Are You Flipping Out or Flipping In?: The How's, Why's, and What's of the Flipped Classroom Model

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The Flipped Classroom: Lectures at Home and Homework in class

(Video: 2:43)

https://www.youtube.com/watch?v=U-ZA7eb74-g





Learning is More Flipped

One Man, One Computer, 10 Million Students: How Khan Academy Is Reinventing Education, Forbes, November 19, 2013, Michael Noer

The One World Schoolhouse (Twelve, Oct. 2, 2012)







Bending over backwards for students?



Maybe it's time to flip your classroom?

February 5, 2014

Lessons Learned from 1,125 Flipped Classrooms It's been 40 years since the Army first experimented with competency-based learning, Peter D. Lenn

The solution they decided to test was what we now call the "flipped classroom". After initial successes, the Army opened 1125 learning centers in every combat arms battalion worldwide. They also converted Advanced Individual Training schools to the flipped model. The result was the army was able to train over 500,000 soldiers for highly technical jobs with 85% reaching A-level competence in 40% less time than the prior conventional courses.



February 5, 2014

Lessons Learned from 1,125 Flipped Classrooms It's been 40 years since the Army first experimented with competency-based learning, Peter D. Lenn

The key ingredients of the flipped classroom are:

- The students learn by doing in class—memorizing, drilling with questions or flashcards, solving problems and writing essays and papers.
- 2. The teacher's principal activity in class is to help individual students, one at a time, mostly when asked by the student.
- 3. Each student progresses from one lesson to the next only after demonstrating competence of the current lesson.



February 12, 2014 (3:10 video)

DODDS-Europe teachers find success with 'flipped classroom' approach,

Stars and Stripes, Jennifer H. Swan KAISERSLAUTERN, Germany



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February 12, 2014

DODDS-Europe teachers find success with 'flipped classroom' approach,

Stars and Stripes, Jennifer H. Swan KAISERSLAUTERN, Germany

- Welcome to "flipped mastery," an innovative approach to learning that a group of Department of Defense Dependents Schools-Europe teachers in Germany are using to help more students succeed in math.
- Flipped learning is a growing trend in U.S. military and stateside classrooms. Students watch their teachers' video lectures at home and do their "homework" in class.

February 12, 2014

DODDS-Europe teachers find success with 'flipped classroom' approach,

Stars and Stripes, Jennifer H. Swan KAISERSLAUTERN, Germany

"We tried lots of things — we tried project-based learning; we tried cooperative groups," Kelly said. "The bottom line is, we would get students that were not prepared. They come to your classroom ... they don't know things they should know already. Then we expect them to learn algebra at a higher level. It just wasn't happening; they weren't doing the work. They were confused." What sold the teachers on "flipped mastery" was the "mastery."

Question #1: How to get them to do the work before class?

- Model it
- Points awarded
- Test on it, email back 2-3 answers
- Make it an expected part of the community
- What else?

Question #2: How else motivate students to flip?

- · Grade their prework
- · Inspire
- Share the purpose, rationale, objectives
- Use it
- Bring back former students for testimonials
- · Build on it (not a one-off activity)

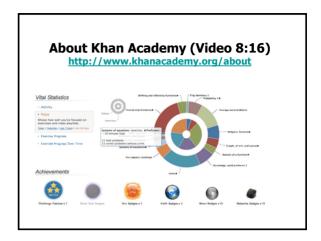
February 12, 2014

DODDS-Europe teachers find success with 'flipped classroom' approach,

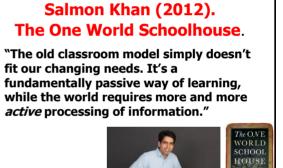
Stars and Stripes, Jennifer H. Swan KAISERSLAUTERN, Germany

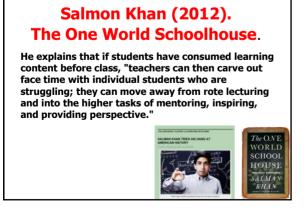
"After the first year of flipping, the Algebros compared their first semester of "flipped mastery" math to the same first semester a year ago of traditional math. Brust, Sullivan and Kelly had 77 D's and F's — out of 265 students — at the end of first semester traditional math during the 2010-2011 school year. The number of D's and F's dropped to 29 at the end of the first full semester of flipping in 2011-2012."

