

Making Animated Videos Using Online Software: An Example of a Hands-On Learning Tool from a Money and Banking Course

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Abstract

In this article its authors describe a hands-on learning opportunity for students in any field. Discussed is a project in which students use the free version of an online website to make an animated movie. Students are assigned specific topics and given a rubric with descriptions of the achievements needed to attain different grade levels.

Introduction

Achieving excellence in teaching requires developing a multitude of different tools that will keep the student engaged in the learning process. Today's college students are more accustomed to working with technology than ever before and want their education to embrace electronic gadgets and social media. Students "are restless with the traditional forms of learning and eager to incorporate into their educations the electronic tools that have become omnipresent in their lives: their smartphones, laptop computers, iPods, and MP3 players." According to a Project Tomorrow 2013 survey, students would like to study in an environment that reflects their lives outside of school and that includes digital technology to enhance learning and communications and to facilitate collaborative group work. Students and teachers also have indicated that the use of technology in the classroom makes learning more enjoyable, "especially for students who are not innately passionate about learning."

In addition to casual observation and scientific and non-scientific surveys, there is ample evidence that engaged students learn more than detached students. Krajcik and Blumenfeld (2005), as well as the extensive project-based learning literature cited

by these authors, argues that learning can be improved using a project-based approached. Similarly, Emerson and Taylor 2004, Ball, Eckel and Rojas 2006, Dickie 2006, Durham, McKinnon and Schulman 2007, among others, find that classroom exercises, experiments, and other interactive tools lead to better student performance in the college classroom.

Students' interests in current technology and media, combined with the results from the literature mentioned above, have led instructors to respond by developing activities and assignments that make full use of the media and technology currently available. The list of applications prepared by economics instructors is already very impressive, including Al-Bahrani et al. (2017) who developed a project called Econ Beats in which students explain an economic concept by producing a music video, and Holder et al. (2017), who created a video project in which students work in groups to rewrite the lyrics of a popular song to turn it into a parody with an economics context. Students then shoot a video and compete with groups from universities all over the United States (http://www.rockonomis.com). In a less technical project but continuing with the musical tone, Hall and Lawson (2008) came up with an assignment in which they distribute song lyrics with a set of relevant questions meant to highlight topics related to the economics discipline. Beyond music, using movies and television shows to draw student interest has also become popular. Mateer et al. (2011) describe the website TV for economics (http://tvforecon.blogspot.com), which collects in one central location ideas by many individuals of television clips useful in economics courses. Gillis and Hall (2010), for example, specifically use of the television show "The Simpsons" as a teaching tool. Finally, Mateer and Li (2008) discuss numerous movie clips with economic relevance that instructors can use in their courses.

The ideas listed above are but only a few of the tools available to today's instructors. In this article we add to this growing set of tools by describing an assignment that, like many of the previously cited authors, combines the use of digital technology with hands-on learning. We have used the assignment in Money and Banking courses, but it can easily be applied to other disciplines. In the assignment we ask students to make an animated (cartoon) video via the free-trial version of the website GoAnimate.com. In the past, this website offered limited animated cartoon movie making capabilities free of charge. Currently, the only free version available is a 14-day free trial version. For a fee, however, users have more elaborate options; there is an educational pricing option (https://goanimate4schools.com/public_index) that allows several instructors and students to use the software. The main limitations of the free version of the website are the length of the videos that can be made by each individual user, the variety of templates available, and the ability to export the video to other online video depositories (e.g., youtube.com). The videos from free trial versions, therefore, are no available to be shared in a public forum, such as YouTube. Only users with an account can view the videos created in the free trial version.

Description of the Assignment

We typically use the assignment toward the end of the semester after we have covered a substantial portion of the course's curriculum. Students are given written and electronic instructions approximately one week before the assignment's deadline. The assignment requires students to write a script for a short animated movie and to produce the movie using the website GoAnimate.com. The students are assigned specific topics and page numbers from the textbook to use when developing their movie script. For example, in a Money and Banking class that uses the textbook *Money, Banking, and Financial Markets* by Stephen Cecchetti and Kermit Schoenholtz, we assign students a topic from the following list:

- "Central Banks in the World Today: The Basics of How Central Banks Originated and Their Role Today, and Stability, The Primary Objective of Central Banks", pages 395-405.
- "Meeting the Challenge: Creating a Successful Central Bank, and Fitting Everything Together: Central Banks and Fiscal Policy", pages 405-416.
- "The Structure of the Federal Reserve System, and Assessing the Federal Reserve System's Structure", pages 422-435.

