Katy McDonald
January 29, 2010
A28469138

Analysis of a Technology Innovation in the Classroom

Overview:

This is an analysis of the use of the Blackboard online course management system as a way to decrease the daily amount of paper used in my classroom and expose my students to sites like Blackboard.

The Problem:

Being an Alternative Education teacher, I deal with the overwhelming task of helping at-risk kids in an extremely unique environment. Besides trying to find ways to deal with their behavior problems, we also struggle as a school to fill in the gaps of their academic history. For example, it is not uncommon to have a high school student struggling with basic math skills and constructing simple sentences. Their behaviors often prevented them from learning the material the first time around, creating a monumental task for the staff in my building. Naturally, as a result, our test scores in English and Math tend to be very low. Our building's School Improvement Plan was designed to incorporate more instructional time that focused on reviewing and strengthening basic skills in the areas of math, writing, and reading comprehension. From the School Improvement Plan came the beginning of the "Do Now".

A "Do Now" is a daily warm-up activity given at the start of every class period. These "Do Now" activities were intended by the School Improvement Committee to be a way to focus on the areas that our students scored the lowest on in the standardized testing, which includes the MEAP and ACT/MME tests, without taking away from instructional time on regular coursework. For example, though I follow the Michigan Standards and Benchmarks for U.S. History, I have a 5-minute warm-up activity that has students focus on writing or perhaps on a math skill like multiplying fractions. I take five to ten minutes to reinforce and reteach these concepts, and then move on to our regular coursework.

In the English courses I teach, I have been using the Do Now to practice grammar skills daily. Websites like www.edhelper.com and ACT preparation websites have been a great resource to find daily grammar worksheets. Though I have seen improvement in the quality of my students' writing as a result, doing these daily worksheets in the computer lab has consumed a large amount of paper. Since our program director has implored that we try and find ways to reduce the amount of lined paper and computer paper that we use in class, I have been trying to find a different way to have my students still complete these daily tasks. Therefore my problem is still assigning these daily practice activities without using an excess amount of paper.

The Setting:

I have four sections of online English classes in our school computer lab. The learners are high school students grades nine through twelve in an Alternative Education Program. The online classes use PLATO, an online program, but will soon be switching to a new program called Compass Learning Odyssey. Presently, neither program allows students to submit assignments to me electronically besides the tutorials and quizzes developed for the program itself. In other words, there is no option for me to give students an extra writing assignment that could be submitted electronically. Therefore, I either need to have students print out materials, use copied materials, or they must submit assignments on lined paper. All three options have proven to be quite costly to my building since we even supply lined paper to students.

Technology Integrated Solution:

In view of the fact that my district currently does not have class web pages and I could not get permission to get www.weebly.com unblocked in my computer lab, I then looked into using Blackboard. Though my principal/program director was initially concerned there would be a cost associated with the program, I contacted my ISD and learn it was offered through the ISD free of charge to districts in the ISD. I requested for my ISD to create Blackboard courses for me to serve as both a platform for me to electronically assign my "Do Now" exercises daily and for students to submit their completed assignments to me, also electronically.

Though I requested courses in Blackboard for all the courses I teach throughout the day, I chose to implement it in my senior class only. This is because I was lacking in both time and in equipment. It was currently the end of the semester and I wanted to focus more time on end of the card-marking activities. For the freshman and sophomores in particular, it would have been an information overload at one of the busiest times of the year. At the same time, I currently do not have a digital projector, SmartBoard, or even a TV hookup in my computer lab. In other words, I do not have any equipment to visually demonstrate how to navigate the webpage in the classroom. Though I have been promised a projector this year, I am still waiting for it. For this reason, I decided to first introduce the website to my senior group. It is a smaller class that I could do demonstrations with in groups. They are also a more mature class that has an easier time adapting to new ideas and new websites much faster than the younger students.

I decided to try using Blackboard for two weeks before making the decision whether or not to implement it in all my online classes. After receiving my account information from the ISD, I was then required to create an Excel document with usernames and classes I wanted to have created. I then had to give a small presentation on how to access and login to the site. The seniors seemed to catch on very quickly to this. The first week I uploaded grammar worksheets in PDF format. Students were instructed to open the PDF document and answer the questions in a word document to submit. The second week I assigned a variety of "Do Now" assignments, including writing prompts for the discussion board. All "Do Now" assignments were assigned and submitted electronically through Blackboard.

The most difficult part for me has been teaching myself how to use Blackboard through my own experimentation and through using the Help options and online tutorials. My ISD strongly recommended attending a Blackboard training session. I had assumed that navigating in Blackboard would be similar to navigating in Angel. I have found Blackboard much more difficult to get accustomed to especially since the tabs, headings, and links do not seem to lead me to where I expect to find various functions. For example, when looking for a tab to create an assignment, I was not expecting the "Information" tab to be the very link I was looking for. Though I know I can learn how to use the system, I think it will take me more time than I had anticipated to master the site. The tutorials are helpful, but I do not always have the same functions that are being demonstrated in the tutorial.
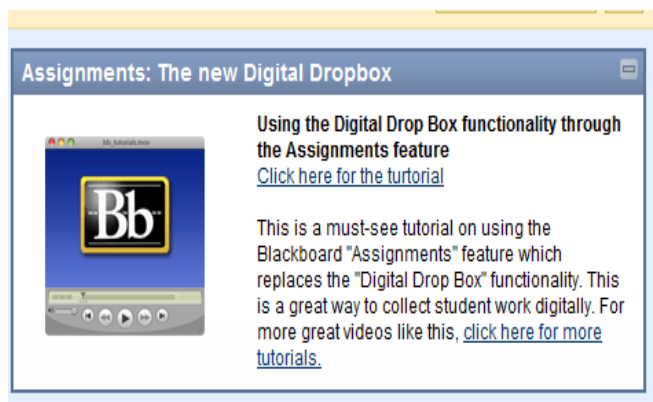

Figure 1: Tutorials are available for me. However, I have noticed that not all functions are the same in my version of Blackboard. For example, the "Assignments" feature in this tutorial is listed under "Information" in my version of Blackboard.

