

Applying Technology to a Problem of Practice in Education

Overview

- ☞ Reviewed by Julie Howe
- ☞ Analysis of PBworks.com as a collaborative online tool to meet Michigan Educational Technology Standards for grades 9 - 12.



The Problem of Practice: A Need or an Opportunity

- ☞ The educational need was to identify a collaborative online tool where students could create, share and edit their individual learning plans. Additionally, each student would need to include how he or she would use technology including this collaborative online tool to advance his or her lifelong learning goals.
- ☞ To be an effective teacher with successful students, it is critical to create lessons in which the instructions, activities and assessment are aligned to the curriculum and make sense to students. (Brophy) My focus has always been to design with the end in mind. The Michigan Department of Education has established a set of standards and expectations to ensure that each high school student has the ability and skills to meet the needs of the 21st century society. The specific expectations addressed by this reviewer are the student's ability to explore career opportunities and identify their related technology skill requirements, design and implement a personal learning plan that includes technology to support lifelong learning goals and use available technologies to

communicate and collaborate on a class project. ([MDE Tech Standards, Grade 9-12](#))

The Setting

☞ The idea behind educational collaboration with technology is the sharing of information in a safe setting that will hold its users accountable. I am currently teaching two sections of a required freshmen course titled, Technology Literacy. My classroom is a computer lab in which each student has his or her own computer and access to the Internet. The district has implemented efficient online filtering software to protect students, but there is still the responsibility of maintaining a “walled garden” where students can learn, be creative and interact with social responsibility.

Technology-Integrated Solutions

☞ **Summary:** The collaborative online tool that I selected was [PBworks.com](#). PBworks was originally called PBwiki and was started in 2005 as an online host to educational and business collaborative websites. The PB stands for peanut butter because the company’s motto was that making a wiki with PBwiki was as easy as making a peanut butter sandwich. (Weekly) Creating a wiki in PBworks is easy, free and can be password protected for a classroom setting. Students can publish and edit their work and collaborate on the work of classmates while still being held responsible for their actions because they are not anonymous.

☞ **Rationale:** PBworks is easy to use, free, can be private or public, password protected, and can be organized as a class. It was important to have an online collaboration site that allows students of all ability levels to have success

creating their own page. The editing page is organized very much like a Word document and is familiar to students. Each student has his or her own page because wikis will not allow multiple editors to edit the same page at the same time.

- PBwiki is free, but offers paid premium services. For educational purposes, the free edition of PBwiki was chosen. Other wiki providers were researched and Wikispaces was comparable as to ease of use, but PBworks was chosen over Wikispaces because Wikispaces charges for private wikis after 30 days. In addition, Wikispaces did not offer wiki membership without email addresses.
- PBworks allows teachers to create an online class. The class list is imported to PBworks and user names and passwords are generated for each student. This is important because each student is held accountable for his or her edits. Any changes are tracked to them. The software also informs the teacher by email or RSS feed of each edit and who made the edit.

 **Logistics:** I had to register with PBworks.com and create the class wiki, front page and the page for instructions. The class list was imported and the software randomly generated user names and passwords. I then linked each student's page to the instructions page to make it easier to get started. The students just needed to click on their names and they were taken directly to their page to start working on their learning plans.

- To begin teaching the unit on wikis, I showed a TeacherTube video on the history of wikis. Then I assigned a web scavenger hunt I had created for students to research what a wiki is and the history behind wikis as well as the trials and tribulations of using a wiki as a communication tool. I also created a

PowerPoint presentation with an overview of the project, instructional handouts and assessment rubric. Class discussion with a review of netiquette laid the foundation for acceptable wiki conduct. Because my classroom is a computer lab, the timeline for completion of the learning plan was two class period segments of about 45 minutes each. (Our classes are scheduled in blocks of 72 minutes each.)

- To insure that I had clearly communicated the expectations of this learning plan project, I created an outline version of my own learning plan including the technology skills I need and the current classes I am taking to acquire new skills to demonstrate lifelong learning.

Benefits and Disadvantages of this Solution

- 🖥️ I implemented a class wiki this week with PBworks. It only took about an hour and a half to design the front page with our school mascot and color design, create the instructional page, create the student passwords and link their pages. With the wiki set up, next trimester I will just need to make a few edits to the class name, clean out the old files and import the new class list.
- 🖥️ The class wiki worked incredibly well with my freshmen Tech Lit students this week. They were excited to each have their own “webpage”! The students initially struggled with the idea of a learning plan and the alignment with technology, but the sample student page I created help to model the project. Once they got started creating and reading each other’s learning plan, everyone was engaged. The collaboration started as polite comments regarding missing sections of the learning plan and correction of spelling errors. They even corrected each other’s work in a few cases. As the project progressed, the

comments were more thoughtful and focused on the career and college choices. The quality of the students' work was impressive. It was as though they had already assessed each other, which made my job at the end of the project enjoyable.

☞ With the free account, PBworks offers automatic backups and a history and edit log, which keeps a complete list of edits. A special education student was near tears as she somehow managed to wipe out her entire learning plan page, but it was only a matter of a few clicks and we were able to restore all of her work.

☞ PBworks also offers notification options that include email and RSS feeds. This makes keeping track of students' work manageable. I turned on the sound for my email notification on my classroom computer to illustrate to the students that I really did know every time they made an edit to their page. This made an impression on the class and kept everyone's work at a high standard.

☞ **Disadvantages:** When I commented on a student's proficiency in using the wiki's web-based editor, she rolled her eyes and replied, "Mrs. Howe, this is just like creating my page in MySpace, but with school stuff!" A classroom wiki requires careful instruction and supervision to insure that the project stays educationally focused. I had a very detailed list of expectations in the rubric, which helped keep the learning plans on the professional level, but it could have easily gone the other way.

☞ My colleague chose to use my lesson plans for her Tech Lit class, but she decided not to import her class list and protected the wiki with only a single password for the entire class. This created the problem of accountability with

the edits because the students were not individually identified. Fortunately, she had set up PBworks to send an email for each edit because some of her students decided to use the wiki in a less than professional manner, which she was quickly able to remedy.

Implications

- 📄 PBworks allowed the entire class to collaborate very easily. We were collectively able to create, share our work, express ideas, and edit each other's work, which is the true technological strength of a wiki. (Hsu)
- 📄 The lesson learned from this project was that our class wiki made our classroom more of an educational community where individuals worked together to learn.
- 📄 Reflecting upon this project, there are two applications of the wiki that I would like to incorporate for the next trimester. From the first day of the trimester, I would like my classes to have a separate wiki that students can use as a way to share ideas and positive suggestions. Additionally, I think that the inclusion of a podcast in the learning plan wiki would be a great way for students to share in their own voices their plans and dreams for the future.

Works Cited

Brophy, Jere. "Teaching." *Educational Practices Series*. 1. (1999): 13-14. Print.

"Educational Technology Standards & Expectations Grades 9-12." *Michigan Department of Education*. January 2006. Michigan Department of Education, Web. 1 Nov 2009. <http://www.michigan.gov/mde/0,1607,7-140-28753_33232_37328---,00.html>.

Hsu, Jeffery. "Innovative Technologies for Education and Learning: Education and Knowledge-Oriented Applications of Blogs, Wikis, Podcasts, and More." *International Journal of Web-Based Learning and Teaching Technologies*. 3.3 (2008): 71-74. Print.

Weekly, David. "The official blog of PBworks/Philosophy." *PBworks.com*. 2009. PBworks, Web. 3 Nov 2009. <<http://blog.pbworks.com/category/philosophy>>