Vision & Rationale for Technology Integration

Chad J. DeWolf

Kennesaw State University

ITEC 7410 | Instructional Technology Leadership W06

Summer Semester 2015

Dr. Julia Fuller

Vision & Rationale for Technology Integration

**Vision Statement**

Educational and instructional technology (EIT) integration for all staff members and students is essential to ensure that each student is challenged to achieve his or her greatest potential while working towards becoming an independent, productive citizen in today’s 21st century world. Our students must be prepared for jobs that do not yet exist by working with EIT through collaborative connections while developing higher-order thinking skills with real world problems. These lessons must be student-centered, relevant and rigorous, which communicate digitally with Web 2.0 tools. Students using EIT will be leading online efforts inside, and outside the classroom setting to further their digital I.Q. while gaining a deeper understanding of content and technology standards.

**Rationale**

Kulik (1991) found that “students who used computer-based instruction scored at the 64th percentile on tests of achievement compared to students in the control conditions without computers who scored at the 50th percentile.” He also continues to explain that, through surveys, “students liked their classes more and had a more positive attitude towards learning when computer-based instruction was implemented.” This was stated in 1991, which was near the birth of the computer age in education. A family who had a computer then was running DOS and typing everything in a coded/foreign language.

Today, we are in the infant stages of mobile technology with touch screen computer in our pockets that universally understand a swipe left or right. Roblyer and Doering (2012) express the “need for more qualified teachers who understand the role technology plays in society and in education, who are prepared to take advantage of its power, and who recognize its limitations.” Just having the technology is not enough, and has never been. They continue to express that the “teachers who need to become more technologically savvy, also need to be child centered,” by building positive relationships of trust and professionalism with each student. With the growing usage of technology from desktop computers, to mobile devices, and even wearable technology, there is no doubt that EIT is here to stay.

The International Society for Technology in Education (ISTE) created standards that should be followed by all school districts. These standards are broken into four major categories of focus: students, teachers, coaches, and administrators. ISTE believes that we need to “rethink how we teach and learn. And it (innovating education) calls on us to re-engineer our districts, schools and classrooms for the digital age” (ISTE Standards).

The ISTE standards will lead our EIT implementation and the LoTi framework will guide us through our EIT practices during and after implementation. This framework will assist all students, teachers, and administrators in the effective EIT implementation and usages – specifically of 21st Century skills in each classroom. The Loti organization believes in a “school improvement initiative focused on increasing student academic achievement … through the strategic integration of 21st Century skills in the core content areas” (About the LoTi Organization). This is our shared focus and vision for our EIT implementation plan.

**Diversity Considerations**

All students, without racial, ethnic, cultural, gender, sexual orientation, or disability bias, will have equal access to district provided EIT. A digital divide will not occur due to using technology to fill the time, or skill and drill the students who need extra help. The EIT will only be used as an instructional tool in a learning environment, as per our technology vision.

**Stakeholder Roles**

Each of the stakeholders play an integral role in the EIT implementation process. Below are specific examples of what our vision looks like in action. They are directly related and aligned to current ISTE standards for administrators, coaches, teachers, and students.

Administrator will:

* Inspire and lead the implementation of our shared vision for EIT integration to promote excellence and support transformation throughout the organization.
* Create, promote, and sustain a positive and safe digital learning culture and environment that promotes rigor, relevancy, and engagement for all students
* Provide professional development in innovation opportunities for educators to enhance student learning through effective implementation of current EIT and digital resources.
* Provide leadership and management to continuously improve the district, school, teachers, students, parents and caregivers, and all stakeholders through relevant information and technology resources.
* Model and facilitate a positive, safe, and smart digital culture of social, ethical, legal and understanding of online and digital responsibilities and requirements.
(ISTE Standards)

Educational & Instructional Technology Coach (EITC) will:

