

OLTD 502 – Final Assignment

by Kris Sward

Implementation of the Virtual Classroom/Student Dashboard

How can you leverage technology to support learning in a new and more immersive or meaningful way?

Recently a call went out to staff in our district asking for participants for a pilot project seeking to implement a Virtual Classroom/Student Dashboard into current face to face classroom environments and measure its use, place and effectiveness. As an educator I believe that a large part of my job is to provide real world experiences for my students in order to better prepare them for their future careers – most of which will have some sort of interface with technology. At the time I had also recently started my Online Learning and Teaching Diploma and could see parallels between the d2l platform we were using there and the proposed virtual classroom, so decided to explore how I could use this new tool to provide my students with authentic and relevant online learning experiences. At the very least, I felt that this tool could help students to keep up to date in their work if they were absent and help to keep parents in the loop with what was happening in our classroom. This attempt to be transparent and open to parents comes from another personal belief, that parents can and should be partners in their child's education. I further hoped that this sort of tool might help me to 'blend' my classroom to provide new and engaging experiences for my students as well as give me opportunities to 'flip' some lessons or units, giving me experience in the world of online teaching from the safety of my own desk.

In order to fully convey and help you to understand my interest in using the virtual classroom, I will start this paper with a review of my past practices in terms of technology use in the classroom, provide an overview of the virtual classroom platform and its practical uses as I see them, and then end with a directional guideline of where I hope this program can take my classroom in terms of student motivation and learning as well as teacher motivation and learning.

Past Practice

I have been teaching for six years, five of them in my own classroom. As I worked to build my practice I had a keen interest in making mathematics fun in order to build student confidence and computational skills. In doing so I hoped that my students would become risk takers in their work and improve their core understandings in mathematical concepts. Somewhere along the way math got coupled with technology and led me to apply two years ago for a Mobile Technology grant – a loaner kit of 15 iPods to use in my classroom. From January to June of 2012, and again during summer school of the same year, I implemented the use of iPods in my classroom and explored their benefits and drawbacks. Within a week of getting the kit I could see their potential value in the classroom and begged my principal to buy a kit for our school (which she did!). The response was simply amazing. Student engagement was up as we used the iPods to complete a number of interesting and creative projects and used apps to boost basic computational skills, improve presentations, build our vocabulary, tell stories and co-author books and review comprehension of weekly class activities. The buy in encouraged me to seek out other ways to implement technology in the classroom, including making effective use of the SmartBoard in my classroom and regularly using the laptop kits in our school for students to complete projects and assignments.

For about a year and a half I have had a classroom website (updated weekly) in order to keep parents informed of assignments we were doing and events that were happening in the classroom and the school and I found it a very effective tool for getting information out to parents. This year I even expanded my horizons to include a class Facebook page. Although I haven't posted a lot of information there, it provides another route for parents to be able to contact me to ask questions, clarify information or find out when homework is due or what day a test is on.

Though my experiences using technology in class were generally positive, I also had some struggles and concerns in implementing its use in my classroom. Early on in the iPod project we had a case of inappropriate texts being sent back and forth between students (on their own personal devices and not during school time but because it was due to mobile device use we dealt with it in the classroom). In terms of making parents aware of class happenings via the website, I've found that messages only really reach those parents who make the effort to log in to see the updates – a practice most aren't yet used to in our largely paper based society. I also had a few major

issues that I ran into using social media in the classroom. Firstly, Facebook only allows access to those who are interested in checking out your page so again, it doesn't reach the entire class – only the students, or the parents of students, who are already interested in making a connection. In this respect it is only available to a limited part of my intended audience. Secondly, with Facebook anybody has the ability to post on your wall. Many 'friends' on my classroom Facebook page are former students who are now in high school and who I have had to block from posting or delete altogether because of their language or their posting of inappropriate content. They are beyond the reach of me chiding them on what is acceptable to post online and so I have to mute them and not allow them to post content, which seems to defeat the overall purpose of Facebook. Thirdly, technically you are supposed to be 13 years old before you are allowed to have a Facebook account so the core group of people that I am trying to be open and accessible to are not yet even supposed to be on Facebook (seeing that I teach only 10 and 11 year olds) and encouraging them to do so is against the rules.

