Technology: Promoting Authenticity in the Classroom

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Introduction

In today’s fast paced society, it may seem impossible to engage teenagers in active learning in the classroom. With social networking, text messaging, and the Internet, some teachers find keeping students’ minds in the classroom an impossible task. Many teachers, however, choose to teach students how to use these technologies as learning tools. These teachers find that by incorporating the very things that tempt the students’ minds to wander from the classroom, active and authentic learning takes place. Authentic learning is a way for teachers to break the mold and engage kids; Anthony and Jan Herrington describe this type of learning as a

 Practical framework for teachers wishing to break away from traditional, teacher- centered approaches...and who are willing to create learning environments where students are motivated to learn in rich, relevant and real-world contexts (2008).

Utilizing technology is one of the best ways to create these relevant and real-world experiences because that is the way that many students want to experience the world around them. That is not to say that technology should be the only way through which students experience the world around them of course, only a way to support those experiences. Two important ways that technology supports authentic learning are through community involvement, and collaboration.

## Authentic Learning

The importance of authentic learning is implicit in its name: it makes learning real for students. This is important in order to both foster a love of learning, and prevent a disdain for it. In his book *The Game of School,* Robert L. Fried describes school as a place that stifles the natural sense of curiosity people feel about the world around them. He describes what he calls the game of school as the “paralysis of intellect and meaningful inquiry” (2005) brought about by teacher-centered instructional strategies and unmotivated students. Fried argues that this paralysis occurs “after enough time has gone by in which little or no authentic learning has taken place” (2005) students replace “a personal sense of value with a fixation on external and symbolic reward” (2005). Fried concedes,

It’s not that nothing happens there or that kids spend their time just fooling around or that teachers don’t try to present their best lessons…it’s just that unless our children…are truly engaged in their learning, most of what they experience during school hours passes over them like the shadow of a cloud, or through them like an undigested seed (2005).

This reinforces the fact that if students are unengaged, learning does not occur. The use of technology and engagement in online communities, however, gives teachers a viable way to work against this disengagement and complacency.

Another reason that makes authentic learning so important is that it increases student achievement in many ways. In *Teaching the Best Practice way: Methods that Matter, K-12*, the authors uses science as an example to describe one way authentic learning helps students achieve; they state,

The National Academy of Science makes this bold statement: ‘Inquiry into authentic questions generated from student experiences are inherently multidisciplinary and often messy; problems need to be identified, complexity needs to be faced, and solutions must be found (2005).

This shows that the organization that creates the standards for achievement in science recognizes the importance of authentic learning.

In addition to student achievement, authentic learning teaches students to take ownership of their learning. In the science experience referred to in *Teaching the Best Practice Way: Methods that Matter, K-12,* the students directed their own learning and take on new roles, not necessarily prescribed to them. The authors explain how the learning became more real:

This authentic scientific inquiry started with the interest and natural curiosity of the students and taught them much more than stuff about earthworms. They became researchers, conducting experiments, recording information, discovering answers, and asking more questions (2005).

This makes it clear that when authentic learning takes place, students learn academic skills for beyond that time and place. The knowledge they gained through conducting an authentic experiment will travel with them beyond their study of earthworms because the students now have ownership of that knowledge.

When students learn authentically, thereby taking ownership of what they’ve learned, they open the door to intrinsic motivation. When students feel empowered and learn to command what they’ve learned, students feel curious about other subjects they may learn successfully. This intrinsic motivation to learn is not always easily attained; however, the addition of technology to the classroom can stimulate this type of authentic inquiry.

Technology can facilitate this type of authentic learning in many ways. Beyond student engagement and encouragement, participating in an online community requires academic skills that are both necessary for high-level media literacy and crucial for success off the web. In his book *Media Literacy,* Potter describes the seven skills of media literacy as the following: “analysis, evaluation, grouping, induction, deduction, synthesis, and abstracting” (2005). These skills are necessary for success in every subject, so this shows that technology not only opens doors that were previously closed, but also reinforces very important extended thinking skills. Because technology transcends subject matter, when students participate in authentic learning experiences via technology, they are learning skills relevant to multiple facets of their lives.

Another important aspect of why technology aids students in authentic learning is that is allows students to be flexible in their learning. This allows them to explore the best way for them to learn, thus making the learning more authentic. When students feel autonomy in their learning choices, they feel empowered and are given the tools to take ownership of their learning. In *Flexible Pedagogy, Flexible Practice*, the editors observe that “students think about their complex needs for choice around course and personal logistics, [and] they develop their expectations of teaching and learning” (2011) Technology allows students to learn in more flexible ways that are more likely to produce feelings of self awareness and learning ownership.

Today, the walls of their classrooms no longer confine teachers and students. Technology allows students to easily transfer their learning in school to their lives beyond the classroom. “Our classrooms in the 21st century are not defined by desks, students in rows, blackboards, and a teacher up front. The word ‘cyber’ defines many learning spaces” (Dallas & Powers, 2006). These learning spaces include class wikis, blogs, websites, apps, and other venues that promote real-world learning. When students transfer their learning to these venues, students see real consequences and real learning occurs.

# Collaboration

Collaboration is one important learning skill that is optimized when authentic learning takes place. Most people acknowledge “to be successful in the job market, students must be able to articulate what they know and to listen to the ideas and opinions of others” (Tileston, 2005). Because of this real world circumstance, in schools “students practice cooperative and collaborative learning strategies to help solidify what they have learned and to practice the learning so that…the learning is in long-term memory” (Tileston, 2005). This explains why it is important for students to collaborate in school. When their learning is authentic, students have many opportunities to collaborate.