Assignment Instructions

Figure 1 below contains the instructions that we distribute to students. Although we assign the project individually, there is no reason why it cannot be assigned in groups. We find the instructions to be easy enough to follow, even for students who are not particularly technology oriented, and thus we believe that every student is capable of completing the assignment individually. Students are graded on four equally weighted categories: content, audience, creativity, and length. Each category is worth 25 points for a total combined of 100 points. The rubric (Table 1 below) describes what each student must complete in order to earn the maximum number of points in each category. Instructors can modify the rubric as needed to fit their audience and class content.

Figure 1: Instructions

For this project you are going to make a video using the website goanimate.com. Below are basic instructions on how to make the video, the topic you have been assigned, and the rubric that will be used to assess you video.

- 1) Direct your browser to GoAnimate.com
- 2) Create a BASIC FREE account. You can create a new account or login using your existing Facebook or Gmail account.
- 3) After you create the account, look at the different tutorials.
- 4) When you are ready to produce your own video, click on the MAKE A VIDEO link on the top right-hand corner of the page.
- 5) When you are finished creating your video, click SAVE.

6) Finally, on your VIDEOS page, click on the SHARE/EXPORT sign and copy the URL at the bottom of the page that says "share a link to this go animate video".

Send your instructor an email with the link to your video by the deadline.

The instructor and students and any individual with a Goanimate.com account will be able to view the videos. However, when using the free trial version of the website, videos cannot be exported or shared in public platforms (such as YouTube), including this publication. Table 1 below presents a guideline for grading student submissions. The rows list the categories used to evaluate the videos, while the columns describe the requirements students must fulfill in order to receive 25, 20, 10 or zero points in each category. A snapshot of a simplest video we use is shown below Table 1 in Figure 2. This is in fact a video we have used in the past to deliver the same set of instructions listed in Figure 1 using an animated cartoon. The video is a conversion between the professor and a student. Additional videos produced in GoAnimate can be found in YouTube, including https://youtu.be/Q3L2Al_qdJ4, https://www.youtube.com/watch?v=ilZ5Y5Fe7rA,

https://www.youtube.com/watch?v=DcusaMIAr4Y, and

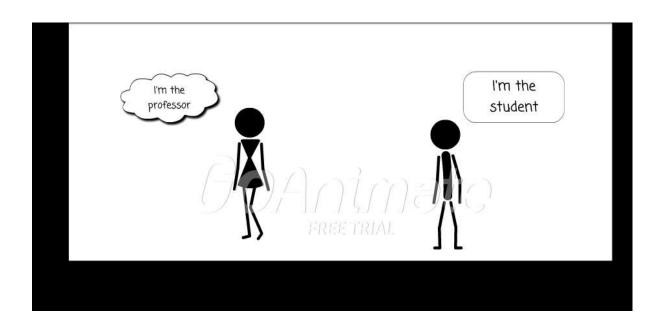
https://www.youtube.com/watch?v=JG8PpJxpVvo&list=PLD576893A10146DD1

Table 1: Rubric

Criteria	A 25 points	B 20 points	C 10 points	D 0 points
Content	The video includes all or almost all of the topics discussed in the assigned book section.	The video includes many of the topics discussed in the assigned book section.	The video includes very few of the topics discussed in the assigned book section.	The video does not include any of the topics discussed in the assigned book section.
Audience	The video content is appropriate for high school students or college students enrolled in principles of economics.	The video content is a little too simplistic or too advanced; it is appropriate for middle school students or college upperclassmen.	The video content is too simplistic or too advanced; it is appropriate for elementary school students or graduate students.	The video content is incomprehensible by either young children or expert economists.

Creativity & Originality	The video is very creative in its design, and the "script" is original. The video uses at most two quotes from the assigned book section, and gives credit to the authors.	The video is creative in its design, and the "script" is mostly original. The "script" uses very few of the book's discussions word-for-word, and credit is given to the authors of the book when direct quotes are used.	The video is not very creative and the "script" is mostly unoriginal. The "script" uses several of the book's discussions word-for-word, and does not acknowledge the book's authors when direct quotes are used.	The video is not creative and the "script" is unoriginal. The "script" uses several of the book's discussions word-for-word without giving credit or acknowledging the book's authors.
Length	The video is 2 minutes long	Student deviates from the 2 minutes target by 30 seconds.	Student deviates from the 2 minutes target by more than 30 seconds but by less than 1 minute.	Student deviates from the 2 minutes length by more than a minute.
Overall Score	A 90 or more	B 80 or more	C 40 or more	D 0 or more

Figure 2: Snapshot of Introductions Video



Conclusions

The purpose of this assignment is to engage students in their learning by having them write a script and produce an animated video. The development of the animated video has several desirable learning outcomes. It encourages the student to read, understand and use the course concepts from the class. It also allows the student to incorporate elements of artistic self-expression, humor, and interactivity with an audience (e.g., other students of economics). Furthermore, since cartoons are typically thought of as playful or intended for fun, the use of a tool like GoAnimate.com can provide a stress- or anxiety-free channel for students to become more engaged with the subject and may also provide an opportunity for some boredom relief. Students are given technical instructions on how to produce the video, and very detailed guidelines regarding the content (including page numbers from the textbook) expected to be on it. Students are given a rubric that details the categories used in grading the video.

