

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**
Turning the traditional
classroom model on its head

The Flipped Classroom: Lectures at Home and Homework in class (Video: 2:43)

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



The Flipped Classroom: Lectures at Home and Homework in cla...
151 views



The Flipped Classroom: Lectures at Home and Homework in cla...
151 views

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<http://ocw.mit.edu/index.htm>

OCW is accessed by a broadly international population of educators and learners. MIT OpenCourseWare averages 1 million visits each month. Translations received 300,000 more visitors from all over the world via OpenCourseWare.

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Available in 100+ languages

Our audience is divided among educators, students, and self-learners

43%	9%	47%
Self Learners	Students	Educators

MIT OpenCourseWare is being successfully used for a wide range of purposes.

Learning is Changing...

(i.e., it's more informal, video-based, ubiquitous, collaborative, self-directed, global, mobile, open, massive, etc.)



Frank Basile, an aircraft technician, took an MITx course on circuits and electronics to increase his knowledge.



Joe Alfonso, a financial adviser from Oregon, is taking the online finance course as a "refresher."

Learning is More Flipped

One Man, One Computer, 10 Million Students:
How Khan Academy Is Reinventing Education,
Forbes, November 19, 2013, Michael Noer
<http://www.forbes.com/sites/michaelnoer/2013/11/09/one-man-one-computer-10-million-students-how-khan-academy-is-reinventing-education/>
The One World Schoolhouse (Twelve, Oct. 2, 2012)

Bending over backwards for students?



Maybe it's time to flip your classroom?

Type in "Flipped classrooms Army" and what do you get?



What else do you get?



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
<https://www.edsurge.com/n/2014-02-05-lessons-learned-from-1-125-flipped-classrooms>

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



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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.



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"Today's flipped classroom dictates that students watch lessons at home in order to increase classroom time for practice and intervention. Note that in the Army's learning centers the soldiers watched lessons in the classroom rather than at home."



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<https://www.edsurge.com/n/2014-02-05-lessons-learned-from-1-125-flipped-classrooms>

"This experience with the Army led to our developing programs that have served more than 400,000 high school and college students."



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<https://www.edsurge.com/n/2014-02-05-lessons-learned-from-1-125-flipped-classrooms>

The key ingredients of the flipped classroom are:

1. 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

<http://www.stripes.com/news/dodds-europe-teachers-find-success-with-flipped-classroom-approach-1.266254>



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Stars and Stripes, Jennifer H. Swan
KAISERSLAUTERN, Germany

<http://www.stripes.com/news/dodds-europe-teachers-find-success-with-flipped-classroom-approach-1.266254>

- 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

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Stars and Stripes, Jennifer H. Swan
KAISERSLAUTERN, Germany

<http://www.stripes.com/news/dodds-europe-teachers-find-success-with-flipped-classroom-approach-1.266254>

"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

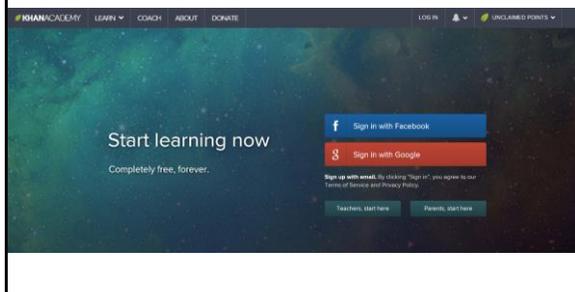
DODDS-Europe teachers find success with 'flipped classroom' approach, Stars and Stripes, Jennifer H. Swan KAISERSLAUTERN, Germany

<http://www.ustripes.com/news/dodds-europe-teachers-find-success-with-flipped-classroom-approach-1.266234>

"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."

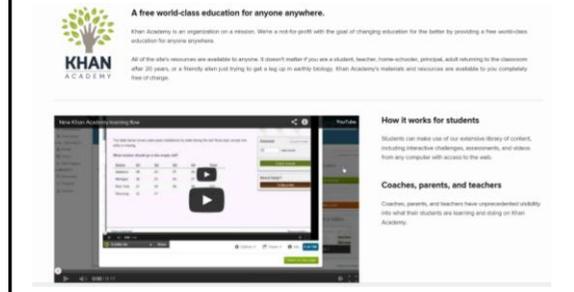
How did this come about?

