Examination of Masters of Educational Technology Leadership

Portability of Public Education

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I have always been interested in technology, from watching my dad work with punch cards on large servers, to wanting to get my hands on the newest technology today. I have been in the tech world, and rode part of the Internet bubble before it burst. I have been an Information Technology manager and helped business develop a sound technology environment. After years of providing technology support, I came to the realization I wanted to train individuals to use technology so they can be more aware of the tool they are working with. I became certified as technology applications teacher for all grade levels and I focus on teaching students web technologies, multimedia, video production, and animation and anything else for the most part that I can offer them about technology.

**Leadership Goals**

My continued education with Lamar University has offered me additional insight into how education and technology are working together. I have learned unique tools that can allow students to express themselves with multimedia, communicate across wide distances in virtual environments, and utilize course management systems to participate in courses from school or at home. As an educator I have seen that most students are very well versed in technology, however some students are limited in the ability to achieve their goals. The current school systems offer very limited opportunities for students wishing to take courses that are not offered within their school or district, a student in a rural community may wish to take a computer aided drafting course, but when the course does not make, they may end up in an agricultural course. I plan on using my leadership skills to help schools work together to expand course offerings to online learning resources for their students. This could lead me into a position of helping a small school district setup online learning courses or I could become a specialist that helps a multitude of schools set up a multi-school online classroom exchange, or even work for an online public school. “The abundance of resources and relationships made easily accessible via the Internet is increasingly challenging us to revisit our roles as educators in sense-making, coaching, and credentialing” (Johnson, Levine, Smith, and Stone, 2010). The resources we have available to use today I hope I can encourage a change in the way education is available to students, from helping develop crossover campus and internet based degree programs to completely Internet based high school options for students. My hope is that every student can receive any education opportunity they desire from any location.

**Vision of Educational Technology**

J.C.R. Licklider said, “As part of its contribution to the intellectual process, the computer will explore consequences of assumptions. It will present complex systems of facts and relations from new points of view, "cutting the cake another way" in a fraction of a second. It will test proposed plans of action through simulation. It will mediate and facilitate communication among human beings. It will revolutionize their access to information. It will even obtain for them the aid and services of other digital computers” (1962). As one of the founding fathers of the Internet, Licklider envisioned a world in which humans would interact with computers to access information anywhere in the world. 40 years later the Internet was growing rapidly, and today universities, public schools and a growing number of the population now has access to a global collection of information from anywhere they can get an Internet connection. With this change I believe we are on the verge of a revolution in how public education is taught. Not only will students be able to reference resources on the Internet, but also I believe school will become more flexible in how courses are offered including but not limited to a combination online and physical based schooling option. “People expect to be able to work, learn, and study whenever and wherever they want” (Johnson, Levine, Smith, and Stone, 2010). This does not just include adult learners, but K-12 students as well, weather it be parents who need to travel with elementary or intermediate age children, or high school age children who need to fit a work schedule around their public education. In the near future we will see a growing demand for flexible education options. An additional resource to a more portable education is the increase in electronic books. The most recent forms of digital books can hold thousands of books. Just as we saw the printing press make knowledge more available and portable five hundred years ago, we are seeing the same change occur again with modern technology. Instead of students carrying around 4 or 5 books at a time, they have access to information from all over the world with just a few clicks or taps on a screen. These two items will be key factors in how education will change in the next decade.

