Teaching 21st Century Learners Using 21st Century Tools

Laura Bell

Graduate School of Education, Touro University - California

Introduction

With the increase in technology and the need to embed it in school culture, comes new and modern problems and issues in the classroom. While class is always a topic of conversation, within New-Tech Network (NTN) schools, there has been a unique challenge that presents itself for schools. How do you effectively manage a technology infused classroom of sixty to seventy students at a high school level, with two teachers while co-teaching English and History? This is the challenge that some high schools are currently dealing with. This classroom set up is unique to some schools, while the traditional classroom settings differ in that typically, these classrooms are found in a smaller, school with in a school model, the untraditional, larger school setting is also being tested out. As always with new innovations, new challenges and a unique set of solutions to counter those obstacles arise.

The difference between New-Tech schools and the average comprehensive high school is that their mission is based around developing and teaching 21st century skills through Problem Based Learning (PBL) (Problem Based Learning, n.d.). While schools have found ways of teaching PBL within their old setting, some schools have adopted a new style of integrating curriculum and technology through their humanities classroom. In these classrooms there is both an English teacher as well as a History teacher, collaborating and integrating the curriculum for students. That, in and of itself, presents a challenge for the average teacher. The additional challenge is that along with co-teaching PBL, students will be placed in a block period class, incorporating technology within a large classroom setting. Being able to have, at any given time, a compilation of tried and used activities in the classroom, organized by level of preferred participation, would benefit teachers.

Purpose and Need

In education teachers are often met with complicated tasks. Teaching in the 21st century, in a non-traditional setting comes with new, unique challenges. There are many different approaches, and solutions to those challenges that teachers come up with. What works for some does not work for all. These strategies may depend on the teacher experience in the classroom, as well as experience utilizing technology, class size, as well as the particular group of students. Rather than recreate the wheel or give up, some research has been done that would prove to be worthwhile if compiled in a way that is readily accessible to teachers. Further explored in this study are challenges the 21st century teachers face, along with possible solutions. The possible solutions will be synthesized and used to compile a "tool kit" in the form of a website for future use by educators in need. There is a real need for teachers to have access to a website with resources and ideas for getting their 21st century learners actively engaged and taking on ownership of their education. Technology in the 21st century has produced a new type of student.(Hicks, 2011)





Figure 1: Screen shot of the webpage created using Weebly -Home Page. (Left). Screen Shot of the usefulness poll, from the home page. (Right)

Results

There has been a shift student learning in the 21st century. Student participation and engagement in the 21st century looks different. Teachers' roles are shifting from delivering the content to becoming the facilitator in helping students find ways to access the content. To help bridge the gap for teachers dealing with these challenges there is a need for something like a universal website. Through research of the themes associated within this project, it was determined that many teachers are facing similar challenges when teaching students in the 21st century. While there may not be one simple solution to meet the challenge, teachers will not be able to get students actively engaged in their own education unless they give some of the new 21st century resources a chance. With the new wave of students and modern technology, what education looks like and active engagement looks like has changed as well. Finding a way to adapt teaching styles to meet the needs of students also means adapt teacher comfort levels with technology. While some may resist the change, it is only a matter of time before it will be necessary to adopt technology and what it is capable of in terms of getting student not just participating, but becoming active participants in their own education (Pinheiro, 2013).

