WEB 2.0 Tools in the College Classroom

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ABSTRACT

The purpose of this article is to introduce Web 2.0 tools available to be used in the college classrooms and a variety of other settings. Web 2.0 tools are accessible to anyone with an internet connection, but they are often underutilized. This paper examines relevant examples of Web 2.0 tools used in higher education, including the authors’ experiences at Oregon State University. It also describes and explores the benefits of introducing them into the classroom, particularly for undergraduate students. The barriers to implementation and ways to help facilitate the process are also addressed. And finally, a collection of Web 2.0 tools are listed for ease of reference.
Web 2.0 Tools and College Classroom

Many students are well versed in the use of web technologies, but haven’t had a chance to explore many of the Web 2.0 tools available. While most people are familiar with social media such as Facebook, Pinterest, and YouTube—how many have used Prezi to create online presentations, Screenr to record a screencast, or Wix to create a website or a digital portfolio? Even tech-savvy college students may be unaware of the presence of hundreds, if not thousands, of completely free, online tools that could be useful in their education and careers. If students are given the opportunity to learn and use Web 2.0 tools, ideally in their freshmen year of college, these skills will be beneficial throughout their remaining years in school, employment, and beyond.

In our graduate program, we have learned essential skills to use in our present and future teaching careers, but by far our favorite courses have been the four term Instructional Technology series. As the twelfth group in this program, we are the first fortunate enough to receive digital technology training, focused primarily on using Web 2.0 tools. A list of our favorite tools is provided in Appendix A of this document. Our learning experience has profoundly changed how we approach assignments, presentations, and education as a whole. In the role of both student and educator, our digital literacy and creativity has improved markedly.

The term Web 2.0 refers to the shift in the way the internet is used, away from a place of consumption to a place of production. In the early days of the internet, the vast majority of users were expected to be consumers of information, viewing content already created. As computers
and online access become more prevalent, users learned they could use technology to create their own content (Donaldson, 2013). This shift has created unlimited potential for those of us whose roles were once restricted to the sidelines. It can also be an excellent opportunity for students to explore their own creativity, while producing original content that is readily available for future reference.

With traditional coursework, it seems unlikely that students would keep boxes of their work or dozens of electronic document files after the term is over. However, what if it was an interactive presentation, with graphics, audio, and video links? What if they could easily insert their masterpieces on a website for future reference or to share with others interested in the same subject? While there are many different ways students can save their work (e.g. hard drives, portable flash drives, etc.), physical storage devices can crash, are available only to one owner, and may eventually be misplaced. Web 2.0 cloud storage ensures that all the hard work created remains alive indefinitely. Being stored online, the content will always exist and can be accessed by anyone, anywhere across the globe. Imagine a world where all people can have access to each other's work and share their learning experiences! Web 2.0 technology allows students to collaborate and exchange ideas—unrestricted by borders or nationality.

One particular tool that can assist students with sharing information is a digital portfolio. According to Galbraith (2000), a digital portfolio “can be seen as a select sample of the total population of the student’s work, while a folio represents the total population of evidence documenting the student’s learning experience” (p. 323). Furthermore, digital portfolios allow the students to demonstrate their mastery of the subject. Perhaps the most powerful feature of digital portfolios in education is metacognition, referring to the self-examination of the learning process. Each educational artifact can be accompanied by a reflection, explaining what mastery
is being demonstrated, how the artifact relates to other artifacts, and how the artifact relates to the portfolio as a whole. Years later the content will still be available to view or expand upon. It is a work in continual process. As students’ skills grow, the project can expand. Additionally, students may be more motivated to strive for excellence if their work is on display. However, if a student wants to keep their work private, he or she may easily do so by choosing the password protection option.

Our graduate program requires four instructional technology courses. The first two courses involve exploring Web 2.0 tools and creating digital artifacts (i.e. assignments created using Web 2.0 tools). We then place our finished educational artifacts into digital portfolios, using a free Web 2.0 tool such as Wix or Weebly. Throughout the courses, we are given control on how we present content to the instructor. In other words, we share work via podcasts, screencasts, videos, alternative presentations, and mind-maps. These applications have offered us a chance to showcase our creativity far better than traditional slide programs can, especially for in-class demonstrations.

Other universities are also emphasizing technology in education, and explain how these tools are used in their classrooms and the benefits they provide for the students on their websites. More specifically, the faculty in communication intensive programs are incorporating blogs and wikis into their courses, resulting in better utilization of class time and lessening the workload for both instructor and student. The instructors also report that students have improved comprehension, communication, participation, and overall performance (LSU). Particularly, exposure to these tools early in the college curriculum can provide great benefits and success to the students who choose to use them.

