

Chapter 2:

Using Web 2.0 Tools to Increase Interactivity and Engagement

What is Web 2.0?

The Internet began to see mainstream adoption in the early 1990s. Adults, teenagers, and children all started to use it to find information when they needed it. Some became more proficient than others, but the Internet had far more consumers than producers. For a variety of reasons, a comparatively small number of people were able to contribute to what was on the Internet. There was very little buy-in from the youth in terms of engagement. Between the slow connections and lack of engaging websites, youth really were not as fervently interested in being online as they are today. People could read and sometimes view pictures, but that was about all. It was very difficult to participate. This can arbitrarily be referred to as the first generation of the web.

The second generation of the web is what has occurred in the last 5-10 years. Youth today, it seems, have to be pruned from their computers and cell phones. The online experience is so immersive and interesting to them. Instead of just reading, people can now watch full movies and play games. Instead of simple email, students can network with hundreds of peers through all sorts of social networks. They can easily make their own websites. They can contribute and participate. This is the nature of Web 2.0, also called the Read, Write Web. No one is solely a consumer of information; everyone is a publisher of some sort. Students today buy-in to the Internet because they are integral parts of it; they add to the experience and make it worthwhile for each other.

The Internet is full of Web 2.0 Tools. A simple definition of Web 2.0 Tools is any tool that people can use to produce something online. What is produced is not important.

The important element of the definition is that someone is producing something. These tools move students away from the old mode of thinking that someone else will produce content for them to use. These tools help the students to become active participants in the Internet. The tools are as varied as students' personalities. There are literally hundreds of tools available and this number will undoubtedly increase exponentially over the next several years.

Unfortunately, I cannot just say that all Web 2.0 Tools are wonderful. There are some truly outstanding tools that can definitely increase student learning when used well. There are many others that fall just in the good range, where they could be helpful depending on the lesson. Lastly, there are some that are silly or would not easily contribute to learning.

This book is going to focus mainly on Web 2.0 Tools and how to use them to benefit instruction. Only those that are very well-designed and would contribute to true learning and sound pedagogy will be presented. This will most likely be the shortest chapter in the book. Each of the following chapters will have a specific focus, such as digital storytelling tools or tools for collaboration. This chapter is going to glance at some representative tools that could easily be utilized by teachers in many different fields and grade levels.

A New Way to Look at Posters

An Introduction to Glogster

Posters have been a standard project for teachers across subject areas for a long time. There are several reasons why posters have been so prevalent. First, they are quite versatile. Teachers from kindergarten to college and math to English have all used posters

at some point with their students. Posters are a simple way to get students to find a creative way to express themselves. Simple does not mean bad; some of the best lessons are those that are kept simple. Second, posters are a good way of trying to include and engage visual learners. Even before the idea of learning styles were propagated, students who normally performed poorly on tests could create posters or other projects that demonstrated their understanding in a meaningful way.

Posters, like any medium or technology, are made relevant through context and proper use. Posters, because of their ubiquity, could easily be used for a mediocre lesson. A student finishes reading the book *The Diary of Anne Frank* in English and is told to make a poster on it. There is no guidance, no real purpose, no audience, and no point to the lesson. Because there is nothing intrinsically motivating about this assignment, it becomes just about the grade. This idea in itself is enough to lose some students. Then, because there is little guidance built-in the directions, other students may give up. Again, while I believe assignments such as this are occurring less frequently, they are still prevalent. The tool, or the poster, is not the fault of the lesson being poor. The assignment could have been made more relevant by giving the students an authentic purpose. For example, creating a poster showing parallels between how Anne Frank and her family were persecuted and how certain groups of people are treated today.

There is a Web 2.0 tool called Glogster (<http://edu.glogster.com>) which lets students make posters online. The first impression many people have when introduced to this tool is that it would be superfluous to simply take a simple project and translate to an online medium. If all Glogster did was add some fancy tricks to a poster, it would not be worth introducing. There are several ways in which Glogster can help improve on the

idea of the poster when it is used in a proper context. First, part of the grade assigned to a poster is often due to simple aesthetics. This biases the assignment to those who are artistic. Glogster still allows the more artistically inclined students to thrive, but also provides means, such as colorful backgrounds, stickers, images, etc..., that help students to focus more on content while still being able to create an aesthetically pleasing poster. Glogster lets students include text, audio, video, pictures, and more right in their suddenly interactive poster. Instead of engaging mostly visual learners, the interactive posters can engage kinesthetic (hands-on), visual, and auditory learners. The assignment is much more well-rounded and helps more students to participate more fully.

