

Flipping the classroom: lectures and homework trade places

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My Prezi is available here:

http://prezi.com/xqbzifvu-fvs/?utm_campaign=share&utm_medium=copy&rc=ex0share

You can also go to Prezi and search for the title to find the presentation.

What is flipping the classroom?

Flipping the classroom involves delivering the content outside the classroom, typically using lecture videos, podcasts, or reading materials. In mathematics, flipped classrooms commonly use lecture videos. Flipping the classroom is not to be confused with inquiry-based learning (IBL). In IBL, students are figuring out the content for themselves by using guided activities. In classroom flipping, the content is delivered to students; the delivery simply happens outside the classroom.

What is my experience with flipping the classroom?

In Fall 2013, I flipped two sections of College Algebra, and I am currently flipping two more sections of College Algebra.

What were my results with flipping the classroom?

Overall, my first experience with flipping the classroom was overwhelmingly positive. Student evaluations were very positive. Many students commented that the flipped class worked well for them, even if they were not initially convinced it would.

On a similar final exam, students in flipped classrooms had a higher mean score and a lower standard deviation than students in a traditional classroom. *Note: the control groups are not actually larger class sizes, they are two smaller classes grouped together.*

| | Flipped 1 | Flipped 2 | Control 1 | Control 2 |
|---------------------------|-----------|-----------|-----------|-----------|
| Mean | 80.5 | 76.9 | 71.6 | 70.2 |
| Standard Deviation | 9.51 | 11.02 | 19.43 | 19.34 |
| Number | N=15 | N=17 | N=18 | N=21 |

| | All Flipped | All Control |
|---------------------------|-------------|-------------|
| Mean | 78.6 | 70.8 |
| Standard Deviation | 10.50 | 19.39 |
| Number | N=31 | N=39 |

What technology do I use to make my lecture videos?

I make screencasts (students only see the screen) using a Wacom Intuos tablet (\$80), Smoothdraw (a free download), and Jing (a free download) or Camtasia Studio (not free).

ipads and other tablets can easily make screencasts as well.