In short, my 'current practices' were falling short of what I really wanted to be able to achieve in getting students thinking and working collaboratively in an online environment. I was looking for other options to use in the class when the Virtual Classroom pilot project came my way.

Virtual Classroom/Student Dashboard

In the first decade of the 21st century, the government of British Columbia developed and proposed a new model of teaching and learning that would emphasize important skills needed by students as they moved into an increasingly knowledge-based world. Referred to as 21st Century Learning, this movement outlines key skills that students will need to be proficient at in order to achieve future success. Those aptitudes include:

- Functional Numeracy and Literacy,
- Critical Thinking and Problem Solving,
- Creativity and Innovation,
- Technological Literacy,
- Communications and Media Literacy,
- Collaboration and Teamwork,
- Personal Organization,
- Motivation, Self-Regulation and Adaptability, and
- Ethics, Civic Responsibility, Cross-Cultural Awareness. (Premier's Technology Council, 2010)

To this end, the ministry envisioned a future system of education that encourages students to focus more on how they learn and less on memorizing factual information, a shift in focus that recognizes the vast amount of information readily available to students and the need for skills to critically assess and work with that information. It is no longer what you know; it's that you know what to do with information that counts. Learning in the 21st century classroom will be more personalized to specific student interests, needs and learning styles and will occur on a continuum of self-improvement and realization.

Building on the premise of a 21st Century Literacy based education system, the West Vancouver School District approached Avantage Partners and tasked them with building a technology platform that would support aspects of the 21st Century plan. Looking for a way to encourage collaboration between students and staff, build problem solving skills and encourage creativity and innovation in their students to help prepare them for their future careers, they wanted a program that would use tools that students were already using – such as social media – to their advantage. “So much of their lives are lived online, how they socialize and interact with their world. And yet when they come to school, they are largely disconnected from that world.” (Avantage, 2012). The problem, they felt, was that “schools have become technologically insulated and separated” (Avantage, 2012) from the rest of the student’s world.

Avantage built the Virtual Classroom/Student Dashboard from the *Microsoft SharePoint* platform, changing certain aspects to tailor it to needs specific to the classroom. For instance some aspects of the existing platform were not relevant in the classroom whereas there were certain privacy and safety needs regarding access to student information and accounts that needed to be further addressed before implementing its use in the classroom. 21st Century learning is a “movement toward differentiated instructional and learning strategies [that require that] learning environments, projects, processes and instructional materials be customized and personalized to fit the learning needs of each student.” (Avantage, 2012). They achieved this goal by creating the Student Dashboard, a platform which allows for better communication between peer groups, provides online collaboration tools and allows students to access content and activities online and work through their assignments when and where it suits them best. In short, what they did was create “a student-centric social computing innovation that integrates

and aligns students, teachers and the larger community toward the *21st Century Learning* vision.” (Avantage, 2012).

Reflecting on my own issues with using technology in the classroom, the virtual classroom provides solutions for most of my concerns. In the first place, every student in my class has been given a login which allows them to personalize their own learning space, email between classmates and post blogs in their own learning area. Even if students don't have access to a computer at home, they can access this technology when and where they have internet access, including at school (parents can piggyback on this access through their child's login). Therefore every member of my classroom has access to the information published there (though I do acknowledge that they still may not log in). In addition, students still have the ability to post anything to the site but I have the ability to monitor blog posts and wiki additions for appropriateness and can take the initiative and pre-teach proper netiquette to my class. Former students don't have access to our class dashboard – only current students can access information, view content and work within our environment, so I no longer have to worry about inappropriate posts or language. Further, there is no age limit for using the virtual classroom. In fact, every student in my class has been given their own login, email and dashboard space so as long as they can access the internet, they can view information about any events going on in our classroom, upload or download pictures, share their work, collaborate on a wiki, participate in class discussions, review homework assignments and more - all in a safe, closed environment monitored by myself.

“The dashboard interface provides students with a hub through which they can manage their personal information (including cloud-based email services, tasks and calendar), social networking and instant messaging activity, create and manage various documents and media libraries, participate and track conversation threads through their classrooms and discussion forums they participate in. The focal point of the dashboard is a blog space where students can create blog posts and comment on others.” (Avantage, 2012).

