Developing a Philosophy of Instructional Technology: 

Developing a Philosophy of Instructional Technology use for Teaching and learning in the 21st Century in a classroom, district, and professionally as a technology leader.

Ahmad Alshahrani

Instruction Technology 5150 610, Section 800

Professor Ward

October 30, 2010
Developing a Philosophy of Instructional Technology

Developing a Philosophy of Instructional Technology: 

Developing a Philosophy of Instructional Technology use for Teaching and learning in the 21st Century in a classroom, district, and professionally as a technology leader.

Education has an immense impact on human society. Education will help the person to live in a room with all its windows open towards the outside. Education is the best investment in the future, and in today’s world, the role of education has become even more vital. For these reasons it is necessary for each teacher to have a philosophy about education. Therefore, as an educator I will write my philosophy about four points:

1. My Philosophy about instructional technology use in the classroom.

2. Teaching philosophy based on TPACK.

3. 21st Century technology tools for teaching and learning.

4. Understanding the ethical uses of technology in the classroom.

My Philosophy About Instructional Technology Use in the Classroom

At the outset, John Dewey said “If we teach today as we taught yesterday, we rob our children of tomorrow.” (Richardson, 2008). That means teaching today is different than it was twenty years ago today. “Today's students are immersed in media. According to Gartner, by 2009, fifty percent of courses offered will be a hybrid of face-to-face and online, and more than eighty percent of students will use mobile technology as a tool for learning.” (Fleming). Thus, teachers need to be using technology for example, Internet, cell phones, and iPods, to teach the students. Using technology in the classroom has many benefits; for example, delivering the information to the student easily and enjoyably, providing a lot of sources of information, saving time, and effort in the process of teaching and learning. Also, the technologies don’t just
help teach the old information in new ways, they can also help us teach new information in new ways. I think there are some challenges for many teachers to help students enable and realize technology’s most positive effects. First, finding a strong connection between the ways technology is used for teaching and learning and the ways students use technology in their own personal lives. Also, there is a gap between what students learn in school and the skills they need for future careers. So, it is necessary to work hard with students to use technology in ethical, accurate and insightful ways to support the society.

Teaching Philosophy Based on TPACK

“The TPACK framework describes how teachers’ understandings of technology, pedagogy, and content can interact with one another to produce effective discipline-based teaching with educational technologies” (AACTE, 2008). TPACK includes three areas; the first area, Pedagogical Content Knowledge; explains how to teach particular content. The second area, Technological Content Knowledge; explains how to select and use technologies to communicate particular content knowledge. The final area, Technological Pedagogical Knowledge; explains how to use particular technologies when teaching. The TPACK has many features for example, TPACK is “a solid foundation for meeting the challenge of teaching all children with technology” (AACTE, 2008), the environment for learning will become more effective, and TPACK will help teachers to use technology correctly. Through TPACK I learned a lot of information: learning process, how teaching and learning change when particular technologies are used, intersection and interaction of pedagogy and content knowledge. Also, understanding of the manner in which technology and content influence and constrain one another. Currently, I use the TPACK concept when I teach my students. In fact, I am enjoying
using TPACK because now I use technology correctly.

Today there are many teachers around the world who use technology in a classroom and a lot of students like using technology in and outside a classroom. Thus, understanding TPACK Philosophy will help us to invest technology with students very well in the future.


“Our children live in a global, digital world – a world transformed by technology and human ingenuity” (Metiri, 2003). Today, many students are comfortable using laptops, chat rooms, and cell phones to connect to friends, and family around the globe. When we look quickly on the rapid rate of change, there is a lot of information, and the technology becomes a significant Influence in life. Therefore, the students need to acquire different skills for adapting to life today. I think there are some skills that are very important to the success of the students in the 21st Century. These skills include; critical thinking, problem solving, communication and work of collective, and creativity and innovation. How can I execute these skills in the classroom? is very important because the answer will give me a big map to what I should work with my students to achieve mastering in these skills. According what I read in (P21 framework, 2009) and my philosophy, there are some ideas to apply these skills in my classroom.

Creativity

“Use a wide range of idea creation techniques (such as brainstorming)” (P21 framework, 2009), training the students to be sensitive to problems, and training the students to be flexible.
Innovation

Change the style of examinations of questions that focus on memory such as what is remembered …, etc to the questions that need to open the mind and thought process, and give the students some projects to be implemented during the semester, the main goal for this idea is teaching students to create many ideas and choose the best.

