patrons. Salinas discusses the importance of librarians working with both schools and the community to establish extended hours that might be beneficial to working patrons. Technology training for patrons is another essential factor to collection development, which includes providing workshops and how-to tutorials on using library resources (133-4). Other research shows that librarians can bridge the divide by offering services to working families that only see the library as a place their children can study.
Services to parents could include education programs for minorities such as instruction in English. Some parents might take advantage of GED prep classes that will help to better their career opportunities (Williams 80-1). Having a collection that supports technology will effect student learning. By providing additional resources and trainings, the technology gap between parents and students is lessened, allowing parents to better support student learning.

Peggy Seiden argues that it takes more than just providing wireless access or a computer to close the digital divide. She explains that the librarian ensures that people have the necessary skills to use technology. Being on the forefront for developing and offering new services and programs, allows the librarian to help patrons not only navigate but also evaluate information (Seiden 329). Other research shows that the librarian provides information and ideas in various formats and materials for all age groups and races without discrimination (Vahid-Aqili 231). Students’ learning is impacted when the librarian helps them navigate and use technology.

Because of the evolving and increasing technology use, a new type of librarian, the electronic resource (ER) librarian, has emerged to play an important role in implementing technology and bridging the gap in the digital divide. Although this job title is a newer one, many of the tasks of the ER librarian are not new. The roles of the ER librarian include technology specialist, content creator, educator, privacy protector, activist, grant writer, collection developer, program designer, policy maker, researcher, and leader. The jobs and abilities are similar to those of librarians and others who work with digital resources. Research shows that many ER librarians have had previous experience with some other type of librarian. Included in the many tasks and roles is the
social responsibility to help end the digital divide. By not only providing access to the Internet and the devices to access it, but by providing trainings and resources for all persons regardless of age, income, race, or gender, the ER librarian bridges the gap (Plumb 328, 344-6). The digital divide exists and impacts student learning. Regardless of the reasons for the divide or why the schools are adopting technology use, libraries and librarians work to close the digital divide.
CHAPTER 3
CONCLUSIONS AND RECOMMENDATIONS

Due to several factors, the digital divide still exists and impacts both student education and the role of the librarian amid the digital divide. This issue of the changing digital divide involves three areas. The research provided answers to the following questions: what are the reasons for the digital divide? How does the use of technology in schools affect the divide? What is the role of the school librarian in the digital divide?

Reasons Behind the Digital Divide

The term ‘digital divide’ originated to describe the gap between those who had access to technology and the Internet versus those who did not. The initial reasons for the digital divide were income, race, age, and gender. While these factors still play a role in the divide, these reasons for the gap have lessened as technology, and the Internet have become more prevalent and accessible.

With the cost of personal computers decreasing over the years and portable devices, such as iPads, tablets, laptops, and smartphones being introduced, more people are gaining access to technology and the Internet at home as well as on the move. Schools have received grants to purchase electronic devices for student learning. Therefore, the main reasons for the divide shifted. The complexity of tools, inoperable equipment, filtering, and prohibiting personal devices have now become more of the norm for creating the digital divide that is affecting student learning.

Technology in Schools

With the popularity of technology, schools are using digital devices and the Internet to reconstruct the way students learn. Schools have evolved from the days of computers and floppy disks containing basic learning games to various digital devices
that impact student learning. Students are not just using the computers to type a paper or create a PowerPoint presentation. They are using iPads, tablets, laptops, and video equipment to explore and create. By incorporating technology into the lessons, teachers are making learning more meaningful and effective.

Some of the ways in which schools are incorporating technology are by using it for testing purposes and through the incorporation of e-books and e-learning. Teachers are using the Internet and digital devices to meet the learning needs of Common Core State Standards (CCSS). Many districts are also using electronic devices to administer CCSS tests. Schools are incorporating technology and saving money by purchasing e-books rather than print copies. E-learning is yet another way students and teachers can learn via the Web. The evolution of technology has an effect on education. It gives both teachers and students a different outlook on teaching and learning.

**Role of the Librarian**

Amidst the digital divide, the librarian’s role has changed from checking out books and teaching the Dewey Decimal System to becoming someone who can positively impact student learning through technology assistance and instruction. Librarians have to become familiar with the various digital devices and resources as well as offer knowledge to patrons by providing informational tutorials, handouts, and training. By providing this assistance, librarians are helping to decrease the gap in the digital divide.

Librarians also have to adjust their collection to help end the divide. This includes the purchase of electronic devices, e-books, research databases, and online subscriptions for patrons. By providing a technology-rich collection as well as digital
knowledge and assistance, the librarian becomes an electronic resource (ER) librarian.

This librarian provides the same services as a traditional librarian with the inclusion of technology in hopes to end the digital divide and provide a positive learning impact on students.
WORKS CITED


Web. 8 June 2015.


ProQuest Central. Web. 8 Mar. 2015.


Williams, Gaye. "Librarians and Working Families: Bridging the Information Divide."


Yelton, Andromeda. "Bridging the Digital Divide with Mobile Services (Brief Article)."