Integrating Technology into Our Classrooms

Tabitha Edmondson-Goodman

ITEC 7410: Instructional Technology Leadership

Summer 2016

Dr. Bacon

*Keywords*: integrating technology, inquiry based curriculum, professional development

Integrating Technology into Our Classrooms

**Vision Statement**

The overall vision for A. L. Burruss is to develop every child as an educated, responsible citizen for our changing world. Within this vision, I believe that technology is a tool for learning that can improve our students communication skills, enhance their critical thinking skills, and differentiate their learning to help improve their academic achievements. The goal of public education has not changed since its beginnings. Our goal is to prepare our students to be successful lifelong learners. What has changed is how we reach this goal. Our technological tools, resources, and even our instructional practices have improved significantly. These advances give our students an opportunity to accept responsibility for their learning, be engaged in topics that interest them and become global citizens. It is our responsibility, as educators, to develop technology-rich curriculums and learner centered classrooms to meet the needs of our students.

**Rationale**

Technology has become an integral part of our lives on a day to day basis. Our students are extremely accustomed to using technology both at home and at school. Integrating technology into our classrooms has to go beyond basic computer skills and computer software programs. The Edutopia Team explains that, “effective integration must support four key components of learning: active engagement, participation in groups, frequent interaction and feedback, and connection to real world experts” (Edutopia Team, 2008). During my recent technology survey I inquired how the participants integrate technology in their classrooms. Several of the participants indicated that they use technology to access programs, websites for inquiry and presentations. Only two of the participants, who indicated that they were technology leaders, shared that their students used technology to gather data, create products, share ideas, and communicate with others. All of the participants indicated that they enjoyed using technology in their classrooms, but several indicated barriers that are enabling them to move forward.

Some of the barriers identified in my survey were: the lack of time to implement these resources effectively and the lack of on-going professional development. Ertmer (as cited in Schrum & Glassett, 2006, p.45) suggested, “These factors can greatly impact whether teachers chose to use the available technology in their instruction.” The Edutopia Team suggests that, “on-going professional development should include: follow-up support, active engagement in relevant activities, collaboration and community building for our teachers” (Edutopia Team, 2008). By moving these barriers our teachers will change the way they teach and their roles will begin to shift. No longer will they be the sage on the stage, but they will grow into roles of advisors, content experts, and as coaches. Integrating technology into our curriculums will also have everlasting effects on our students.

The participants of my survey felt that a technology enriched curriculum and instruction would enhance our student’s critical thinking skills, develop communication skills, and students will be more engaged in their learning. Research has shown that technology can increase student motivation, attitude, engagement, and self-confidence, while improving organization and study skills (Carver, p.110). All of these factors taken together were found to significantly improve school attendance and academic performance (Warschauer, Zheng, Niiya, Cotton, & Farkas 2006). These academic achievements do not occur automatically just because we start purchasing these technology tools. As Carver stated, “Technology’s impact is determined by how teachers use the technology in their classroom instruction” (p.110).

**Diversity Considerations**

Integrating technology into our classrooms can greatly improve the lives of our students, especially our low socioeconomic students. Technology can also bridge the gap between our female and male students as well. Unfortunately, the students who would benefit the most from technology are usually in school systems that cannot afford them. In recent years our federal and state governments have been increasing funds so all of our students will have better access to computers at school. Many of our schools have begun pushing to have one to one technology ratios amongst students. This is a great endeavor with some long reaching benefits, but many of our minority students struggle with technology access at home. Access is the first step towards bridging the gap for all of our students. Authors Warschauer, Zheng, Niiya, Cotton, & Farkas (2006), acknowledged that, “it is the way in which students and teachers use technology that impacts their learning” (p.47). Adopting programs such as inquiry based curriculum, providing on going professional development for our teachers, involving our parents directly in the education of their children, and implementing one to one technology into our schools will greatly impact all of our students.

An inquiry based curriculum will give our students an opportunity to work in collaborative groups, where they can construct and process their knowledge and develop critical thinking skills while interacting with real world materials, models, and technology. By offering our parents training and support they can use these tools to guide their children’s education and access. Once our parents fully understand how and why technology is being used in our schools then they will be better equipped to support their child. Rothschun and Lazarus remind us that, “we have an important role in ensuring that parents have proper guidance and adequate resources to be effective partners in the education of their child” (p.2). Technology can also bridge the gap between our female and male students. Author Ring states, “Girls and boys show similar attitudes toward technology as young children, their views change as they enter puberty” (Ring, 2008).