Second, another important aspect of almost any poster project is displaying students' work. There is a difference between just displaying a student's work and finding ways to display a student's work to an authentic audience. A glog, which is what Glogster refers to their interactive posters as, can be made either public or private. In addition to that, they can be put on other websites if it is desired. They can also, for public Glogs, allow comments. Commenting is a feature of social networking that can be very powerful and can help with the idea of an authentic audience. For example, a student could make a Glog about a book and have the actual author comment of it. A student could make a Glog to bring awareness to the situation in Haiti after the earthquake and how to help, and find that other people leave comments about how they are getting involved. It is good practice to display student work so that they can both receive constructive criticism and take ownership of the work as their own; using this online tool opens up that dialogue immensely if it is desired.

An Example Lesson

As an English teacher turned Library Media Specialist, learning to help and work with math teachers was initially a struggle. The pre-calculus teacher and I were working on a lesson in preparation for the final exam; we wanted to work on a project that would reinforce important concepts while also giving students freedom to express themselves and explore the content in a way that would make sense uniquely to them.

We jointly chose Glogster because it helped us to give each student the freedom necessary to do well. The lesson involved letting student choose from a list of concepts that would be assessed on the final exam. Each student was responsible for creating a Glog that he or she would use to teach the concept. The Glogs could include any medium that Glogster supports, including videos, songs, pictures, text, links, and more. Below is the example that was shown to students to help give them an idea of some of the things that Glogster is capable of. There are links to self-enrichment websites and an embedded video from SchoolTube, a YouTube-like video site that focuses on safe, academically related videos. Since those items cannot be appreciated in a static picture, here is the link. <http://jasontbedell.edu.glogster.com/quadratic-equation/>. This is a fairly simple idea that could be incorporated into any subject area and used in most grade levels. The pedagogy is also sound as students often learn from teaching others. The poster and technology were used as tools, not added on top of an existing lesson. Several Glogster tutorials can be found at the companion website: http://jasontbedell.com/?page_id=131.

The Equation

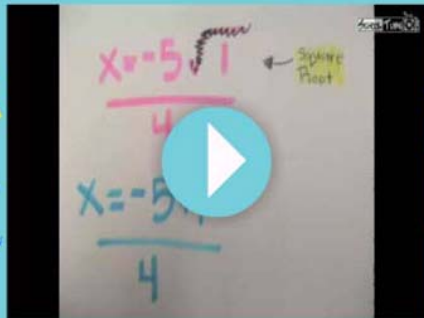
$$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$

How do you solve the quadratic equation? Click me to find out. When you have an equation like $ax^2 + bx + c = 0$, you solve for x by putting a , b , and c in the equation on the top right of the page.

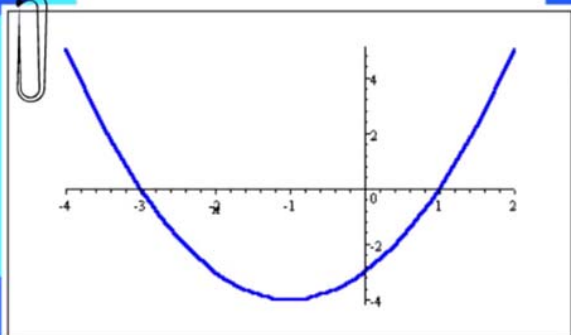
When will I ever use this?

The quadratic equation is important in geometry and architecture. It is used to determine correct lengths when planning and constructing buildings. Click me for more information.

Watch how to solve an example.



What does a graph look like?
Click the picture for directions on how to graph.



Some other members of my PLN were gracious enough to share some of the examples that they or their students have done.

- Bernadette Roche had elementary students create visual advertisements. This student chose to use Glogster to create an advertisement for Folgers coffee.
<http://louisr1.edu.glogster.com/glog-1931/?voucher=3ef38ce66350a287cb2cb881e065329c>
- Here are 2 projects from Kyle Pace's students who were working on a wildlife project: <http://lsr7.edu.glogster.com/glog-2964/> and <http://suziq56.glogster.com/glog-340-655/>
- One of Marilyn Winter's students used Glogster to make an outstanding book review: <http://mckilloplibrary.edu.glogster.com/McKillop-Book-Reviews2/>.