* Inspire and lead the implementation of our shared vision for EIT integration to promote excellence and support transformation throughout the instructional learning environment.
* Assist educators in the implementation process and using EIT for assessing student learning, providing differentiated instruction, while providing a rigorous, relevant, and engaging learning process for each student.
* Create and support all educators in providing a digital learning environment to maximize the learning potential of each teacher, and student learner.
* Conduct needs analyses on assessments, technology driven professional development opportunities, and evaluate the digital impact on instruction and student learning.
* Model and promote best practices for digital citizenship.
* Demonstrate knowledge and skills in content areas, technological areas, and adult learning through evaluation, reflection, trainings, and continuous learning.
(ISTE Standards)

Educators will:

* Facilitate experiences that advance student learning, creativity, and innovation in brick and mortar and online environments, both synchronous and asynchronously.
* Design, develop, and evaluate learning experiences and assessments that incorporate digital technology tools and resources to ensure that learning is maximized through student’s developing their knowledge, skills, and attitudes towards learning and achievement.
* Exhibit knowledge, skills and innovate professionally in our global and digital society.
* Understand local and global issues and responsibilities within a digital community while exhibiting legal and ethical practices.
* Continuously improve professional practice, model lifelong learning and exhibit leadership through the promotion and demonstration of effective use of digital tools and resources.
(ISTE Standards)

Student will:

* Demonstrate creative thinking, obtain knowledge independently, develop and create innovative products using EIT.
* Use digital media to communicate, work collaboratively and independently (both synchronous and asynchronously), to improve as self-regulated learners and contribute to the learning of peers.
* Manipulate digital tools to gather, evaluate, and use information to make informed decisions, process data and report results, and evaluate.
* Critically think to plan and conduct research, manage projects, identify and solve real-world problems using appropriate and relevant digital tools and resources.
* Understand societal issues related to technology and practice legal and ethical behavior.
* Demonstrate a strong understanding of technology though troubleshooting of old, current, and possible future EIT.
(ISTE Standards)

**References**

*About the LoTi Organization*. (n.d.). Retrieved June 26, 2015, from http://loticonnection.com/index.php?option=com\_content&view=article&id=172&Itemid=28

ISTE Standards. (2015). Retrieved June 25, 2015, from http://www.iste.org/standards

Kulik, J., & Kulik, C. (1991). *Effectiveness of Computer-Based Instruction: An Updated Analysis*. Retrieved June 25, 2015, from http://deepblue.lib.umich.edu/bitstream/handle/2027.42/29534/0000622.pdf

Roblyer, M., & Doering, A. (2013). *Integrating Educational Technology into Teaching,
Student Value Edition (6th Edition)* (Sixth ed.). Pearson.

**Appendix**

 The following are the questions sent to colleagues within my district to guide me through this Shared Vision and Rationale document.

**Shared Vision**
Do you know if MCSD has a clear vision for technology implementation/usage for students and teachers? (Yes or No)
Were you involved or do you know someone involved in the creation of this vision? (I was involved, I know someone involved, I do not know anyone involved)

**Consistent and Adequate Funding**
Do you believe that adequate funds are being used for educational technology district wide? (Yes or No)
Do teachers have the technology tools/devices to implement successful lessons? (Yes or No)
Do students have the technology tools/devices to utilize during their educational lessons? (Yes or No)

**Equitable Access**
Do you believe that ALL students have access to technology, the internet, and devices when needed for learning opportunities? (Yes or No)

**Skilled Personnel**
Have you been trained in using the technology tools/devices available to you by someone from the district? (Yes or No)
Do you feel confident in your abilities to adequately implement the technology tools/devices provided by the district? (Yes or No)

**Ongoing Professional Learning**What areas of technology integration are needed for teachers? (Short answer)
What areas of technology integration have been delivered to you by district personnel? (Multiple list select)

**Technical Support**
Rate the tech support in your building. (1 to 5)
The tech support is available to your needs in a reasonable amount of time. (1 to 5)
Is there a process in which you can ask for technology help and it is provided?  (Yes or No)

**Curriculum Framework**
Are you aware of any instructional technology embedded within the curriculum framework in which you teach? (Yes or No)

**Assessment & Evaluation**
Do your students use technology for assessments? (Yes or No)
If YES, how often? (Daily, Weekly, Quarterly, Once a Semester)