Many young girls become self-conscious about being labeled as smart. There are several ways that teachers can help close the gender gap. Present our young girls with role models that they can look up to and want to emulate. Ring emphasizes that, “role models will inspire our girls to take more tech-related course in school” (Ring, 2008). These role models will mentor and demonstrate to our young girls that anyone can work in the field of technology or science. Also, engaging them in an inquiry based curriculum will give them the chance to work in collaborative groups and solve real world problems. On-going professional development for our teachers will demonstrate how to purposefully support all of our students equitably in class. There are so many different strategies that we can use to support our students. As educators we must do all that we can to motivate, engage, and develop educational resources to break the cycle for our disadvantaged students.

**Stakeholder Roles**

Putting my vision in action would display to my colleagues, parents, and students how the effective use of technology can support our students learning and our teacher’s growth. I would begin with designating a full-time technology specialist to our school. The primary focus of our technology specialist would be to guide the integration of technology into our curriculums. The technology specialist will also support our teachers through on-going professional development, work with students, and educate and support our parents and community. Along with our technology specialist, our teachers would be working together to teach and support one another. A great way for teachers to learn new technology is by sharing knowledge and ideas with each other. Teachers can learn from other teachers and then they can adapt those tools to fit into their classroom needs and their teaching philosophy.

Our administrators will need to be kept up to date with how our initiatives are progressing and be ready to provide support. They will also be more active in our classrooms. During these visits they can observe and work alongside our students and even help troubleshoot when necessary. This would be a great time to ask our students questions to see how they are progressing. Our administrators should also be attending our grade level meetings regularly. Along with our grade level minutes we need to seek out professional development funds for resources and technology conferences. We can also use our grade level meetings or faculty meetings to share, exchange ideas, and brainstorm solutions to problems.

 We will also need to involve our parents and students in creating this technology rich curriculum. Our students will be communicating their needs through their assessments, projects, and daily classroom activities. Teachers will be able to identify which resources are the most and least effective by having their students reflect often. Our parents will also play an active role in this vision by participating in curriculum events offered in our school. They will also continue to serve as role models for their children while teaching them computer skills and the necessity of digital safety. Technology is such a strong tool to help educate our students. We as teachers look forward to working with all of our families to achieve our goal of preparing our students to be life-long learners.

**References**

Carver, L. (2016, January). Teacher Perception of Barriers and Benefits in K-12 Technology Usage. *The Turkish Online Journal of Educational Technology,* *15*(1), 110-116.

E. (2008, March 16). Why Integrate Technology into the Curriculum?: The Reasons Are Many. Retrieved from http://www.edutopia.org/technology-integration-introduction

Ring, S. (2008, May 19). Tech gURLs: Closing the Technological Gender Gap. Retrieved from http://www.edutopia.org/computer-science-technology-gender-gap

Rothschuh, J., & Lazarus, W. (2010, October). Empowering Parents Through Technology: To Improve the Odds for Children. *Digital Opportunity for Youth,* *7*, 1-16. doi:http://www.abcadultschool.edu/dl/EmpoweringParentsThroughTechnology.pdf

Schrum, L., & Glassett, K. (2006, Spring). Technology Integration in P-12 Schools: Challenges to Implementation and Impact of Scientifically-Based Research. *Journal of Thought,* *41*(1), 41-59.

Warschauer, M., Zheng, B., Niiya, M., Cotten, S., & Farkas, G. (2014). Balancing the One-To-One Equation: Equity and Access in Three Laptop Programs. *Equity & Excellence in Education,* *47*(1), 46-62. doi:10.1080/10665684.2014.866871

**Appendix**

**ITEC 7410- Technology Leadership & Vision in Schools**

Survey and Interview Questions:

**1-strongly disagree 2- disagree 3- Neutral 4- Agree 5- Strongly Agree**

1. Choose the best statement to describe your level of instructional technology skills:
	1. I do not consider myself proficient with technology.
	2. I consider myself a proficient technology user.
	3. My technology skills are very strong.
	4. I am a technology leader.
2. How would you describe A. L. Burruss’ vision for technology?
3. A. L. Burruss provides ongoing professional development to help improve my teaching and student learning.\_\_\_\_\_\_\_\_
4. Students at A. L. Burruss are encouraged to construct and produce knowledge beyond the material from teachers and textbooks. \_\_\_\_\_\_\_
5. Students in my classroom are engaged in technology rich assignments. \_\_\_\_\_\_\_
6. Describe how you integrate technology in your classroom.
7. What ongoing, differentiated support and training should be offered to support your technology needs?
8. All students have equal access to technology that is infused into their instructional day. \_\_\_\_\_\_\_\_
9. Describe how a technology enriched curriculum and instruction has impacted your students/ achievement.
10. A. L. Burruss provides all stakeholders with the technology tools needed to ensure students are college and career ready. \_\_\_\_\_\_\_
11. What current conditions are enabling the use of technology at our school?
12. What role should our parents and stakeholders represent in our schools vision for technology integration?