Problem solving

Training the students to create many solutions for a problem, “Identify and ask significant questions that clarify various points of view and lead to better solutions” (P21 framework, 2009), and “Solve different kinds of non-familiar problems in both conventional and innovative ways” (P21 framework, 2009).

Communication and work of collective

Encourage the students to work effectively and respectfully with diverse teams, “Assume shared responsibility for collaborative work, and value the individual contributions made by each team member” (P21 framework, 2009), and “Utilize multiple media and technologies” (P21 framework, 2009).

Critical Thinking

“Analyze how parts of a whole interact with each other to produce overall outcomes in complex systems” (P21 framework, 2009), and training the students to some skills such as: asking questions, problem identification, and analyzing the assumptions.
Developing a Philosophy of Instructional Technology

Understanding the Ethical uses of Technology in the classroom

“IN an era of rapid change, technology leaders and facilitators are constantly grappling with how to use technology programs in positive ways” (Williamson & Redish, 2008). Today there exists many new concepts in technology such as, social and ethical. Unfortunately, many teachers think that using technology means using some program such as, PowerPoint. Thus, it is important to understand these concepts correctly to get good results in the future. “Some of the most prominent contemporary issues facing school technologists today are digital equity, privacy of electronic student records, student’s online safety, and copyright infringement” (Williamson & Redish, 2008).

**Digital equity**

Digital equity requires that all students have quick, easy, and appropriately functional access to equipment and the Internet both in and out of school. My Philosophy about the digital equity includes some points: equitable student access to all types of technology in and out of the classroom; appropriateness of technology for students; affordability of technology and technology use; and human capacity and training.

**Privacy**

Privacy is a very sensitive issue that a lot of people care about. Today, there are many problems in many fields such as education. The most common problems occur with students who create simple or obvious passwords, share accounts with others, write passwords down in accessible places, or leave computers without logging out. The best solutions to these problems are giving the students training in some skills such as; creating a hard password, and some strategies to save the privacy information.
Online safety

Today, the internet is a new environment for students. This environment has advantages and some disadvantages. Thus, we need to consider how we can get advantages in this environment. Statistically, kids are safer online at school than at home because they are often better supervised at school, as someone usually oversees all their online activities by watching them. Also, the students have limited school Internet access. I believe we need to work hard with students to adapt with this environment, through three strategies:

Provide advices and guidelines

Never fill out questionnaires or any forms online or give out personal information (such as name, age, address, phone number, school, town, password, and schedule) about yourself; never agree to meet in person or with anyone you have spoken to online, never tell anyone online where you will be or what you will be doing, and never send a picture over the Internet or via regular mail to anyone you've met on the Internet.

Train the students in some skills

For example; staying safe from online predators; protecting computer data; staying safe with online gaming, and while using chat rooms, IMs, and Email, and learning about viruses.

Create a program

Exploring online educational programs, such as imbee.com and think.com, to integrate social networking tools into educational environments (Williamson & Redish, 2008).

Copyright

I think new technologies are the main reason to see some undesirable behaviors. “This is especially true in cases like plagiarism and unauthorized duplication of other
copyrighted materials, such as movies, and music” (Williamson & Redish, 2008). Today there are some undesirable behaviors beginning to proliferate for example: “buying papers online and submitting as original work, making and possibly distributing illegal copies of copyrighted movies” (Williamson & Redish, 2008). I think they are some of the reasons to see this phenomenon between the students; first, many teachers do not understand copyright law. Second, some schools do not focus in this subject with teachers and students. Finally, some products of technology are expensive. I think the best solutions for this problem are “using information, curriculum, and guest speakers from key organizations promoting copyright adherence” (Williamson & Redish, 2008), using some programs in the school to prevent the teachers and students installing software without permission, talking with teachers and students about the copyright law and sanctions, and teaching the students what plagiarism is.

In Conclusion, Success in the 21st Century depends on the quality of the philosophy. Therefore, to become mastered in instructional technology use in the classroom, a teaching philosophy based on TPACK, 21st Century technology tools for teaching and learning, understanding the ethical uses of technology in the classroom is a key to success to get good results in the future.
Develop a philosophy of Instructional Technology

Reference