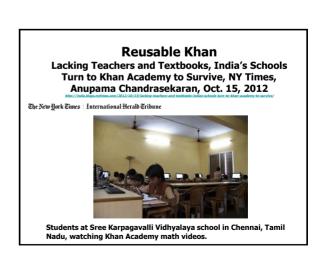












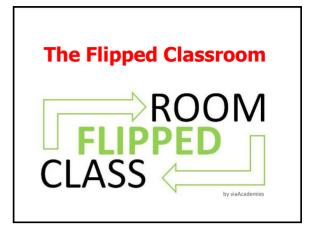
The Flipped Classroom Enables Personalized Learning

Microsoft Educator Network

Aaron Sams and John Bergmann's book Flip Your Class: Reach Every Student in Every Class Every Day; "15 Reasons To Flip Your Classroom" speak to personalized learning:

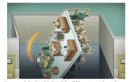
- · Helps struggling students;
- · Increases instructor-learner interaction;
- · Allows for different learning rates or speeds;





What is Flipped Classroom?

- A model of learning that rearranges how time is spent both in and out of class to shift the ownership of learning from the educators to the students (The NMC horizon report, 2014).
- The Flipped Classroom inverts teaching methods, delivering instruction online outside of class and moving homework into the classroom.
- Students watch online lectures at home at their own pace, communicating with peers and teachers via online discussion.

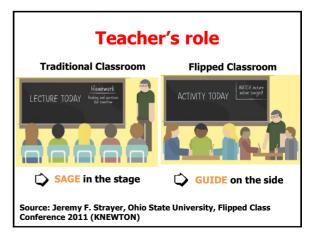


Source: Demski, J. (2013), Illustration by Peter Hoey

Flipping the Class, Penn State (3:23 video) https://sites.google.com/site/flippingclass/

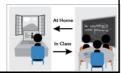
Teaching for Tomorrow: Flipped Learning (Video: 2:52) https://www.youtube.com/watch?v=4a7NbUIr_iQ





Why is it significant?

- Students can watch, rewind, and fast-forward as needed while they cannot stop to reflect upon what is being said in traditional classroom.
- Devoting class time to application of concepts might give instructors a better opportunity to detect errors in thinking.
- Collaborative projects can encourage social interaction among students to support their peers.



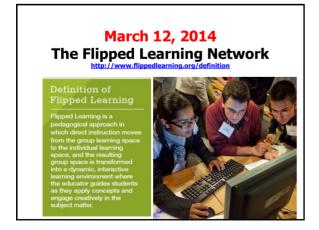
6 Expert Tips for Flipping

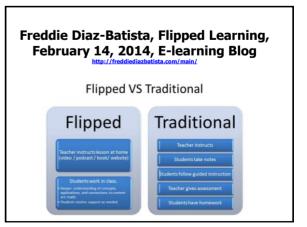
- 1. Use existing technology to ease faculty and students into a flipped mindset.
- 2. Be up front with your expectations.
- 3. Step aside and allow students to learn from each other
- 4. Assess students' understanding of pre-class assignments to make the best use of class time.
- 5. Set a specific target for the flip.
- 6. Build assessments that complement the flipped model.

Source: Jennifer Demski, Campus Technology, 23 January 2013

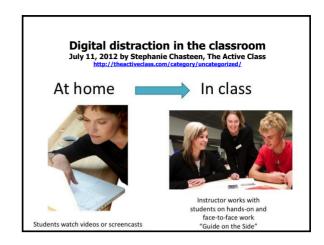


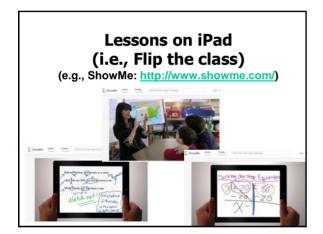












Digital distraction in the classroom
July 11, 2012 by Stephanie Chasteen, The Active Class
http://theactiveclass.com/category/uncategorized/.

"I no longer go to work to 'perform' five times a
day; instead, I look forward to going [to class] and
interacting with my students all day," says high
school teacher Jonathan Bergmann...In the flipped
class, instructors create video podcasts for students
to watch — either of lectures, or solving a problem,
or demonstrations — and post those for the
students to watch at home.





Ohio State Chemistry Flips the Classroom

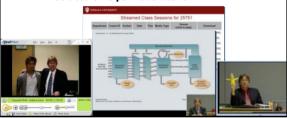
(Video: 1:10) https://ww





My First Attempt to Flip

- · Ask students to watch weekly lectures.
- Reflect on key concepts.
- Instructors helps moderate it.



Freddie Diaz-Batista, Flipped Learning, February 14, 2014, E-learning Blog

"One of the big mistakes we made when we

pioneered this model is that we focused too much on video. We now like to use the term "learning object" when we talk about the flipped classroom. A learning object can include videos, but it also can be resources such as online simulations, books, and periodicals."