The single remaining concern that I have regarding the implementation of the virtual classroom is building student and parent buy-in and getting them onto the site. I haven't made many attempts in this area and students have encountered a few bugs during the few attempts they have made to get onto the site in the process. However, as you will read in my proposed uses section, I plan to implement a course of action to address student use come January.

Two additional points of interest in this technology implementation plan are that though future teachers may not implement the virtual classroom into their own practice, student's profiles will follow them as they progress through middle and secondary school and all the tools on their dashboard (email, calendar and blogging capabilities) will continue to be available to them. Also, all information added to and kept on the dashboard will be logged on local school district servers, therefore information never leaves Canada and student privacy is protected.

Critics of the virtual classroom platform argue that it does not provide students with any opportunities that can't already be found in a traditional face to face classroom and that there is no new learning occurring specifically because of the use of the dashboard in the classroom. Highlighting the wow factor, they purport that it is simply a new tool that replaces regular routines and practices already present in classrooms. Whereas the West Vancouver School District circular on the dashboard states, "Dashboards are designed to encourage and support digital literacy, of which learning to network and collaborate is a key component. Future workplaces and post-secondary institutions increasingly require students and employees to intelligently connect with others to enhance and support their own projects and learning," (Kern, G., 2011), critics question how much collaboration is actually achieved that is different to what already occurs elsewhere. A blog post on the following site referencing ETEC 511 (though no author was discretely identified) highlights some important concerns in using the dashboard. The blogger likens the dashboard to an online planner, "that most students and parents don't even bother accessing," (Theorizing Educational Technology, 2012) and argues that the social networking tools are akin to Facebook or Twitter. Students are already using these tools but are prompted to adopt the use of another, more discrete platform that only allows them to engage with a particular group of classmates or limits their audience to 'colleagues' within their school district. The writer hypothesizes that "As technology is becoming increasingly available and rapidly changing, school districts are faced with the pressure to modernize. The intention is to keep up with the fast paced innovation of technology and to promote digitally literate students." (Theorizing Educational Technology, 2012). However, the implied feeling is that school districts are falling short of creating fully capable 'digitally literate students.'

I have personally found that the integration of technology into my own teaching practice has been a huge jump for me and is resulting in quite a transformative year for me. Part of my learning journey has been questioning what

I've been continuing to do, not because there was a pedagogical purpose behind it, but because it was a good start at covering the PLOs as set out by the ministry. However, my current learning is causing me to rethink my teaching practice and is resulting in a shift in my teaching away from textbook or knowledge based, test assessed learning to a more personalized, project based learning that allows students to show evidence of their academic growth by applying knowledge gained through a collaborative exploration of content. Part of this learning journey will require a more continuous and open platform for students to work from that will be engaging and relevant and allow them to work and learn at their own pace, collaborate on projects and give feedback to their peers in order to build collective knowledge. It seems that the virtual classroom may be able to provide these experiences to my students.

My overall experience with using technology in the classroom has been a positive one. As soon as a laptop is powered up or a mobile device is unlocked my students are eager, engaged and entertained. It's how they live their lives and it's also how they want to learn. Use of the virtual classroom will allow me to meet my students at their level and on their terms while allowing me to get some promising work out of them that provides evidence of their personal growth.

Proposed Uses

In order to make good use of the virtual classroom project in my own practice, I have compiled a cursory list of ways in which I would like to implement the virtual classroom into my practice to seek out the most benefit from its use and provide rich, relevant learning experiences for my students. For the most part this exploration will start in January (2013) and continue on until at least the end of June. Hopefully I will have the opportunity to continue use of the virtual classroom beyond the present school year in order to tweak my practice and further develop my understandings gained this year. In implementing this potentially valuable tool in my classroom teaching, I plan to:

- 1) Morph weekly journal assignments into weekly blog entries – I require students in my class to write weekly journals for a number of reasons. Firstly, it is a weekly excuse to get students writing, something most need regular practice in. Secondly, it allows me a window of understanding into each of my student's lives and find out what's going on for them at a particular time or what interests and excites them. It allows me to better know my students and be able to make better choices about their learning

based on the information they provide me about themselves. That being said, journals often become a list of things they've done during the week or how they feel about class activities and a source of repetitive mundane information that doesn't always help me to get a good grasp of who they are. I would like to pull together some blog sites that we can visit as a class and critique them in terms of content, writing style and interest level and then have students write blogs of their own on topics that they deem themselves to be experts in. Not only will this keep them writing and provide me with valuable information about their interests and events in their lives, it will also give them the opportunity to write for a different audience, network with other likeminded individuals and provide a future job opportunity they perhaps hadn't explored.