In *Creativity & Collaborative Learning* the authors pose “one of the most critical educational questions for the 21st century: How can we harness the capacity of people to collaborate and to use human creativity to create learning that will lead toward an inclusive, multicultural society?” (2002) Technology offers many solutions to this question. Through complex HTML-writing programs like Dream Weaver to simple apps like Flashcardlet, students are presented several opportunities to collaborate with one another in a productive and profound way.

When describing the authentic learning taking place during a science experiment in *Teaching the best Practice Way: Methods that Matter, K-12,* the authors highlight the importance of collaboration in the learning process. They explain that, “the students worked collaboratively, because in the real world science is a collaborative enterprise, dependent upon the sharing of ideas and discoveries” (2005). In order to truly understand the meaning of scientific discovery, the students had to work together. This shows that only when the learning is authentic can students truly grasp the concept.

Students are more willing to collaborate and generally have more success when their learning is authentic. Students realize the importance of working together in order to achieve a goal bigger than the group; bigger than the classroom.

The students and teachers involved in this science experiment learned the value of learning collaboratively. These students learned that

learning is a dynamic, social activity that is supported by relationships and by community. It is well documented in educational and psychological literature that collaboration enhances learning. Collaborative learning practices encourage students to work together to enhance their own learning to maximize the learning of the entire class (Cambridge, 2012)

Some of the best technological tools that support this type of collaboration are blogs, wikis, video conferencing programs, and virtual classrooms to name a few.

In many aspects, students collaborate more successfully when using technology. When accessing the vast expanse of online learning, students encounter other cultures, and in conjunction with guidance from their teacher, learn to problem solve with people from other cultures in a positive and productive way. In chapter 5 of the book *Flexible Learning in an Information Society,* the authors pose a question that people throughout the world face constantly: “How can we overcome potential cultural discontinuities in online collaborative project-based learning environments?” (2007). The answer to this question may be to introduce people to varying cultures via online interaction at an earlier age. If teachers provide students with support for authentic collaboration with other students around the world, then students can take ownership of this process, and ultimately become better problem solvers.

# Community Involvement

When students’ work is involved in the community, local or online, the learning is more authentic. Learning through an authentic, real- world experience gives students insight into different aspects of how they might apply this knowledge outside of school. As the author of *Ten Best Teaching Practices* describes,

nothing is more real-world than the experience of being in the place discussed, conversing with the people being studied, or watching practitioners use the skills being learned. Through video conferencing, virtual classrooms, distance learning, and the Internet, all of these things are possible today” (Tileston, 2005).

When students experience this type of learning, the learning process is more memorable and beneficial.

Teaching students how to use technology, not simply giving it to them is of the upmost importance. In a recent online article, “Removing obstacles to the pedagogical changes required by Jonassen's vision of authentic technology-enabled learning,” the authors emphasize what teachers must do beyond bringing technology into the classroom. They explain,

The use of technology in the classroom is not the critical issue facing education in the 21st century. [Rather], the issue of foremost importance is to develop thinking skills in our students so that they will be able to utilize the power of technological tools to solve problems and do useful work. This, then, translates into the requirement that technology be placed in the hands of students, who are encouraged and enabled to utilize it in the same ways, and for the same purposes, that professionals do – that is, to communicate, collaborate, and solve problems (2012).

This sense of participating in the online community in order to work with other people fosters a sense of belonging to and participation in a community, which is a fundamental step in the learning process.

Students can use technology to be involved in the community through several venues. Students can participate in blogs, forums, wikis, posting videos to YouTube, and other websites that allow students to share their work and ideas. This sense of online community involvement is a great way to get every student involved in the topic, and encourage the student to feel apart of a group.

When students become involved in the online community, they must grapple with the social responsibility of interpreting the messages they encounter; in other words, they must develop a higher degree of media literacy. As students become more involved in the online community, and they develop this higher degree of media literacy, there are several advantages, as stated in James Potter’s book *Media Literacy*; for instance, “first, media literacy grows one’s appetite for a wider variety of media messages” (2005). By participating in online communities, and thus developing a higher degree of media literacy, students don’t feel confined to one type of media message. They can expose themselves to a broader range of information because they have the confidence to use a variety of online resources. Potter goes onto say, “Second, it gives people knowledge about how to program their own mental codes” (2005). This advantage means that students are able to shift the control of the information presented to them away from the source and into their own hands. For students, this means the higher their degree of media literacy, the more they can exercise critical thinking about the information presented to them. Related to this advantage is Potter’s third and final advantage: “it provides people with more control over the media” (2008). This point argues that when students have control over media literacy, they can use each information source to their advantage to support their own ends, rather than taking everything they see at face value. So, by getting involved in the online community, students will have more control over the information they receive via online sources, both academic and non-academic. They become more aware, cautious, and curious users of technology.

Conclusion

As a teacher, I not only strive to teach students that technology can reinforce collaboration and community involvement, but also to appreciate and acknowledge the achievements of the human race and the collective consciousness. I teach students to acknowledge others’ achievements with pride in the human race, rather than dwell on their own perceived shortcomings, which can be a danger of unlimited access to the online world. These ideas are represented and taught through both Collaboration and Community involvement. For embracing this concept, I draw support from the book *Being Nobody, Going Nowhere,* which describes an alternative option to the envy that sometimes emerges in the minds of young people given access to technology. Khema describes this other possibility:

One can also have joy with other people’s abilities…there are so many things other people can do better than ourselves. Some can sing and some can paint, some can dance and some can translate, some can make money and some can live without. Everybody has some ability. One can find innumerable occasions for being joyful (1987).

While the author of this book describes one avenue for Buddhist meditation, the same principals apply to the way teachers must teach students to embrace technology.

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