Writing Has Never Looked So Pretty

All teachers are literacy teachers. While the primary responsibility of course falls on the English teacher in secondary school, students have to be able to read and write effectively in all situations. The skills necessary to communicate effectively and understand content area texts are very different in science and social studies. Being able to access content in a fiction story for English is different than being able to navigate a math textbook.

I had the privilege of teaching a class called Reading in the Content area for a few years. The main part of my job was helping students to develop skills and strategies that would let them be able to understand the textbook and associated reading material for all of their different subjects. I can appreciate how different the styles are. Elementary teachers have this burden on them everyday as they generally teach all the core subjects

the chapter focused on teachers using social bookmarking, social networking (Twitter), and blogging to help students.

Cindy Lane, with inspiration from Tom Barrett, created a presentation on 43 interesting ways that Wordle can be used in the classroom. Click the link to view the presentation: http://docs.google.com/present/view?id=dhn2vcv5_157dpbsg9c5. There are some really great and innovative ideas in the presentation, such as using Wordle for class polls or vocabulary work.

One of the most common ways to use Wordle is to help students who are having difficulty with redundancy in their writing. It is very simple to do. Students just go to the website, paste in their paper, and hit create. Since words become larger as they are used more, it becomes very obvious to the student which words he or she is overusing.



Another great way to use Wordle is to help teach literature. So many of the works that are taught are available for free online. Project Gutenberg is one of many websites that have countless works available for free online. It is simple to just copy and paste the text from a book or short story into Wordle. What Wordle does is fairly simple, but it does it well. While it may be limited, it can help teachers to meet many different

educational objectives. In many cases, simplicity is best. The point can be communicated clearly and without distraction.

Sticky Notes Like You Have Never Seen

There are some things that are in nearly every teacher's desk. A pad of sticky notes is one such item. They are used to organize ideas, write students passes, for class games, and more. They are inherently useful in many situations. Wallwisher (<http://wallwisher.com>) successfully tries to replicate the function and usefulness of sticky notes online.

Wallwisher shares one of the best traits of many Web 2.0 tools: simplicity. After you setup an account, you build a wall. All that entails is giving it a title and a description. Then, your students just double-click anywhere on the wall to create a new sticky-note. Here is an example of one I created. I was planning a discussion for a conference and wanted ideas of things to talk about. The wall is located at <http://wallwisher.com/wall/tmnashville>.



The screenshot shows a Wallwisher wall titled "TeachMeet Nashville 2010" with the description "Please add ideas that you think we should talk about during TeachMeet, April 1-2 at the Nashville Public Library." The wall is red and contains several sticky notes from users like "J Bedell", "@nwnsm", "M5mith", "asbella", "afowles", "JManess", "L5mith", and "afowles". Each note includes a title, content, and an "Edit" button. The wall also features a top navigation bar with "Build a wall", "Go To...", and "Do More..." options.

User	Text	Time
J Bedell	What tools can increase students interaction and engagement?	4 weeks ago
@nwnsm	Using Facebook in the classroom	6 days ago
M5mith	Collaborative Documents - use of etherpad like pages in the classroom	4 weeks ago
asbella	Technology "lessons" that work with integrated subjects.	4 weeks ago
L5mith	Meaningful tech integration for early primary students.	3 days ago
afowles	edupunk teachers who create their own materials. Wikis for cross-classroom collaboration. IWBs, social media in the classroom, instruction on demand.	4 weeks ago
JManess	iPod Touches in classrooms - value/use	4 weeks ago
M5mith	Professional Growth - free and online available whenever you are!	4 weeks ago
asbella	assessment tools for technology standards	4 weeks ago
J Bedell	TRAILS for real time assessment of student research and online literacy skills - for Reka Tabb, LMS.	4 weeks ago
asbella	scope and sequence for educational technology	4 weeks ago

Wallwisher is a very useful tool that can be used in a myriad of ways. For example, if students have laptops, every student can answer a question so that the teacher can accurately assess understanding. Some students who are difficult to draw out in conversation thrive online where they feel like they can present an opinion in an atmosphere that feels safer to them.

Tom Barrett, an innovative educator from England, began a PowerPoint on different ways to use Wallwisher in class. Ideas and examples were collaboratively added by several people. You can view the presentation by going to this link:

http://docs.google.com/presentation/view?id=dhn2vcv5_436f8kscmdc.

Just as there is no limit on ways you can use real sticky notes, there is no limit on ways to use Wallwisher. It is infinitely simple and versatile. Some great ideas from the presentation are using Wallwisher for book reviews and including a picture of the book in the sticky note, for a showcase of student work, or for organizing collaborative information. Tutorials for Glogster, Wordle, and Wallwisher can be found at http://jasontbedell.com/?page_id=131.

