Chanell Tyce

Elaine Minamide

ENG 100

November 15, 2012

I-Search Paper: Digital Education

Digital education is a controversy that will be and has been an issue in school systems across the country. Digital education includes using computers for in class work as well as out of class homework assignments. While the kind of digital education that exists is unclear, I would assume there is technology in classrooms that can aid in every subject, including reading, English, and Math. The positive for those that use this digital education is that the classroom will be able to save paper, which will effectively save schools money in the process. However, logically, money wouldn't necessarily be saved because of the price of these technological systems. Using these programs, computers can actually teach students with interactional learning. Interactional learning could include educational games and activities to further learning in a very hands on and visual way. Having computer activities can help gear lessons towards the needs of individual students, instead of having general lessons for the whole class. I would assume that the role of teachers wouldn't be as important if this digital education was added to a school. As of now, I can't imagine many schools that have used their dwindling budget to purchase many of these technologies. Elementary schools in particular have taken extreme budget cuts, which could affect the schools possibility of gaining this type of education. As time progresses, I feel schools with a bigger profit will be more likely to adopt this type of education system because it definitely can be very expensive, especially if every student needs a computer for their learning at home and at school. Technology education will most likely help young generations to start successfully using computers

and technology at a very young age. Digital education can be used for a child of any grade; benefiting elementary school aged children all the way to high school adolescents.

Why care about digital education? Personally, digital education will greatly affect my future vocation as an elementary school teacher. I found myself soul searching halfway through college for a career that would fit my traits and loves, something that would invoke passion. One day, as I was sitting in a class designed for music majors, I realized I was no longer passionate about the career path I had chosen. Switching schools and career paths, I found myself in child development classes that truly enthralled me, causing me to settle into a Liberal Studies major. Technology in the classroom is just one of the many topics relating to the development of children that pertains to me and sparks my interest. This new digital age is finding its way into the teaching curriculum at schools and many are questioning this new curriculum. The idea of digital education poses great achievement in the classroom and yet great discrepancy; there are both positives and negatives in adding classroom technology. What are the benefits and detriments to this education? How can we tell who is right? I don't know much about technology within the classroom, but it is a topic I wanted to research more using the research question should schools be trying to use as much digital education as they can afford?

Upon starting the research for technology within education, I found topics and articles that didn't exactly relate to my research question, although they still do pertain to the topic I'm researching. The first relevant article for my research question is titled "Digital Readers: The Next Chapter in E-Book Reading and Response". Writer and user of digital readers, Lotta Larson, explains the potential of using digital readers in classroom settings. Digital readers are defined within the text as devices that "store hundreds of books, newspapers, magazines and blogs", and are capable of looking up information quickly as well as customizing "settings to suit each unique reader" (Larson 15). Larson conducted a study in the Midwestern United States in a K-12

environment. Two students were given the Kindle reader from teacher Mrs. Miles 2nd grade class: Amy, a 2nd grader who has a difficult time reading quickly but great verbal and written communication skills, and Winnie, a 2nd grade girl who reads at a 5th grade level, speaks English as a second language, and is usually very quiet and serious (Larson 17). The usage of the Kindles as reading tools was measured by the kinds of notes each girl had written throughout the book. By looking at their notes, Mrs. Miles was able to gather that Amy had "struggled to understand the emerging plot or specific text features" but the use of this tool supported her "ability to…decode unfamiliar…words with the help of the built-in dictionary" (Larson 21). Winnie's notes show "deep transactions with the text"; it shows her hidden sense of humor and more outgoing personality (Larson 21). While this is a very small case study, it illustrates that this new technology in e-book readers help students by providing a "new teaching and learning [possibility]"; its taking our traditional teachings methods and updating them to fit the times (Larson 21).

This article provided me with some great information on digital technology, specifically digital readers on elementary age students. While it didn't completely pertain to the question I posed, it contained great information and was an excellent starting place for prior research. Upon finding which phrases worked best to search through databases, I came upon this article. The intended audience was those interested in digital education and elementary school children, which is more relatable to my vocation. By looking at two vastly different students, the study gave a good idea of how e-books can help students with varyingly different situations. However, limiting the study to two students could also affect the credibility or usefulness of the study, as they are only two situations out of many that could be affected by the e-book. Another issue to keep in mind in relation to my research question is the fact that this source was looking only at digital readers with students, not the entirety of technology in classrooms. With my starting point being this article, I

changed my search terms so I would be able to find an article more about the affect of technology

on teachers and the curriculum. This became the route to my next search.

