Philosophy of Instructional Technology

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Aiding the student in his/her quest to become a life-long learner is the ultimate goal of teachers. In this global society, high school graduates must possess skills that will not only allow them to compete and succeed in the workplace but also communicate with people for various purposes and by various means. Today’s teachers must accept and excel in many roles in and out of the classroom in order to prepare students for the world at large. They must be life coaches, classroom managers, content experts, problem solvers, etc. Above all, teachers must be facilitators of their students’ learning. By providing the means to gain and improve skills in critical thinking, communication, and collaboration, teachers allow their students to carry these skills forth into their chosen post-secondary path. Stewart (2007) calls teachers to this task: “…our challenge is to hone students’ critical thinking skills and to familiarize students with key concepts that they can apply to new situations” (p. 10). These skills will never become outdated or irrelevant for any student because no matter how society changes, society’s members must be able to think critically, communicate easily, and collaborate effortlessly. No matter what the school setting, rural, suburban, urban, public or private, teachers can and must use technology to enhance their students’ learning and to prepare their students for the future. Technology should be readily available, employed daily, and integrated seamlessly.

Teachers have the main role in the employment of technology in their classrooms; however, it is the school’s responsibility to make sure that the technology is purchased and installed for classroom use. Every member of the faculty and staff must have a shared view of technology use. Williamson and Redish (2009) confirm this by stressing the idea that a shared goal unites a school and allows for goal attainment (p. 106). If any level of the administration is not solidly in favor of technology integration, then the teacher will have a difficult time obtaining support for the use of it in the classroom. This is detrimental to the students. As development
and cost of technology has improved, most teachers have the opportunity to integrate technology into their lesson plans. When used daily in a purposeful way, students and teachers benefit and increase their 21st century skill set. Technology must enhance the students’ learning, not distract students from learning specific content and not replace the teacher as the facilitator and motivator in the classroom. Seamless integration is essential in fulfilling the need to enhance students’ educational experiences. Teachers must know the software and the hardware very well, and they must be prepared for any glitch because no matter how advanced the school is in terms of obtaining and maintaining the latest technology, there will be glitches. How one faces and solves these issues is another valuable lesson to demonstrate to students.

The ease of technology usage in the classroom is dependent on the teachers’ classroom management style. Procedures and expectations, when clearly explained and practiced, prevent mishaps and safety issues with computers, both hardware and software. When a teacher clearly conveys how students should act in the computer lab, what they may search for on the Internet, and how they must respect the school’s equipment, the technology usage in the classroom will become effortless as the school year progresses. According to Wong (2001), clearly stated procedures are essential for students’ sense of security: “Students must know from the very beginning how they are expected to behave and work in a classroom work environment” (p. 170). When a student feels secure, he/she can learn without distractions or worries. Teachers must also allow time to not only demonstrate the technology but also for the students to experiment with it. This may take valuable time away from the content of the class, but in the end the practice will save time because the students will be well-versed in the technology and they will know the procedures necessary to be successful with that technology. Allowing time
for these practices at the beginning of the school year results in fewer mishaps and more quality time with technology for the students and the teacher.

A teacher also needs to apply the TPACK model to his/her lesson plans so that technocentric teaching does not become a habit. TPACK is the blending of the best of technological, pedagogical and content knowledge. For many teachers these knowledge bases are evolving, developing, and circling one another. In other words, teachers continue to learn and apply this knowledge to their lesson plans throughout their careers. Good teaching centers on good planning, and good planning comes with practice and experience. Koeler and Mishra (AACTE Committee 2008) state, “Integrating technology in the classroom is a complex and ill-structured problem involving the convoluted interaction of multiple factors, with few hard and fast rules that apply across contexts and cases” (p. 10). Unfortunately, teachers face many dilemmas when utilizing technology with their students. These dilemmas must be anticipated to the best of one’s ability so that they can be avoided. On the other hand, teachers should not be apprehensive about technology integration because trial and error, especially in less technologically savvy schools, might be the only way they can advance their students’ technology skills. In using TPACK as the basis for lesson planning, a teacher can employ the best tools for transmitting knowledge to his/her students. Focusing how the technology compliments the content will allow a teacher to reach her students in the best way.

Once a teacher understands that simply using technology is not sufficient enough to reach his/her 21st century learners and that the confluence of TPACK is vital to the classroom, he/she needs to select the best technology tools for the objectives and activities for his/her students. Using a guide like the Activity Type charts provided by Young, Hofer, and Harris (2011) is a fantastic starting point. Teachers should have this chart, as well as the TPACK diagram nearby
when they are writing their lesson plans. Of course, many English teachers know that wikis and blogs can be used for individual online journaling, but they can also be used for Literature Circles to document group discussions about a shared reading (Young, Hofer, and Harris, 2011, p. 3). More effectively than forcing one’s students to use certain technology tools is developing assignments that allow students to select the best technology tools for their purposes. This is the best way to instill 21st century skills in to one’s students because students not only produce assignments that assess their learning, but they also choose the best method for creating the assignments, which involves evaluating and planning for the outcome.

Another necessity in the use of classroom technology is making sure one’s students are safe. Knowing, practicing, and teaching copyright laws show students how important integrity in one’s work is. Anticipating and preventing safety issues ranging from the viewing of inappropriate content to physical safety with and around equipment is essential for a well-managed classroom. Of course, students also deserve equity in terms of access. No one student should be excluded from using technology as much as his/her classmates.

The logical path for a teacher who successfully integrates technology into his/her own classroom is to help others do the same. The teaching profession and its practitioners are ever-changing. Although younger, more technologically savvy teachers are being employed, a large population of teachers is older and less comfortable with technology. Technology facilitators are needed in every school building to bridge the gap between the “immigrants” to the world of technology and the “natives” that reside there. A technology facilitator with classroom experience will understand the increasing number of daily responsibilities that a teacher has; he or she can help that teacher not only balance those responsibilities but also find technological solutions to ease the teachers’ burdens. The building technology facilitator will realize that
teachers are learners too and must be taught in meaningful ways how to implement new technologies in their classrooms for use by their students: “By helping other educators become proficient users of productivity tools, technologists can help transform schools into efficient workplaces reflecting the skills and knowledge students need to be productive members of society in the digital age” (Williamson and Redish, 2009). Without a little handholding and encouragement from the technology facilitator, teachers might decide to eschew technology in favor of what they consider tried and true methods. The ramifications of this choice are detrimental to the students’ path to becoming a life-long learner and successful member of society.

Education has always been a great equalizer because with a quality education one can succeed. Now technology is a true equalizer because when students have access to technology in schools, they can learn how to analyze and evaluate information, they can communicate with people outside of their community, and they can collaborate in the creation of new products. No matter where students live or what their socio-economic status is, access to and use of technology can help them to succeed in their future endeavors.
References


Williamson, J., & Redish, T. (2009).*I STE's technology facilitation and leadership standards: What every k-12 leader should know and be able to do*. Eugene, OR: International Society for Technology in Education.