

Designing an Engaged Classroom

Is it really worth it?

Summary

This session will provide you with a brief overview of a method used to convert a typical lecture course into a more collaborative learning environment. Both positive and negative aspects of the method will be discussed, and evidence of success will be presented. You will also have opportunity to practice the method described and are encouraged to participate throughout the session.



Look familiar?

I hear and I forget.

I see and I remember.

I do and I understand.

-Confucius

Learning Objectives

- Understand the basic design of the “flipped model” or blended classroom
 - Learn one specific method for designing an engaged classroom
 - Learn of other general methods for converting a typical lecture to something more collaborative
 - Learn some of the tools that are available and get practice in using some
 - Be a student for a lesson in biochemistry, as an example of prepping for an engaged classroom
 - Examine the pros and cons of “flipping”
 - Consider evidence for success of the model
-

References

- Creation and Implementation of a Flipped Jigsaw Activity to Stimulate Interest in Biochemistry among Medical Students, From the Department of Biomedical Sciences, Cooper Medical School of Rowan University, Camden, N.J.,
https://iubmb.onlinelibrary.wiley.com/doi/epdf/10.1002/bmb.21126?purchase_referrer=www.google.com&tracking_action=preview_click&r3_referer=wol&show_checkout=1
 - Freeman et al. (2014), Active Learning Increases Student Performance in Science, Engineering, and Mathematics, Proceedings of the National Academy of Sciences in the USA, PNAS 2014 111 (23) 8410–8415, <http://www.pnas.org/content/111/23/8410.abstract>
 - Lage, M., Platt, G., & Treglia, M. (2000). Inverting the classroom: A gateway to creating an inclusive learning environment. Journal of Economic Education. Vol. 31. No. 1 (Winter). pp. 30-43. Taylor &
 - Francis. Mazur, Watkins, J. (2010). Just in time teaching and peer instruction. In S. Scott & M. Mark (Eds.),
 - Just in time teaching: Across the disciplines and across the academy (pp. 39-62). Sterling, VA: Stylus. Moore, E. (May 20, 2013). From passive viewing to active learning: Simple techniques for applying active learning strategies to online course videos. Faculty Focus. Online at: <http://www.facultyfocus.com/articles/teaching-with-technology-articles/from-passive-viewing-to-active-learning-simple-techniques-for-applying-active-learning-strategies-to-online-course-videos/Squarecap>
- Information

Squarecap Information

Squarecap is an intuitive classroom engagement tool that works on any web-capable device and supports student success by automatically tracking attendance, encouraging class participation, and providing students with immediate feedback. Squarecap makes it easy to engage students with live comprehension checks throughout the lesson, identify gaps in knowledge through a student-generated Ask & Vote, and can automatically group students for peer instruction through the use of personalized and dynamic seat maps.

For more information, please go to www.squarecap.com or email stephanie@squarecap.com to schedule a personalized demonstration. Mention you attended this conference for a 20% discount of the subscription price for your students.



How did I make the videos?

Program: QuickTime Player®

Equipment: Computer, printer, headset

I first prepare the PowerPoint lecture slides – complete with animations and run through the slide show to make sure it contains all the information and flows smoothly. I then prepare the script as a Word document. You can either use a fully written script – or just bullet point items. I find that unless I have something written before me – successfully completing the video is much more cumbersome and time-consuming. I review, in advance, the points of emphasis so that it sounds more like a conversation and less like I am reading a script. (How'd I do??) In the script, each slide is a new paragraph – so that I can time the slide advancement accurately. I also mark the points of animation on the script – so that they are timed properly with my words. The script is printed and laid out before me before I begin.

The PowerPoint lecture is opened and ready to begin (of course, the headset is on). QuickTime is started and I use File > New Screen Recording to record the video. Once completed, I then edit the beginning and end of the file to edit out the screen changes that occur in switching from QuickTime to PowerPoint and back. The QuickTime program has editing features that are easy to use – so you can replace a segment of the video if you find a mistake was made on one slide. This program is super easy to use!

The last step is to export the file using the parameters (resolution, etc.) desired. I upload all of my videos to a YouTube channel and import the links into my LMS system (Canvas). Feel free to contact me if you want more detailed information or advice!

Contact Information and Background

Dr. Gail K. Grabner
Assistant Professor of Instruction
Department of Molecular Biosciences
The University of Texas at Austin
1 University Station A5000
Austin, TX 78712-0165
Office: NMS 4.104B
ggrabner@cm.utexas.edu
512-471-1982

B.S. in Chemistry; M.S. in Biochemistry; Ph.D. in Biochemistry