In addition to the student outcomes listed above, the use of a tool like GoAnimate.com can also provide the course instructor a concrete example of course content that may not be adequately understood by students in the class. A student cartoon that fails to appropriately explain the concept assigned can provide important information to the instructor about where students may be missing the concept and provide clues to where course improvement can be made.

This assignment has met with a positive reception from our students. They enjoy its novelty and the opportunity to be creative. Admittedly, the grading (rubric) is lenient; students can easily make a B on this project, and they like that too. For this reason, it might be a good idea to keep the weight of the assignment low (5-10% of the final grade) or make it an extra credit opportunity.

References

Al-Bahrani, A., S. Drabik, J. Gibson, B. Libis. 2017. "Econ Beats: A Semester Long, Interdisciplinary, Project-Based Learning Assignment." Journal of Economics and Finance Education. 16 (3). 1-11.

Ball, S.B., C. Eckel and C. Rojas. 2006. "Technology Improves Learning in Large Principles of Economics Classes: Using our WITS". American Economic Review 96(2): 442-446.

Cecchetti, S. G., and K. L. Schoenholtz. Money, Banking, and Financial Markets. New York: McGraw-Hill/Irwin, 2011.

Dickie, M. 2006. "Do Classroom Experiments Increase Leaning in Introductory Microeconomics?" Journal of Economics Education 37(3): 267-288.

Durham, Y., T. McKinnon and C. Schulman. 2007. "Classroom Experiments: Not Just Fun and Games". Economic Inquiry 45(1): 162-178.

Emerson, T.L.N. and B.A. Taylor. 2004. "Comparing Student Achievement across Experimental and Lecture-Oriented Sections of a Principles of Microeconomics Course". Southern Economic Journal 70(3): 672-693.

Gillis MT and J. Hall (2010) Using the Simpsons to improve economic instruction through policy analysis. The American Economist, 55(1), 84-92.

Hall, J. and R. Lawson (2008) "Using Music to Teach Microeconomics", Perspectives in Economic Education Research 4 (1), pp. 23–36.

Holder K, A. Hoffer, A. Al-Bahrani, and S. Lindahl (2015) Rockonomix. The Journal of Economic Education, 46(4), 443.

Krajcik, J. S., and P.C. Blumenfeld (2005). Project-Based Learning. In R. K. Sawyer (Ed.), The Cambridge Handbook of the Learning Sciences, Cambridge Handbooks in Psychology (pp. 317–334). chapter, Cambridge: Cambridge University Press.

Mangan, K (2014) "Digitally Savvy Students Play Hide-and-Seek With Campus Messages." The Chronicle of Higher Education. Web. 26 June 2014.

Mateer G.D, L.S. Ghent and M. Stone (2011) TV for Economics. The Journal of Economic Education, 42(2), 207.

Mateer GD and H. Li (2008) Movie scenes for Economics. The Journal of Economic Education, 39(3), 303.

Matthai, A. "Students and Teachers Agree: Let's Bring In More Tech." CompTIA. Web. 10, December 2014.

"Trends in Digital Learning: Students' Views on Innovative Classroom Models." Project Tomorrow. Web. 24 September. 2014.

Van Der Werf, M. and G. Sabatier (2009), "The College of 2020: Students." Chronicle Research Services. Web. 26 June. 2014.

http://www.warren-wilson.edu/~adcommittee/Tuition_Study/2020Students.pdf.

Van Wyk, M. M (2011) "The Use of Cartoons as a Teaching Tool to Enhance Student Learning in Economics Education." Journal of Social Sciences, 26(2): pp 117-130.

End Notes

- 1 Van Der Werf, M. and Sabatier (2009), p. 7.
- 2 http://www.tomorrow.org/spkup/2014_OnlineLearningReport.html
- 3 http://www.comptia.org/about-us/newsroom/blog/comptia-blog/2014/12/10/students-and-teachers-agree-let-s-bring-in-more-tech