60 years ago our parents or grandparents relied on a daily paper radio or possibly television to get current information as to what was going on. If they needed to learn, they went to school or the library to get a book, encyclopedia, or journal. And they were limited to what was available at that location. Today, information is everywhere, and it seems that people can’t get enough. The biggest growth area for accessing this information is in the mobile market. According to the 2010 New Horizon report “The fastest-growing sales segment belongs to smart phones – which means that a massive and increasing number of people all over the world now own and use a computer that fits in their hand and is able to connect to a network wirelessly from virtually anywhere” (Johnson, Levine, Smith, and Stone, 2010). The fastest selling mobile computer device is the iPad, with over 2 million sold, it is already being used on college campuses as research tools and as mobile classrooms, allowing students to have access to course material and communicate with their professor. The law states that children must have access to a public education. And this has been readily available in the form of school buildings. However static buildings can limit students in both rural and urban environments. Rural students in smaller schools are often limited to core courses, and the few electives that meet graduation requirements or that can be used to help pull in additional funding. Urban schools can be limited to the neighborhood a child lives in and the school they are designated to attend. These are physical limitations that mobile computing and online courses can help overcome. Some possible solutions that already exist are online schools that offer a wide selection of courses for all grade levels. Some schools even offer a fully accredited high school diploma. Another scenario would be for public schools to offer select courses online and allow students from other schools around the world to take the course online. Students who are limited by their physical location would then have a broad network of choices from other public schools to take courses that fits their personal goals.

The printing press made it possible to reproduce books rapidly and distribute them to libraries schools and individuals. This increased the portability of education to what could be included in a book and how many books a person could have access too. When a student can carry around a one-pound device in their bag they are able to look up information from a large number of resources from around the world at any given moment. Since these devices can hold the digital version of thousands of books at any given time the portability and accessibility of knowledge is has as notable of a leap as the printing press did. J.C.R. Licklider was correct; the computer has revolutionized the way we reach information.

What we can envision is a student using the Internet and portable devices to access their school work from anyplace in the world, at any time of the day. Contacting classmates and teachers, completing assignments individually or in collaboration without ever having to step into a school building. This is the change in education that I believe we will be seeing in the near future.

**Self Discovery**

“When many adults think back to what shaped their learning about a given issue, they cite some field trip they went on or competition they participated in” (Bacon, 2010). I believe this is true for any of us, whether as a student or an adult. Usually the most important things that help us learn are participating in an event. As Mark Twain wrote in *An Innocence Abroad,* “Travel is fatal to prejudice, bigotry, and narrow-mindedness, and many of our people need it sorely on these accounts. Broad, wholesome, charitable views of men and things cannot be acquired by vegetating in one little corner of the earth all one's lifetime” (Twain, 1966). This is a good example of what I have grown to believe about our educational system and how we can use technology to improve this situation. Up until recently our educational system has promoted the concept of learning from “one little corner of the earth” even if books about other people and places. Students are guided by the books schools chose for classroom, library, and additional study. Up until recently it was not encouraged to think outside of those parameters.

Students now live in a world where this style of education can be reversed. Students can use technology to be away from a physical school building, be part of what they are learning by traveling, participating in work study environments, interactive field trips and other events that are held outside the school building. Some students may have the opportunity to focus on extracurricular activities and have their education presented to them in alternative methods. Students can learn from wherever they are, and continue to learn with their online groups to provide a global learning environment.

For many years, since I left web development prior to the dot com bust, I have been wondering what was going to drive me next. This course itself has helped me discover that I want to help organizations develop a better ability to train or work from any place in the world. This self-discovery in a way has been growing inside me. For many years I have felt that mobile devices would be the next big push. However, the use of the devices for a true functioning tool is the bigger goal. Mobile tools for education can offer a large number of opportunities for global education, as well as financial opportunities for educational organizations to offer online courses. This concept of learning outside the “box” for students will lead to many workers who have the opportunity to work away from a corporate building.

In order for me to promote this in schools I need to work on improving my ability to present in front of others. Throughout this course I have not had problems leading when it came to producing technical work or deciding on how to complete a project, my weakness in leading comes when I have to present or talk in front of others. While I understand the content, I stammer over words or hesitate in my answers of questions when in front of a group of my peers. In order to grow in this area, I need to continue to give presentations and group training sessions. This program has given me the tools to make sure I can provide better assessments and in return feel more confident when talking to others. One of the tools I gained in this program was how to research better, how to dig deeper to find better information that would help promote the use of newer technologies in educational or cooperate environments.