April 30, 2014

Flipped learning skepticism: Can students really learn on their own?, Robert Talbert, **Chronicle of Higher Education**

Unfortunately this is a common misconception about the flipped classroom: That it's "learning on your own" without any guidance or support from an instructor. I told a story in my previous post about trying to teach a friend how to play a game by giving him the instruction manual and then walking away. Whatever this is, it's not flipped learning.

April 30, 2014

Flipped learning skepticism: Can students really learn on their own?, Robert Talbert, Chronicle of Higher Education

A misconception about the flipped classroom itself, that it is a pedagogy of abandonment, where students are loaded up with books and videos but then left to fend for themselves. This is not the intent of flipped learning at all! The idea in the flipped classroom is to leverage human and electronic resources to teach students how to learn for themselves.

April 30, 2014

Flipped learning skepticism: Can students really learn on their own?, Robert Talbert, Chronicle of Higher Education

A well-designed flipped classroom, on the other hand, not only helps students master content knowledge but also gives them practical experience with learning how to self-learn...For me, this is built into the Guided Practice assignments that my students get.

March 12, 2014

The Flipped Learning Network

http://www.flippedlearning.org/definition
April 1, 2014

Toward a common definition of "flipped learning", Robert Talbert, Chronicle of HE

Four pillars:

- Flexible environment (various modes of learning)
- Learning culture (student-centered inquiry)
- Intentional content (direct instruction b4 class)
- Professional educator (reflective and accessible; collaborates and perfects one's craft)

Flexible Environment

F.1 □ I establish spaces and time frames that permit students to interact and reflect on their learning as needed.

F.2 □ I continually observe and monitor students to make adjustments as appropriate.

F.3 □ I provide students with different ways to learn content and demonstrate mastery.

Learning Culture

- I..1 | I give students opportunities to engage in meaningful activities without the teacher being central.
- I..2 I scaffold these activities and make them accessible to all students through differentiation and feedback.

Intentional Content

Professional Educator

and relevant to all students.

April 1, 2014

Toward a common definition of "flipped learning", Robert Talbert, Chronicle of HE

Goal:

Self-regulated learning Enhanced problem solving abilities Confident problem solvers Desire to learn on one's own

May 13, 2014

Exploring the Fringe: Flipping, Microcredentials, and MOOCs

Jeff Cobb and Celisa Steele, Tagoras

Essential Goals of the Flipped Class:

- From lecture as primary;
- · From instructor-centered environment;
- · From individual to collaborative.



May 13, 2014

Exploring the Fringe: Flipping, Microcredentials, and MOOCs

Jeff Cobb and Celisa Steele, Tagoras

May Require:

- More time and effort to prepare;
- · Resource investments;
- Prepared learners;
- · A different instructional philosophy;
- · Active participation.

May 13, 2014

Exploring the Fringe: Flipping, Microcredentials, and MOOCs

Jeff Cobb and Celisa Steele, Tagoras

Flipped Content Includes:

- Video captured from conferences;
- Webinar recordings;
- · Brief audio or video interviews:
- Screen recordings;
- · Various publications.



May 13, 2014

Exploring the Fringe: Flipping, Microcredentials, and MOOCs

Jeff Cobb and Celisa Steele, Tagoras

Class time spent:

- · Problem solving activities;
- · Case studies;
- · Facilitated discussion;
- · Other.

May 7, 2014 6 Myths of the Flipped Classroom

Joshua Kim, Inside Higher Ed

http://www.insidehighered.com/blogs/technology-and-learning/6-myths-flippedclassroom#sthash.tm2eSel4.dubs

- Proponents despise lectures
- Must get rid of lectures
- Students will stop coming to class
- Requires much technical knowledge
- Requires huge prep time (half true)
- Teaching evals will suffer (true)





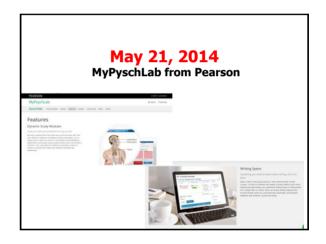
May 21, 2014

Missouri State U Improves Learning
Outcomes With Flipped Course, Leila Meyer

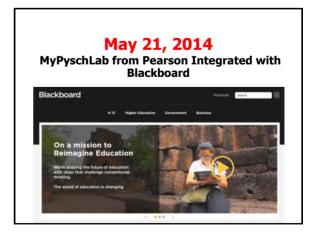
http://campustechnology.com/Articles/2014/05/21/Missouri-State-UImproves-Learning-Outcomes-with-Flipped-Classroom.aspx?p=1

Introductory Psychology (changed fall 2012).
Old Version = 30 percent improvement.
Flipped Class = 76 percent improvement
DFW rate from 24 percent to 18 percent

"and this is a much more rigorous course now"
said Hudson. "When you think about it in terms of dollars and retention, that's pretty significant."."