<http://www.khanacademy.org/>



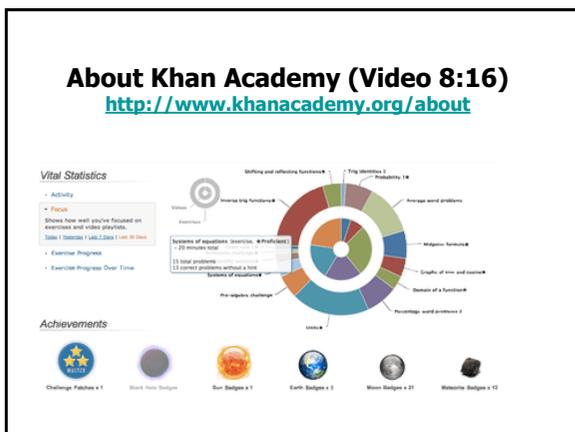
About Khan Academy (Video 8:16)

<http://www.khanacademy.org/about>



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<http://www.khanacademy.org/about>



February 21, 2012

Rethinking Learning with Salman Khan, Stanford Graduate School of Business

<http://www.youtube.com/watch?v=Wj65H9a5w>
Khan Academy Founder Finds Simplicity Appeals in Online Education Experimentation
<http://www.gsb.stanford.edu/news/headlines/sal-khan-academy.html>



Salmon Khan (2012). The One World Schoolhouse.

"The old classroom model simply doesn't fit our changing needs. It's a fundamentally passive way of learning, while the world requires more and more *active* processing of information."



Salmon Khan (2012). The One World Schoolhouse.

He explains that if students have consumed learning content before class, "teachers can then carve out face time with individual students who are struggling; they can move away from rote lecturing and into the higher tasks of mentoring, inspiring, and providing perspective."



Reusable Khan

Lacking Teachers and Textbooks, India's Schools Turn to Khan Academy to Survive, NY Times, Anupama Chandrasekar, Oct. 15, 2012

<http://blogs.nytimes.com/2012/10/15/online-education-uses-garments-to-help-schools-survive-when-teacher-is-absent/>

The New York Times | International Herald Tribune



Students at Sree Karpagavalli Vidhyalaya school in Chennai, Tamil Nadu, watching Khan Academy math videos.

The Flipped Classroom Enables Personalized Learning Microsoft Educator Network

<http://www.pit-network.com/HotTopics/personalizedlearning/flipped-classroom-enables-personalized-learning#comments>

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;



The Flipped Classroom

ROOM
FLIPPED
CLASS

by viaAcademics

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

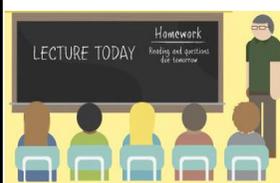
(Video: 2:52)

https://www.youtube.com/watch?v=4a7NbUir_iQ



Teacher's role

Traditional Classroom



SAGE in the stage

Flipped Classroom

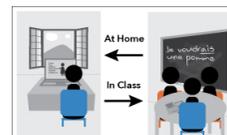


GUIDE on the side

Source: Jeremy F. Strayer, Ohio State University, Flipped Class Conference 2011 (KNEWTON)

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

May 13, 2014

Exploring the Fringe: Flipping, Microcredentials, and MOOCs

Jeff Cobb and Celisa Steele, Tagoras

<http://www.tagoras.com/2014/05/13/flipped-learning-microcredentials-moocs/>



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May 13, 2014 Exploring the Fringe: Flipping, Microcredentials, and MOOCs

Jeff Cobb and Celisa Steele, Tagoras
<http://www.tagoras.com/2014/05/13/flipped-learning-microcredentials-moocs/>

flipping *noun*
/'fl-i-pin\

: learning strategy that offers preparatory or foundational content outside of the classroom and uses class time for active learning

March 12, 2014 The Flipped Learning Network

<http://www.flippedlearning.org/definition>

Definition of Flipped Learning

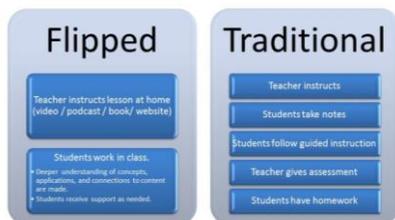
Flipped Learning is a pedagogical approach in which direct instruction moves from the group learning space to the individual learning space, and the resulting group space is transformed into a dynamic, interactive learning environment where the educator guides students as they apply concepts and engage creatively in the subject matter.