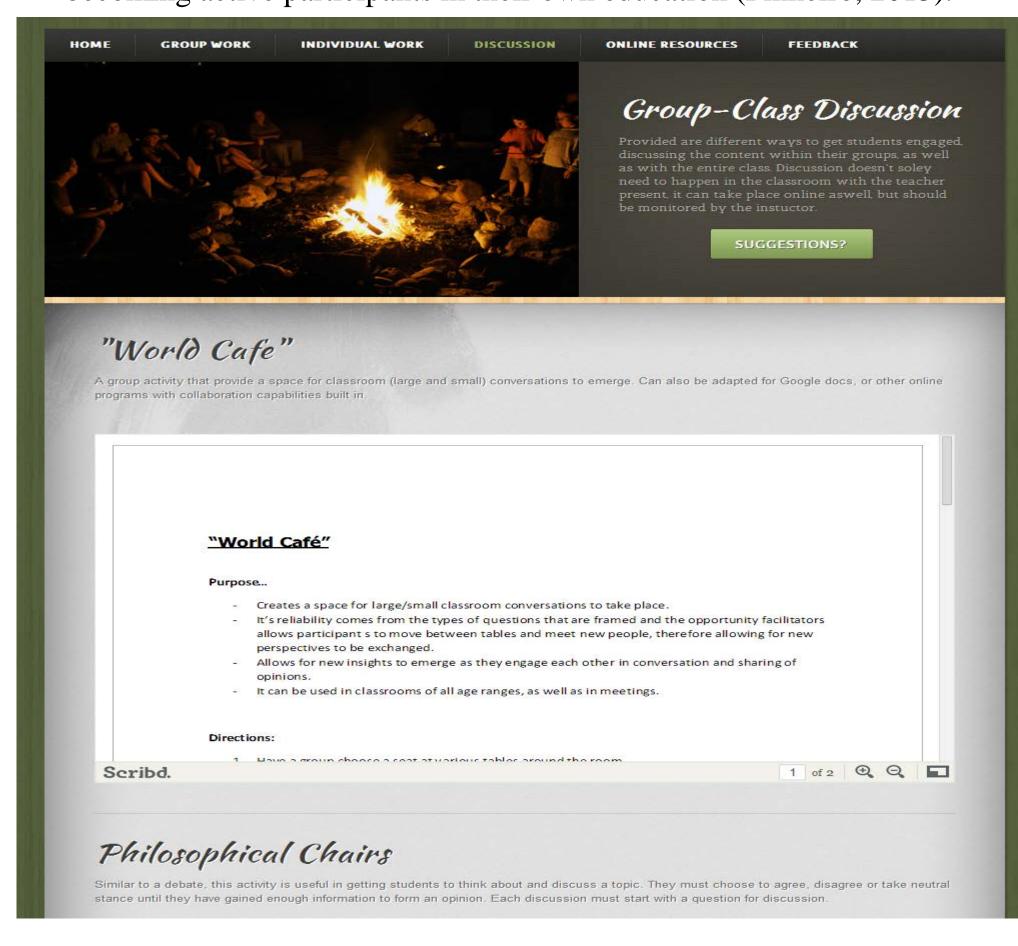


Figure 2: Screen shot of the webpage "Discussion" tab.

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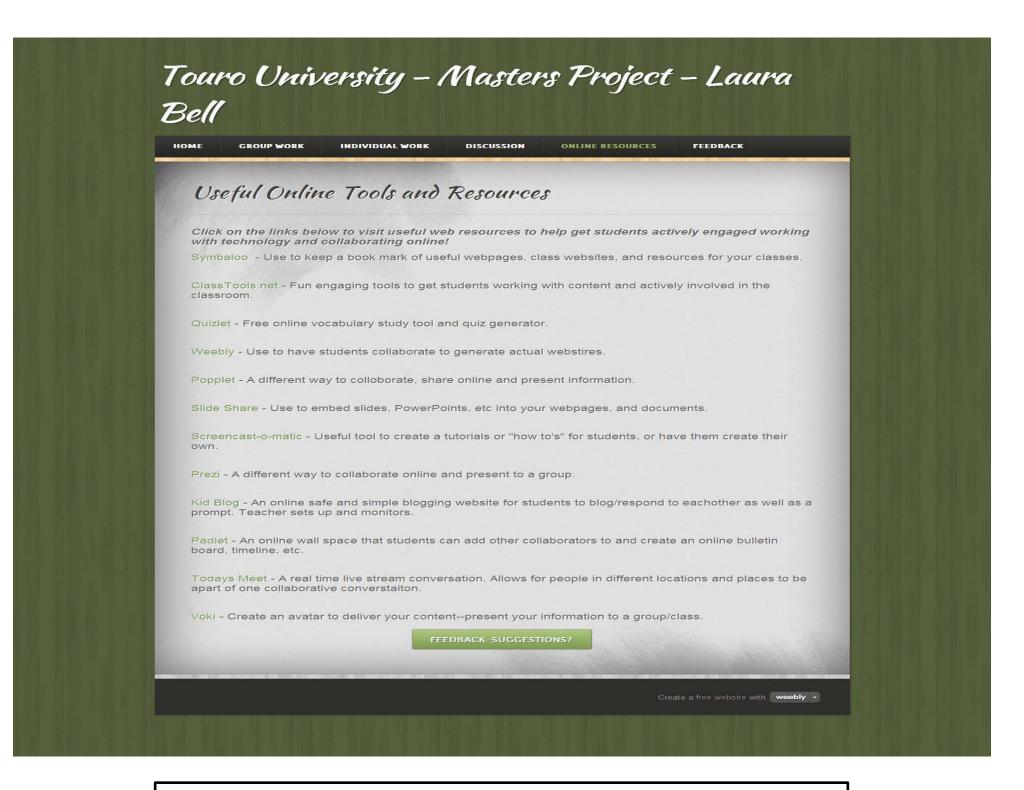


Figure 3: Screen shot of the webpage "Online Resources" tab. Each resource has a brief explanation and is linked to the website online for quick and easy

Website Purpose

In the 21st century, students need to master a number of different skills. For the website of resources, it should be apparent that not all the activities and lesson plans included require the use of a computer. While they all can be modified or adapted to include technology, and students can be encouraged to include technology, computer skills are not the only ones that constitute 21st century learning. The website of tools reflects that understanding. 21st century learners are more than computer savvy students. They require a multitude of others skills, such as collaboration with peers (online and offline), academic literacy, communication skills, and the ability to take responsibility of their education. In the end it is up to the student to take themselves where they want to go (Breivik, 2005). The teacher is there to facilitate their journey.