Flattened Classrooms and Learning Studios

Adjusting the Prescription: The School of Medicine overhauls its century-old educational approach.

Maura Singleton. February 2011. University of Virginia

Maura Singleton, February 2011, University of Virginia http://uvamagazine.org/articles/adjusting_the_prescription



The Learning Studio: First-year medical students work in teams in the learning studio, a radical departure from the lecture hall. 'One of the goals of this whole model—of having students do a lot of the learning themselves rather than passively listening—is that they need to be lifelong learners," says Randolph Canterbury, senior associate dean for education. (called the

Flattened Classrooms and Learning Studios

Adjusting the Prescription: The School of Medicine overhauls its century-old educational approach.

Maura Singleton, February 2011, University of Virginia ttp://uvamagazine.org/articles/adjusting the prescription





The newly expanded Medical Simulation Center lets medical trainees practice skills and case scenarios in clinical settings that mimic actual situations. Outside the operating room, a technology specialist manipulates vital signs on a patient simulator and controls the cameras recording the session.

Flattened Classrooms and Learning Studios

Adjusting the Prescription: The School of Medicine overhauls its century-old educational approach.

Maura Singleton, February 2011, University of Virginia

Maura Singleton, February 2011, University of Virginia



April 21, 2014 (6:52 video)

Multimedia Assignments: Not Just for Film Majors Anymore (student and instructor produced videos) Chronicle of Higher Education, Danny Ledonne

Video production fosters

- Engaging more senses and learning styles
- Deeper engagement
- · Content reflection
- · Can be shared and reused

April 21, 2014

Microflipping:

a Modest Twist on the 'Flipped' Classroom
Chronicle of Higher Education, Sam Buemi

"But in practice, the flipped classroom often feels like an all-or-nothing endeavor that does not serve students as well as it could. Instructors typically either invest in flipping classes—using social media, video-editing software, or other bells and whistles of educational technology—or they don't. What if, instead, we used a partially flipped classroom—the "microflipped" classroom—that combined the best of the old and new teaching approaches?"

April 21, 2014

Microflipping:

a Modest Twist on the 'Flipped' Classroom Chronicle of Higher Education, Sam Buemi

"Microflipping is a "guide on the side" approach that can be highly versatile inside and outside the classroom. Unlike the fully flipped approach where students are expected to come to class prepared, microflipping is designed to instruct both those students who have done the required assignments before class and those who have not. It blends the flipped-classroom and traditional-lecture approaches."

April 21, 2014 Microflipping:

a Modest Twist on the 'Flipped' Classroom
Chronicle of Higher Education, Sam Buemi

Microflipping includes:

- Lecture of 5 minutes maximum;
- Clickers, mobile apps, videos, activities, conversation, etc.;
- Constant balance between lecture and activity is by creating a script that outlines what content and activities I will be covering during class, and which technological tools I'll be using.











How to Create...?



How to Create...?

Creating videos for flipped learning, eSchool News
http://www.eschoolnews.com/2013/09/09/educators-video-flipped-008/2/2ast=1238astc=11015
Joe Zisk: http://teacheronline.us/screencapture/

- Screencasting software for iPads includes:
 - Replay Note (\$4.99), Explain Everything (\$2.99), Screenchomp (free), and ShowMe (free).
- Screencasting software for a laptop or desktop includes:
 - Jing (free), Snagit (\$29.95),
 Screencast-o-matic (free),
 Camtasia Studio (\$1.79), Camtasia for Mac (\$75 for a single educator license), and aTube Catcher (free).



I Flip, You Flip, We All Flip: Setting Up a Flipped Classroom

(Video: 24:09)



May 18, 2014

Harvard goes all in for online courses The stress is on production values, props, and, yes, scholarship

The Boston Globe, Marcella Bombardieri





Laurel Thatcher Ulrich, a Harvard historian, was filmed in the HarvardX studio for her class, "Tangible Things."

April 14, 2014

The New Academic Celebrity
Why a different kind of scholar—and idea—
hits big today,

Chronicle of Higher Education, Christopher Shea