**Influential Courses**

**EDLD 5301 Research Methods**

Research methods, EDLD 5301, was for me the best course that I had in regards to the amount of knowledge I gained. Even during my undergraduate work I did not receive a course that offered concepts of how to do research. What I had practiced many times, but never knew the type of research it was called was action research. For me, understand action research in more detail would have helped through most of this program. Unfortunately this course was introduced to me just two courses before my internship course. I have noticed it now is required to be the second course. I think this is a great benefit to all new students because it will allow them to start their research in that course and continue it for the rest of the program and present some quality research results.

**EDLD 5306 Concepts of Educational Technology**

Concepts for Educational Technology, EDLD 5306, is a great introductory course for this program. I found it very useful because it gave me a broad overview of what I would be experiencing during this program, from gaining a deeper understanding of the Texas STaR Chart to understanding digital natives. I think we may start to see mobile natives as more and more students operate their technology in a mobile format allowing digital boundaries to disappear. This is an area I feel it is important for school districts to accept. A digital, mobile, and social culture that is more confined by when they are told to learn compared to their willingness to learn. I believe if we encourage students to use the tools they are comfortable with and encourage them to learn about a topic with those tools they are more willing to learn. In essence they are learning by showing what they can do.

**EDLD 5362 Informational Systems Management**

I felt this was an important course because it introduced some important aspects that technologists need to be aware of, and what can also be encouraged for educators to use. There were many articles discussing the use of online course and the use of technology in educations. Because this is a key area that I believe technology will be leading education I thought many of the readings and the assignments were very useful. One of the items I found most interesting in this course was the discussion of course management systems. I believe schools will be implementing more of these systems and hopefully a state wide sharing initiative can get started where schools can offer their computer or web based courses to other districts allowing students statewide and nationwide opportunities they may not have in standard school settings.

**EDLD 5364 Teaching with Technology**

Teaching with Technology offered a welcome exposure to a number of online tools that provided collaborative learning environments. This I found very beneficial as I think students will be doing more of this in public schools as students begin to harness the power of digital technology as a learning tool. For this course the students had to work together over the Internet to complete a project. This had been the first time I really had worked on the Internet with a group of people I had never met before and actually completed an assignment. It makes me think of how changes are being made in the corporate world, but it also makes me think about how we can change teaching as well. If students were to work with other students all over the world, then they open their minds to other cultures and individuals. This can be very important to both rural and interurban students as it gives them a broader perspective.

**EDLD 5366 Digital Graphics and Desktop Publishing**

Over time I found this program very useful. It was a nice refresher for me to take this course because it helped me remember some rules that I had not used since my college art classes about 15 years ago. These rules and other design concepts are ones I had forgotten, and also important items I need to be teaching in my technology application courses as well. While I don’t see Desktop Publishing an area that will be growing, I do see these tools useful in developing online multimedia based applications.

**EDLD 5368 Instructional Design**

This course really covered many things that I want to see happen in the future. As part of our assignment in this course, we had to create an online course using the website Schoology.com. Because I feel that more and more classes will begin offering some sort of online course management system for the students, I felt I was able to see one tool that is available to teachers. While I personally like some other applications that are out there, this is a simple tool for schools or individual teachers to get started with to encourage a larger usage amongst their campus or district. The Internet is a powerful tool, and course management systems provide an important role.

**Reflections of the Overall Degree Program**

**Three-Year Plan**

References

Johnson, L., Levine, A., Smith, R., & Stone, S. (2010). The 2010 Horizon Report. Austin, Texas: The New Media Consortium.

*Computers and the World of the Future*. (1962). Cambridge: The M.I.T. Press.

Bacon, N. (n.d.). How Out-of-School Programs Enrich Student Learning. *New Horizons for Learning*. Retrieved from <http://www.newhorizons.org/strategies/character/bacon.htm>

Twain, M. (1966). *Innocents Abroad (Signet Classics)*. New York: Signet Classics.