Letting Students Choose

As you become more proficient with integrating technology, you will probably reach a point where you can easily identify the best tool for most assignments. Sometimes, though, what would work best for one person is not the tool that would work best for another. After you have introduced your students to several different tools, sometimes it is beneficial to give them an assignment and allow them to determine the best way to complete it. This is not only great preparation for life after school, it gives them the freedom to grow and exceed expectations. For example, students in English or

economics might be asked to create an advertisement for a product. Some students much prefer to make a video, while others list the key benefits of the product to make a word cloud, and still other make an interactive glog. One is not necessarily better than others; students in this situation have created products that can sufficiently advertise a produce and that reflect their knowledge of the product and advertising techniques regardless of the tool used. Giving students choices can help them to see the relevance of the work and make real world connections. It is not unlikely, though, that the students will push back the first few times an assignment is done in this manner as many students are used to receiving instruction at every step.

Aaron Eyler is an excellent social studies teacher from New Jersey. He also runs the outstanding Synthesizing Education blog. He recently wrote a post about this subject entitled “Why Assignment Structure is Detrimental to the Development of Thinking.” It is included below and the link to the original is here:

<http://synthesizingeducation.com/blog/2010/02/11/why-assignment-structure-is-detrimental-to-the-development-of-thinking/>

One of the problems with the development of project and problem-based learning is that students are given too much structure in how to complete these types of activities. It is amusing to me how we talk about how much we care about student success and preparing them for the future, but we also provide them with a step-by-step explanation of what is required to produce a “quality” product. Perhaps students would be better served if simply said to them: “Here’s the problem. Have at it.” Instead, we provide them with a six page assignment sheet complete with rubric and talking points so that they basically have the answer in front of them.

Maybe we have gone so far overboard with these overly structured assignments that kids never learn the ability to function and think critically without a detailed explanation and process to do so? Project/problem Based Learning is NOT the problem; teachers and administrators who overly structure assignments are.

I can remember when I was in high school, and I had an English teacher who used to say things like: “Write me a five-paragraph essay on the book”. Then he used to tell us about how when we went to college we would be faced with these types of assignments all the time and how we needed to start to construct our own thoughts without tons of guidance and explanation. When I got to college I only had one professor who did this, but I was definitely ready for it. Now we provide kids with every possible crutch and explanation because “kids need to know what is expected of them at all times.”

Maybe we need to start convincing people that the short term pain they feel of not earning an “A” on the assignment or having to devise the project themselves will be superseded by the long term gain of being able to think without someone holding their hand?

From the Teachers

How do real teachers actually use these tools? Here are a few examples. Scott Snyder is a 16 year veteran English teacher who blogs at <http://thespian70.blogspot.com/>. Matt Guthrie is a very helpful math and science teacher from North Carolina who blogs at <http://learningfromeachother.blogspot.com/>.

English Teacher Scott Snyder's Use of Wordle

I use Wordle from time to time for two activities. For the one, I paste the text of something we are about to read in my American Literature class in to Wordle and work

with the students to identify what the main ideas or areas of emphasis in the text might be. We often dig a little deeper, taking away the most often repeated words and see what then rises to the surface as another layer of ideas. It gets the kids thinking about the message of a text before reading commences.

After a unit, I have used Wordle to have the students visualize the class's thinking. For example, I ask the students what are the main qualities of the Americans we just read about. The students submit their responses via a Google Form. I paste the results from the survey in to Wordle and then ask the kids to take a look at the results. Did we focus on the correct big ideas as a class? What did the class not emphasize enough that perhaps we should have? And why?

Math and Science Teacher Matt Guthrie's Ideas on All 3 Tools

I set up student accounts on Glogster for all of my kids. Their first project was to create a visual study guide on plate tectonics using some very specific guidelines re: content. I haven't given any specific assignments to use Glogster since then, but several of my kids have made it their platform of choice. These are all my artsy, creative type kids. They love what can be done with it and always turn in topnotch products. It's just one more example of how important it is to introduce the kids to as many tools as possible and then give them choice.

I've used Wordle on a few occasions with other teachers, especially on #edchat, to graphically illustrate what's "important" in many of the written documents we guide our activities by like standard course of study listings, pacing guides, etc.

Wallwisher is one I'm hoping to integrate this semester. My first planned activity will probably be a KWL chart with the students. We'll see how it goes.