Move Feedback and Student Learning to the Forefront with Doctopus

by Nicole Ray and Robert Strong

Doctopus is a google sheets add-on that will change your teaching life! Doctopus allows users to organize shared documents, provide feedback quickly and easily, allows peers to provide feedback and MUCH more. Doctopus can even integrate with Google Classroom for those teachers who have access as a Google school.

The unfortunate part of most technology use in classrooms is it fails to engage students in collaboration and critical thinking. Google Drive has surfaced as a tool many teachers are utilizing to support the paradigm shift from the teacher, to the student centered learning model. Doctopus has emerged as a valuable instrument to help teachers manage distributing assignments to students as well as allowing for collaboration. Teachers and students can use these tools for free anywhere, any time.

Although hardware and software are more widely available now than ever before, there is a deficiency in the ability to implement them in education. Pitler et al. (2012) summarized Schacter and Fagnano (1999), "applied effectively, technology not only increases student learning and understanding, and achievement but also motivates students to learn, encourages collaborative learning, and helps develop critical thinking and problem-solving skills" (p.3). A classroom with a focus on technology utilizes teacher facilitated, not teacher reliant learning. Students are inspired to move beyond finding the right answers and truly engage in the learning process (Cuban, 2001).

How it works

Google Drive and Doctopus can facilitate the shift to teacher facilitated learning. Once teachers and students have Gmail accounts, teachers can use the following steps to share assignments and begin collaborating:

1. Teachers begin by creating a new Google Sheets and adding the Doctopus add-on.

2. Doctopus will walk teachers through the step by step process of creating and distributing an assignment.

   - Doctopus Step 1: Teachers can choose to use an existing Google classroom assignment or use an existing roster (or create a new one) to create a new assignment.

   - Doctopus Step 2: Doctopus creates folders for the class.

   - Doctopus Step 3: Teachers determine which sharing arrangements they'd like for their project: individual-all the same, individual-differentiated, group project, or whole class single shared document. Teachers then determine access for the whole class as well as individuals. Viewing allows students to only view the document. Commenting allows text to be selected and comments to be made. These comments appear in the margin, others can respond to these comments as well. Editing allows edits directly to the document.

   - Doctopus Step 4: Teachers choose the project template or assignment they would like to assign.

Once shared, the documents will appear in the students' shared Google Drive. Teachers can monitor student progress from their dashboard, and when the assignment is complete teachers can prevent students from making any further edits for as long as they choose.

Impacts

Google Drive is an invaluable collaboration tool. When combined with Doctopus this software can transform teachers' classrooms into centers of great thought. The benefits of collabor-

ative work are well documented, and is certainly required as part of the 21st Century Skills. Google Drive and the Doctopus add-on have several benefits:

1. Flexibility in sharing arrangements for teachers- Group, individual, or whole class projects are possible depending on the intended learning objective.

2. Organized shared files- Saves teachers' and students' time and frustration by organizing files into classes on Google Drive.

3. Allows for collaboration of students and teachers anytime, anywhere through the commenting, suggesting, and edit functions. With group and individual projects classmates can provide feedback.

4. Progress monitoring tools- Teachers can monitor student progress by having access to every document via individual links on the teacher dashboard. Teachers can also view data on the word count, number of comments the teacher, students and peers have made and resolved, and the number of comments students have made on others documents.

5. Provides a teacher feedback mechanism- Teachers can comment on text selections. Additionally, teachers can work in suggesting mode, which shows students the suggestions the teacher is making directly in the text. Students can choose to accept or reject the suggestions.

6. Provides an assessment mechanism- Teachers can leave feedback and a score to be emailed to students from the teacher dashboard as well as comments on the document.

Advice on getting started

There are a myriad of tutorials in existence on YouTube, as well as other platforms to assist teachers in getting started with this resource. Although not required, a Google Educator Certification would serve as a valuable tool for those teachers who might not yet be familiar with Google's capabilities. An additional Google app called Goobric permits teachers to create rubrics and utilize them for summative and formative assessments. This app is intended to be used in conjunction with Doctopus, and certainly adds more valuable feedback for students, and ease of use for teachers in regards to technology related assignments. Google Chrome is free to download, as is the Doctopus add-on. Google Drive can be used on any web browser; but it works best when used on Google Chrome. Teachers and students will need a google account to use this collaborative educational tool.

References

Cuban, L. (2001). Oversold and underused: Computers in the classroom. Cambridge, MS: Harvard University Press.

Pitler, H., Hubbell, E. R., & Kuhn, M. (2012). Using technology with classroom instruction that works (2nd ed.). Alexandria, VA: ASCD.

Nicole Ray is the Agriculture Department Chair at Exeter High School in Woodlake, CA. mrsnicoleray@gmail.com

Dr. Robert Strong is an Assistant Professor at Texas A&M University. r-strong@tamu.edu