Benefits of the Solution:

The first and most important benefit of using Blackboard as a solution to my problem is that I am exposing my students to websites like this for the first time. Should my students decide to go on with their education after high school, they may very well be using a website like Blackboard in their college career. Furthermore, I believe it is very important for students to learn how to download and upload documents to a website. Not all of my students have Internet access at home and do not have much experience with discussion boards or sending uploading files. As I explained to the class how to upload their files, one student pointed out that it was just like uploading a resume. It was a great moment for the rest of the class to see how learning the skill of uploading their "Do Now" file for the class was actually practice for a real life situation.

Another benefit is that Blackboard can also be used a place for students to learn about and practice good "netiquette", a topic that typically does not typically get addressed in most classes. Before having students post to the discussion forums, we reviewed the principles behind good netiquette including remembering the people we are addressing as well as keeping your emotions under control in a heated discussion. Though we touched on many of the principles of netiquette, I emphasized these two ideas because they reinforce the theme of respect that my building is promoting right now.

A third benefit of using Blackboard was the response from the students. Most expressed that they felt as if they were doing less work simply because they did not have to write anything by hand. Others were excited that they could still do the work if they did not have a pencil, a common occurrence in our school. (Teachers in the building often provide pencils because students do not get the necessary supplies from home.) Other students simply liked the idea of using Blackboard as practice for the future. Some students see the connection between Blackboard and online job posting sites. Other students realize they may use Blackboard or a website similar to it at a college or university.

A fourth benefit is a benefit that indirectly impacts the students: reducing costs. Since the Alternative Education Program is not a large program, it does not have a large budget either. Saving money in any area possible means there is more money left over to spend elsewhere, such as our upcoming field trip to the Henry Ford Museum. I have calculated the estimated savings incurred by simply eliminating the use of paper for my daily Do Now exercises would be $57.12 if I applied the use of Blackboard to all of my English classes. The savings would double if I decided to also use it in my Social Studies classes. Finally, the savings would also increase if I used Blackboard for a whole school year rather than just five months. See Figures 2 -4.

Figure 1

Cost of Paper	
1 box of paper	$31
Reams per box	10
Sheets per ream	500
Costs per sheet	**$0.0062**

Figure 2

Sheets Used Per Day	
English 9	28
English 10	31
English 11	27
English 12	25
Total Sheets	**111**

Figure 3

Sheets Used Per Month			
	Days	Sheets Used	Total Cost
Feb	15	1665	$10.32
Mar	23	2553	$15.83
Apr	16	1776	$11.01
May	20	2220	$13.76
June	9	999	$6.19
Total		**9213**	**$57.12**

Additionally, I believe these benefits of implementing the use of Blackboard would also be experienced by other teachers and students. All students regardless of socioeconomic status and home life could benefit from the real life practice Blackboard gives students. Using the site allows all students to practice uploading and downloading files, just as they would in an email at a future job. All students, whether they are in Michigan or Texas, can benefit from learning proper netiquette. Finally, all schools, regardless of budget size and wealth, can agree that finding simple ways to cut costs through simple strategies, such as using Blackboard to replace paper copies, is a smart idea in today's tough economy.

Implications:

As a result of this project, I have come to several conclusions about technology innovations in education. First and foremost, it is evident that by using software that is available for free, such as my version of Blackboard, technology can actually help save money. By using a resource that is already available, I can save my building money simply by turning copies of practice problems into electronic files available online.

This project has also shown me that using technology does not mean that you have to forego providing a quality education. Many of the twelve principles of effective teaching presented by Jere Brophy can still be achieved in a classroom that uses technology. In fact, in some ways, the technology can actually help teachers use Brophy's twelve principles. For example, the first principle of effective teaching that Brophy addresses is creating a supportive classroom climate. Brophy explains that, "teachers need to display personal attributes that will make them effective as models". (Brophy 8) Teachers can still act as models in Blackboard by actively participating in the discussion forums. By doing so, their posts and communications can then serve as proper examples of using good netiquette and supporting other learners.

Blackboard can also serve as a mode to give students practice and application activities, another one of Jere Brophy's principles of effective teaching. According to Brophy, by assigning what he calls "authentic writing" activities, students can engage in more meaningful practice of the grammar and writing skills that I would like to see them improve.(Brophy 22) After each worksheet focusing on a particular grammar skill, I have assigned a journal entry and asked students to apply that skill in that day's entry to accomplish this.

The one drawback I have found to using the Blackboard system in my classroom is that the setup has been time consuming for me. With practice I believe I will become faster at creating the assignments, checking them, and providing feedback for them. My computer lab should also have a faster wireless internet connection by the end of the month. That would cut down on the wait time my students and I have experienced while waiting for the Blackboard pages to load. Once these minor setbacks are no longer an issue, I envision that I will apply using Blackboard to my other classes.

Works Cited

Brophy, Jere. "Teaching." *International Academy of Education* . (1999): Print.