Using the search of technology on teachers and their curriculum within the classroom, I

stumbled upon an article titled "Intertwining Digital Content and an On-to-One Laptop Environment

in Teaching and Learning: Lessons from the Time to Know Program" by Yigal Rosen and Dawne

Beck-Hill. The article provides a look at what can be achieved by combining a digital curriculum in

a learning environment in elementary school. According to Rosen and Beck-Hill, "some

educators….take a technology-centered approach to educational technology without sensitivity to

how people learn" while others "take a learner-centered approach" in which they teach traditionally

and use technology to further student learning (Rosen and Beck-Hill 226). They highlight the Time

to Know program, created in response to lack of change and challenges in schools worldwide

(Rosen 227). Because teaching is shifting to the digital, a teacher must interact with the students

closely while they learning "experientially through computer programs" (Rosen and Beck-Hill 227).

The Time to Know program guides teachers through learning sequences for students with

computers. When a case study was done with these technical learning guides, studies found that

students who participated in the year- long program did exponentially better on skills tests

administered than those who did not. The "participation in the program contributed….to higher

frequency of one-to-one interactions" with students than normal teaching did. The study also

proved that those who participated in the program had fewer unexcused absences and "improved

student discipline" (Rosen and Beck-Hill 236).

In contrast to the last article, this one deals more with how teachers view growing

technology and how when incorporating computers into the classroom they should change their

curriculum and role. Programs like Time to Know even give teachers tips and lessons plans they

can use while teaching with aid from the computer. The article shows many more of the benefits

the children and school will have if they spend their money on computer aid systems. The topic greatly relates with my research question, agreeing that schools should be spending their money on this technology because of its benefits. Not only does it address the research question, but it also goes into depth about how technology should be used in classrooms and emphasizes what the role of the teacher will become.

Deciding I had found enough articles related to my topic, I searched on the databases for films or movie clips. I came across a clip from Films On Demand called "Digital Divide: Teachers, Technology, and the Classroom". It was created in 2000 by New Technology High School, located on the East Coast. In this particular school, there are 210 students and 280 computers; this is quite impressive for not being in a very wealthy area. The students use this technology everyday as well as participate in an internship, one in which they use their abilities with a computer. These intern students are known to "have incredible computer skills", as said by a local employer (*Digital Divide: Teachers, Technology, and the Classroom*). Half the film is devoted to showing the positive aspects of digital education. The second half interviews administrative and teachers that don't believe in digital education. They bring up the fact that "education video games are still simply video games" and computers are only as useful as the kids can make them (*Digital Divide: Teachers, Technology, and the Classroom*). Socializing could also become a problem with students that are constantly on a computer. Also, the "cost of technology hurts schools….it involves hardware, software, tech support, training, repairs and upgrades" (*Digital Divide: Teachers, Technology, and the Classroom*).

In respect to my presented research question, the information provided in the film seems to answer the components I have searched for. It looks at both the negatives and positives presented in such a controversy. It's a film that poses both the benefits and detriments of digital education and expects the viewer to formulate an opinion about the topic for themselves. The

downside to this film is that it is extremely outdated; technology has come a long way since 2000. However, its concepts are still applicable to the controversy of digital education and could still be applied to new technology. Another issue with the film is that it looked more at particular technology based schools instead of a traditional public school that one might see throughout the nation. It would've benefited me, the researcher, to find a film where a public school took on digital education and seen how the students and teachers reacted. None-the-less, the ideas presented in the film almost exactly matched what my researched question posed. I began my search for a book source that highlighted more nationally widespread data.

It took me some time to figure out where and how to search for eBooks on the databases given. Finally on the database eBook Collection, I found a giant source that would help me in getting closer to answering my question. "Rethinking Education in the Age of Technology: The Digital Revolution and Schooling in America" was written in 2009. The book looks at the affects that technology education will have on the students and the teachers and how exactly schools can cope with the new technology. I mainly looked at a chapter within the book titled "What May Be Lost and What May Be Gained"; with this "revolution in education", comes the altering of our modern society, and in any revolution, there are gains and losses (Collins and Halverson). Some losses include loss of mixed culture, high expenses causing division intellectually between rich and poor, and possible "decline or liberal arts as education becomes more centered on the individual" (Collins and Halverson). The benefits from digital education is engaging learning, customized programs to individual learners, accessible knowledge anytime, competition between students will diminish, and it "transfers responsibility for learning onto the family" and the individual (Collins and Halverson). The hope is that as technology resources become more readily available, the cost will become cheaper so more schools can afford to buy the technology.