Grosseck (2009), in her article, “To Use or Not to Use Web 2.0 in Higher Education,”
contends that a growing number of participants in the higher education field support class presentations with Web 2.0 technology. She continues to expand on the benefits of incorporating Web 2.0 technology into the classroom, “teachers can foster collaborative work not only among their own students, but with colleagues, students, and community members from around the world” (p.482). Her list of Web 2.0 technologies includes blogging, micro blogging, wikis, photo/slides sharing, video sharing, social bookmarking, and social networking. She explains how instructors allow students to give and receive instant feedback, create and maintain a classroom Frequently Asked Questions (FAQ), make online presentations, share videos for professional development, instant message to create the sense of community and accessibility, and increase a global perspective in their classroom. These activities help to foster a cooperative learning environment. Cooper et al. and Goodsell et al. (as cited in Jones & Jones 2008) assert that numerous studies have shown that students are better able to retain information and apply their knowledge with this type of instructional model over other methods (p. 63).

Acknowledging the benefits of digital literacy and Web 2.0 tools is simple. However, there are challenges in trying to garner widespread support for their use in academia. The “Horizon Report: 2013 Higher Education Edition” makes it clear that trends in the near and distant future increasingly include technology in mainstream courses (Johnson, et al., 2013). Web 2.0 tools fit neatly into many of the listed trends, particularly in personalization of the learning process and in terms of quantifying outcomes (Johnson, et al., 2013). Still, some instructors may be resistant to allowing students to use Web 2.0 tools in their classrooms because they may not feel comfortable using technology, or prefer more traditional coursework.

Norbury (2012) contends that “convincing them [instructors] of the value of classroom technology--and persuading them to use it--is probably the most significant tech hurdle facing
However, strategies can be used to further educate instructors on digital literacy. Several universities have had significant success implementing programs to encourage faculty to learn new technological skills. Adelphi University in New York recruited tech-savvy colleagues in order to provide peer-to-peer training, boosting the use of the school’s learning management system from forty to seventy percent. Texas Wesleyan in Fort Worth created individualized training programs to encompass faculty members’ different learning styles, and Marist University in New York implemented training in the instructor’s own office, resulting in a thirty-three percent rise in attendance of their training classes for the institution’s learning management system (Norbury, 2012).

The value of digital literacy and Web 2.0 technologies cannot be overstated because it allows students to be more creative and collaborative. Most importantly, it can be applicable to real life situations, long after the last paper is written and the final tests are complete. Therefore, we recommend that institutions of higher learning offer Web 2.0 technology classes, ideally for first year undergraduate students. This will ensure that they are able to navigate, explore, and apply their skills for their remaining collegiate years and beyond. When a professor asks for a presentation they will be well-versed in the many available options. When students need to complete group work, they could easily do so with Google Docs. Students could quickly find that with a skilled technology instructor and comprehensive course work, their scholastic lives may become more relevant, their creativity can flourish, and the quality of their work may improve. If undergraduate students are exposed to those technologies, it could bring forth a new vision on how to create original content.
References


Appendix A.  
List of different Web 2.0 tools available for instructional purposes

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<thead>
<tr>
<th>OUR FAVORITE WEB 2.0 TOOLS</th>
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| **Presentation Tools**- create online presentations; | http://www.brainshark.com/  
  http://voicethread.com/  
  http://prezi.com/  |
| **Audio Tools**- create podcasts: | http://www.chirbit.com/  
  http://audioboo.fm/  |
| **Video Tools**- create or edit and share videos online: | http://www.youtube.com/  
  http://teachertube.com/  
  http://vimeo.com/  |
| **Graphic Tools**: edit, share graphic content (e.g. picture editing, etc.): | http://pixlr.com/  
  http://www.flickr.com/  |
| **Alternative Presentation Tools**- create alternative presentations such as animated videos: | http://www.vuvox.com/  
  http://goanimate.com/  
  http://www.xtranormal.com/  
  http://animoto.com/  
  http://www.zooburst.com/  
  http://www.voki.com/  |
| **Concept Clustering Tools**- create diagrams, mind maps; | http://mind42.com/  
  http://www.mindomo.com/  
  http://www.spiderscribe.net/  
  https://bubbl.us/  
  http://www.mindmeister.com/  
  http://creately.com/  
  http://www.mapul.com/  
  http://www.spicynodes.org/index.html  |
| **Screencasting Tools**- create screencasts: | http://www.screenr.com/  
  http://screencast-o-matic.com/  |
| **Website Tools**- create websites or blogs: | http://www.jimdo.com/index.php  
  http://www.edicy.com/  
  http://www.moonfruit.com/  |
http://www.roxer.com/
http://www.webs.com/
https://www.yola.com/
http://www.wix.com/
http://www.weebly.com/