Finding Collaborative Online Tools Daunting? Essential Tips for Navigating the Evolving Google+ Landscape

Mary D. Wehunt
University of Wyoming

Lisa Rice
Arkansas State University

Abstract: *This workshop presented recent innovations and improvements using Google+ circles, communities, pages, handouts, docs and Glass in order to help instructors overcome initial reluctance to using this collaborative toolset to design authentic learning activities. Applications supported by Google+ were also presented.*
Keywords: *Google Apps, collaboration, transformative learning, Cloud security*

Cloud computing is here to stay but understanding how a myriad of products can serve the needs of students often mystifies instructors. The purpose of this workshop was to present recent innovations and improvements using Google Apps and Google Drive for collaborative online learning environments. We discussed collaboration and how students' learning practices are transformed and power relationships are altered through authentic activities employing Google+ circles, communities, pages, hangouts, docs, and Google Glass in both the desktop and mobile app environment. The presenters demonstrated the proper use and design features of the technology, giving attendees an opportunity to ask questions about particular toolsets and how they might be implemented in collaborative teaching and learning environments. To illustrate the versatility of Google+, applications such as SlideShark and Socrative, were used to deliver and explore uses of Google+. Other applications that could be used in instruction including MindMeister and Haiku Deck were also discussed. Though these two do not synchronize directly with Google Drive, materials created in the applications could be exported to programs that do synchronize with Drive. The presenters provided handouts with tips for best practices within a classroom that included a conceptual framework for designing authentic activities using Google+ circles, communities and docs.

REVIEW OF LITERATURE

Technology in higher education is often times relegated to task management in online learning environments. The two most common uses for cloud computing are moving information back and forth between source and destination and housing student and instructor documents. Instructors in higher education typically operate on an expert-novice transmission model of delivering course content (Rowe, Bozalek, & Frantz, 2013). The instructors (experts) transmit the content to students (novices). In fact, "When technology is used in higher education, it usually reinforces didactic teaching methods that carefully control access to expert knowledge (Rowe et al., p. 595).

However recent advances in cloud computing provide a myriad of tools to enhance communication and allow students to engage in a shared learning environment that promotes critical thinking and complex problem solving (Rowe et. al., 2013). Additionally, if finding ways to encourage students to be more contemplative and less distracted when using technology is the goal, then frustrated instructors utilizing ineffective tools make that end result more difficult in the cloud computing environment (Nevin, 2009; Newman, 2013). Google Drive is one platform that currently encompasses a dozen innovative applications for finding, organizing, assimilating, and distributing information to students organized into collaborative groups.

Google Drive provides mobility when designing projects because the Drive is the common thread that allows the project to be accessed from any computer. A study of acceptance behaviors in adults aged 18 to 55 years of age found that 27% feel that Google+ tools are difficult to learn and another 29% feel that it takes time to adapt with some features (e.g., Hangouts) being more demanding than others (Kaur & Grover, 2012). Thus, figuring out how the various interfaces work together can be frustrating, and so there is a tendency for instructors to avoid using these tools altogether (Haebig & Lawrence, 2013; Honeyman-Buck, 2010), resulting in limited opportunities for students to engage in authentic problem solving and collaborative environments.

METHODS/PRACTICE DESCRIPTION

The presentation was an interactive, information/discussion-based workshop. The skills-based presentation presented ideas gleaned from the presenters' actual experience using Google+ online tools and Apps in an instructional design setting within an outreach education program and as part of collaborative research projects conducted during graduate studies at a Western university. Presentation attendees were asked to share experiences working with online tools.

Step-by-step instruction included: constructing and sharing a document; implementing the collaboration features; how to use the dropdown menus and expansion features; how to manipulate the interface; how to design and implement a Google form for use in surveys; and the important facts and design of Google Glass including a YouTube video demonstrating the spatial disorientation effect of wearing Google Glasses. Fears about copyright infringement surfaced during the workshop. However, Google has strong privacy protections in place, stating "You retain ownership of any intellectual property rights that you hold in that content. In short, what belongs to you stays yours." (http://www.google.com/policies/terms).

To enhance the experience of workshop participants, presenters used Apps outside of, but supported by, Google+ to deliver content and demonstrate ways Google+ can be incorporated into teaching, presenting, and collaborative research. SlideShark is one App used to deliver presentation material to audiences, similar to PowerPoint. The App allows users to download presentations from Google Drive onto a tablet and is the medium of delivery. Another App presented was Socrative, which allows instructors to create short assessments in a variety of formats (e.g., short answer, true/false), which students can complete on their iPad. Instructors then can obtain immediate feedback or compile results into Google Drive for viewing and storage. Other Apps to promote productivity and collaboration were discussed with their connection to Google Drive.

RESULTS

The scholarship suggests that employing integrated technology supports a variety of pedagogical activities including the following: community building activities; enhanced communication between teachers and students; allows instructors to act as facilitators; transforms the power relationships in the learning environment; and encourages transformation in how students perceive the learning process (Rowe et al., 2013). Additionally, research has shown positive outcomes when teachers participate in professional development (PD) focused on integrating technology into instruction (Martin et al., 2010). These positive outcomes include: improved lesson plans, more time spent reflecting on teaching practice, and greater understanding of the PD program. Based on participants' reactions and questions, the workshop appeared interested and informed of the various features and uses of Google+. We made handouts available to participants, which outlined Google+ and Google Glasses.

IMPORTANCE TO THE FIELD

Currently the transmission method of teaching (e.g., classroom lectures) dominates higher education. Cloud computing technology offers an exciting and empowering medium for transformative learning and enhanced communication in distance learning environments. Learning how Google Apps can effectively assist instructors to design pedagogy that is both transformative and allows for the social construction of knowledge within diverse student communities is an important skill set for educators. Two objectives of this workshop were to inform participants of the features of Google+ and its Apps and to discuss ways they might be used in instruction and research with the hope of making participants more comfortable with the online technology. As instructors become more comfortable with cloud computing tools, online and classroom pedagogy will better align with theories of learning rather than simply providing a convenient place to store and retrieve documents.

REFERENCES

Haebig, C., & Lawrence, D. (2013/2014). 'Hangout' with your students using Google. *Learning and Leading with Technology 41*(4), 26-28.

Honeyman-Buck, J. (2010). Google rocks. *Journal of Digital Imaging, (23)*1, 104-106.

Kaur. K. & Grover. A. (2012). Technology acceptance: Perception of people towards Google Plus. *International Journal of Management, IT and Engineering, 2*(10), 373-386.

Martin, W., Strother, S., Beglau, M., Bates, L., Reitzes, T., & Culp, K. (2010). Connecting instructional technology professional development to teacher and student outcomes. *Journal of Research on Technology in Education*, *43*(1), 53-74.

Nevin, R. (2009). Supporting 21st century learning through Google apps. *Teacher Librarian, (37)*2, 35-38.

Newman, B. (2013). The contemplative classroom, or learning by heart in the age of Google. *Buddhist-Christian Studies, 33*, 3-11. doi:10.1353/bcs.2013.0017

Rowe, M., Bozalek, V., & Frantz, J. (2013). Using Google Drive to facilitate a blended approach to authentic learning. *British Journal of Educational Technology, (44)*4, 594-606. doi:10.1111/bjet.12063