Once I figured out how to advance my search for books online, I found this source to be extremely helpful and completely answered my research question. This eBook is full of useful material; it's an overwhelming amount of information for such a short research paper. When I narrowed down my search to just one of the most relevant chapters from the book, it made it more manageable and I was able to pull quotes from there. The book provides the reader with both the positives and negatives of digital education in a clear manner. The only problem with this source is that it was published three years ago, which could affect its relativity to present issues. But without any knowledge about present issues presented, it is applicable to my research question. One might stop their research after finding this perfect of a source, but I did need one more source to complete my research process: a news article

"With iPads making their way into kindergarten classrooms from Maine to Tennessee, it may seem like a given that American education is embracing technology for the rising generation" (Khadaroo). This is a news article printed by Stacy Khadaroo titled "Education 2.0: Can Digital Learning Day Begin a Classroom Revoltion?" It talks about the first National Digital Learning Day, a day designed to introduce new technologies to schools through events and webcasts. Teachers can "exchange tips on digitally enhanced science projects and anti-bullying lessons" that have been effective (Khadaroo). Increasing technology also benefits students by giving them digital tools to "close the digital divide" and promote "'collaboration, creativity, communication, and critical thinking' says Bailey Mitchell" (Khadaroo). Teachers won't necessarily teach as before; instead they will have to relinquish control and design a curriculum that will highlight technological tools.

Finding a news article to complete my toolbox of sources was more difficult than I had anticipated. I went through many databases and keyed in multiple search terms in order to finally find a few news articles on the subject. After using advanced search in MAS Ultra-School Edition, I found the article by Khadaroo in Christian Science Monitor as well as a few other great news

stories. This is another source that finds technology in classrooms to be something schools should adopt. With the introduction of National Digital Learning Day, schools can start to learn more and more about how to integrate technology into their curriculum. I appreciated how this article was written so recently; that way the reader knows this is an issue with current issues and facts. In relation to my research question, this news article exposes the benefits of a school adopting expensive computer technology.

After having looked at many sources about the topic, my initial understanding of digital education was unclear when compared with the facts. At the beginning, I knew little about all the true benefits or detriments in digital education and felt that with the introduction of more learning technology, the need for teachers would become obsolete. I have come to find this is far from the truth. Instead of technology wiping out the role of educators, it is used more in harmony with teachers from a "learning centered approach" (Rosen). This means teachers have a teaching curriculum and are aided by digital programs that can help restate and review what they have already taught. Teachers and technology can actually work together to create the best learning environment for students. While my assumption that money would be important in order to receive digital programs was correct, I was unaware that as technological becomes more readily available, the cost of such programs will gradually decrease (Collins). Schools who have a small budget will some day be able to afford these systems as the technology education grows. I have researched the many advantages and disadvantages schools have by adopting digital education, and whether schools should be using as much technology as they can afford. While there will never be a right or wrong answer to this question, I personally have changed my assumption and now realize that the benefits of digital education highly outweigh the negatives. This leads me to believe that schools should try and spend at least some of their budget on digital systems as they work with teachers to improve students learning environment. Why care about digital education in schools? Because

digital education can improve and mold the minds of our youth and provide our new generations

with adequate learning that will eventually shape who they are as individuals.

Works Cited

Collins, Allan, and Richard Halverson. *Rethinking Education in the Age of Technology : The Digital Revolution and Schooling in America*. N.p.: Teachers College, 2009. Technology, Education--connections. *EBook Collection*. Web. 8 Nov. 2012.

Digital Divide: Teachers, Technology, and the Classroom. Films on Demand. Films Media Group, 2000. Web. 6 Nov. 2012.

Khadaroo, Stacy Teicher. "Education 2.0: Can Digital Learning Day Begin a Classroom Revolution?" *Christian Science Monitor* (2012): N.PAG. *MAS Ultra - School Edition*. Web. 11 Nov. 2012.

Larson, Lotta C. "Digital Readers: The Next Chapter in E-Book Reading and Response." *Reading Teacher* 64.1 (2010): 15-22. *Academic Search Premier*. Web. 8 Nov. 2012.

Rosen, Yigal, and Dawne Beck-Hill. "Intertwining Digital Content and a One-To-One Laptop Environment in Teaching and Learning: Lessons from the Time To Know Program." *Journal of Research on Technology in Education* 44.3 (2012): 225-41. *Academic Search Premier*. Web. 1 Nov. 2012.