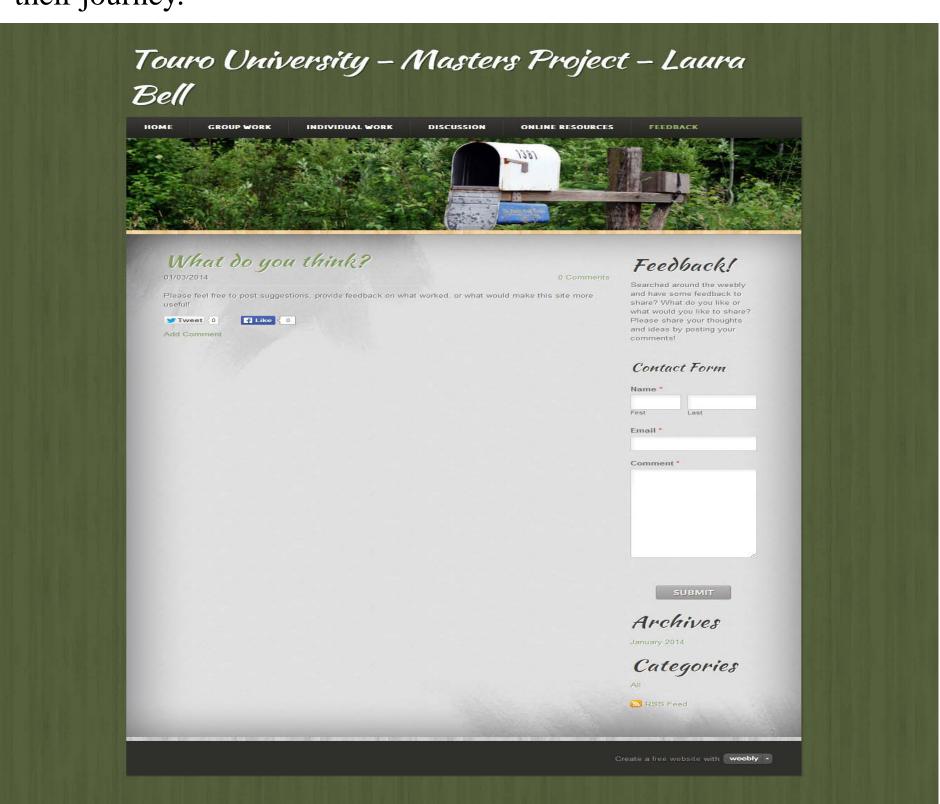


Figure 4: Screen shot of the webpage "Feedback" tab. Here visitors can leave comments, fill out the contact form for additional information or questions. Also the archives allow users to track others comments/feedback.

Conclusions

Teachers will always be faced with challenges in education. This is not something that is new the field. What is new, the 21st century technology and the digital natives. Being able to build and foster relationships with students has always been a part of the job, but now the way to access students and their access to the world via the internet has changed the way education needs to be delivered, and accessed. Teachers are not needed to be front and center in the classroom, but are needed on the sides as a guide or coach to help students on their own educational journey (Greiffenhagen, 2012). With that change in teaching positions, students then need to rise to the challenge to become agent of their own education. This is the model that is being portrayed in the New Tech Classroom. While not all teachers are fortunate enough to have access to the resources necessary at their school sites to meet their needs, providing a tool with multiple resources with multiple classroom set ups in mind is a convenient tool to have access to. A student collaborating amongst their peers definitely looks different in the 21st century. It would be at the advantage of to the teachers to embrace the change, and find ways to connect students to their education by providing meaningful and real life experiences. This will help students take their learning and knowledge outside the classroom and into the real world. As most teachers know that learning does not just happen in side the class room, but outside as well. And learning definitely does not stop after high school. It continues long after into college and into the careers of their choosing. It is the job of teachers to demonstrate and guide students in the right direction, not matter how challenging the task may seem. If open to it, teachers can find access to tools to help them such as a website create by a teacher for teachers in the 21st century.

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For further information

Please contact <u>lbell@nvusd.org</u>

