

High School Teachers Use Google to Engage Students

High School American Government teacher Jason Apgar and Physics teacher Dave Johnson are using Google Applications (Apps.) to help engage students in their respective classrooms. Google Apps. for Anthony Wayne Local Schools is a suite of applications provided to the district through an agreement with technology giant Google that offers faculty, staff, and students email accounts, and document creation and sharing. But perhaps the most impressive piece of the Google Apps. software is its implications in teaching and learning.

Anthony Wayne Local Schools Director of Technology, Linda Hertzfeld, began first looking at Google as an email provider for the district. "Google offers an almost unlimited amount of storage space," said Mrs. Hertzfeld. "That becomes very important when looking at things such as archiving email and saving documents that are created by teachers and students." Anthony Wayne went on-line with Google Apps for Education in 2008. However, it provides much more than email communication. As with any Gmail (Google mail) email account, the district is able to take advantage of Google docs. Google docs is a software suite that allows individuals to use Google's own programs for document, presentation, form, drawing, and spreadsheet creation. Once created, these documents can then be shared with other individuals who also possess an Anthony Wayne Google Apps. or Gmail account.

Mr. Apgar, a former computer science major, saw the potential technology offered his teaching way before Google ever came on-line at Anthony Wayne Schools. "I saw the opportunities technology offered me as a teacher as well as what it could offer our students," stated Mr. Apgar. "We can use Google and the 'Cloud' to save time, resources, and improve communication between teachers and students." The "cloud" refers to the information Google handles through email and portable documents. It is all saved and stored automatically within Google's storage mechanism, which allows both teachers and students to access their information anywhere they have an internet connection. Mr. Apgar can not only create assignments using technology, he can deliver content, save information, store lectures, and even grade papers using his Google account. Mr. Apgar can now use his website to house all of the information his students need at any given time. He can even video record his classes, so that absent students can actually see the class period they missed. "Since so many students have computers, smartphones, electronic readers, iPads, and other devices that connect to the internet, this only makes sense," added Mr. Apgar. "Now students can have access to all of the information for my classes 24 hours per day. They can also email me with questions after school hours (within reason) if needed."

Mr. Johnson, high school Physics teacher, has used the Google apps idea to assist in his subject area as well. By using his web site for instance, Mr. Johnson is able to create an informational "homebase" for students to go to if they have questions about schedules, assignments, or upcoming projects. This is especially helpful since Mr. Johnson does not teach all of his classes in the same room. Mr. Johnson is also in the process of deploying new textbooks in his Physics classes that will have on-line access to the textbook. Students will eventually be able to access their textbook wherever they have a connection to the internet.

A great deal of work went into this idea becoming a reality. Mr. Apgar began by submitting a proposal for his ideas to high school principal Jeri Hoellrich, who worked with district technology director Linda Hertzfeld to develop usage guidelines, deploy the necessary computer hardware, and create individual student accounts. Each Google classroom had a 15 minute visit from Mrs. Hertzfeld to outline expectations and ethics

regarding online communications. Once all of the logistical work was done, students received Google accounts to use in Mr. Apgar's classes. Students are assigned a fee of eleven dollars for their account. This fee pays for the entire Google suite and allows them all of the access they need to send and receive email as well as take advantage of the Google document sharing features. Mr. Apgar works individually with students who do not have home internet access. "We can typically find solutions if a student does not have home access," said Mr. Apgar. "I just work with these students on a case by case basis to make sure that they have the same opportunities as those who do have home internet access." The students also get some real world instruction on acceptable use. They review acceptable use with their teachers and have to agree to use their accounts for school-related work. One very important feature to Google apps is that everything is archived. Each time a character is typed, Google archives it forever. Students learn that anything they create, send, or receive, can be accessed by district administrators. Of course, ethical usage of technology is something that they will be exposed to both at college and once out working in real-world situations.

As the use of Google Apps continues to spread throughout the district, staff and students will continue to have opportunities to utilize its power as an educational tool that can be utilized to impact teaching and learning in a multitude of ways.