- 2) Build class content and units collaboratively using the wiki function – I can see this playing into the collaborative side of the BC Ed Plan. At first I would limit it to building class content for our class – birthday lists, discussion forums, etc. – but then perhaps would look at collaborating with another class in our district or beyond to build and share information and deepen student understandings. I can see building a collection of data about the country we study using facts and information collected by us as well as by students living in that country. (what an amazing project that would be!)
- 3) Provide alternate assignments for students who miss class in order to reach the same outcomes in a different way (idea of the flipped classroom – watch a video to get the lesson and evidence your learning by completing an authentic task). Many students have attendance issues in our school and providing them with an alternate way of accessing class materials could prove useful in getting them to keep up with the pace of our classroom. Perhaps these students could meet with me during weekly Skype sessions in order to maintain a connection and when they can't be at school they know that the expectation is that they will look online for the learning topic and cover the outcomes in their own way. Perhaps in the idealistic world this will happen easily, though in reality it will be much harder. However, the virtual classroom provides students with another option to complete course content and maintain that connection with our class before we move them off to the alternate school because they can't get to school every day.
- 4) Track assignment due dates and test dates virtually instead of with student planners – there is a built in planner tool as part of the virtual classroom, so why not make use of it? Not only will it save students

\$7.00 per year, but it will take their planning and organizational skills to another level – one which they might recognize and use in the real world outside the four walls of our classroom.

- 5) Provide peer reviews and feedback on assignments via the email capabilities and blogging – I think this is the most valuable area of this platform – student collaboration and networking. In my own practice in the OLTD I have found value in using tools like Googledocs and wikis to create and share information within our network of students. I hope to provide a similar opportunity for my own students to create and share information online.
- 6) Provide access to assignments online - I've already started posting projects in the assignments folder and will continue to do so on a weekly basis. I think this aspect of the virtual classroom will help move my teaching online and require me to create a more blended environment for my students. As a face to face teacher, this will be hard and a huge task to undertake, but I'm willing to try it and to work at building it as a significant part of my teaching practice.

Summary

My personal belief is that technology, though just another tool in our toolbox for teaching, can help level the playing field for those that are struggling learners in the classroom. I have students who use voice to text programs to help them create more effective writing, others who have text read to them to compensate for struggles reading or comprehending text, and still others who use technology to help them with math concepts that they struggle with. More than any other pedagogical purpose, I believe in the power of technology to provide students with the access to information and ability to interact with content at their level so that they can make meaningful contributions to the classroom, regardless of how well they can read or write. The virtual classroom platform allows struggling students such as these to access information when they need it, keep track of assignments and test dates through their own calendar, ask for and receive assistance from their peers or myself via email when they need it, and provides them with avenues to voice their opinions on class discussions in written form if they are nervous talking in front of the class. It also allows for more individualization in their learning and provides access to learning materials and assignments anytime, anywhere so that students who can't make it to class or for

whatever reason didn't get the information they needed in class can find their way through the learning objectives in their own time and way.

The virtual classroom is a "social computing platform that has the potential of extending the innovative capabilities of students and teachers. However, realizing this potential requires new ways of thinking about the relationships between social learning and information technologies, students and teachers, schools and communities." (Avantage, 2012). Change is slow and often hard to incorporate into existing practice. My goal is to implement the virtual classroom, explore its benefits to classroom learning and hopefully, in doing so, encourage others to adopt this model to improve the learning opportunities for all of our students. My biggest challenge will be to build student and parent buy in and encourage consistent use both in the classroom and at home. But in the end if my students become comfortable with the technology, proficient at using the tools that it provides and are able to develop skills that will help them to become contributing 'digital citizens' I will be happy.

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