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

<http://freddiediazbatista.com/main/>

Flipped VS Traditional



Digital distraction in the classroom

July 11, 2012 by Stephanie Chasteen, The Active Class
<http://theactiveclass.com/category/uncategorized/>



Digital distraction in the classroom

July 11, 2012 by Stephanie Chasteen, The Active Class
<http://theactiveclass.com/category/uncategorized/>

At home ➔ In class



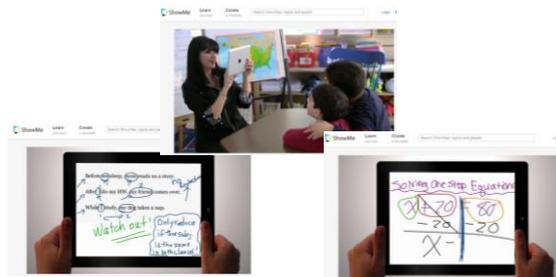
Students watch videos or screencasts



Instructor works with students on hands-on and face-to-face work
"Guide on the Side"

Lessons on iPad (i.e., Flip the class)

(e.g., ShowMe: <http://www.showme.com/>)



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.**



Happening in College Too!

The Washington Post, Nick Anderson, March 11, 2013

http://www.washingtonpost.com/local/education/more-classroom-flipping-in-colleges/2013/03/11/0c42d758-8a7f-11e2-9889-3013c3c981e6_story.html

More on classroom flipping in colleges

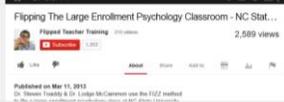


View Photo Gallery — Flipping the classroom: University of Virginia professor Philip Zetlow is teaching a course called "The American Novel: Critical Inquiry Since 1900." It's a massive open online course, which offers the world a free sample of education from the elite public university. The public is able to register for the course and watch the video lectures for free, and follow up in the classroom with his lectures on their own time. Here's an overview of previous classroom hours for a depth discussion. This technique is known as "flipping" the classroom.

Flipping The Large Enrollment Psychology Classroom - NC State

(Video: 3:45)

<https://www.youtube.com/watch?v=QTDQaaVWEzI>



Ohio State Chemistry Flips the Classroom

(Video: 1:10)

https://www.youtube.com/watch?v=6FA_hCmfsp8



eCN Special Report

eCAMPUS NEWS

How 'collaborative learning' is transforming higher education

Technology is enabling more dynamic teaching and learning—both inside and outside of class



EDUCAUSE

7 Things You Should Know About... Flipped Classrooms

<https://net.educause.edu/ir/library/pdf/ELI7081.pdf>

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THINGS YOU SHOULD KNOW ABOUT...™
FLIPPED CLASSROOMS

Scenario

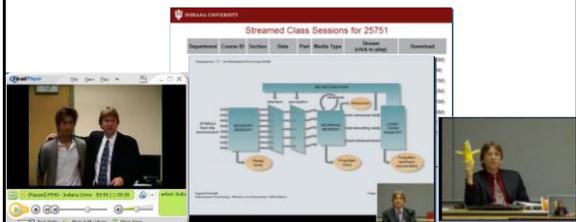
For the past two weeks, Kyle has been taking a flipped course in designing food gardens. Before he attends each class, he watches videos of short lectures, recorded or recommended by his instructor. Each lecture comes with a brief online quiz that offers him immediate feedback on whether he missed any essential points. Today as he enters

What is it?

The flipped classroom is a pedagogical model in which the typical lecture and homework elements of a course are reversed. Short video lectures are viewed by students at home before the class session, while in-class time is devoted to exercises, projects, or discussions. The video lecture is often seen as the key ingredient in the flipped approach, such lectures being either created by the instructor and posted online or selected from an online repository. While a prerecorded lecture could certainly be a podcast or other audio format, the ease with which video can be accessed and viewed has made it an obvious choice for the format needed to

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

<http://freddiediazbatista.com/main/>

“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

<http://chronicle.com/blognetwork/castingoutlines/2014/04/30/flipped-learning-skepticism-can-students-really-learn-on-their-own/>

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

<http://chronicle.com/blognetwork/castingoutlines/2014/04/30/flipped-learning-skepticism-can-students-really-learn-on-their-own/>

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

<http://chronicle.com/blognetwork/castingoutlines/2014/04/30/flipped-learning-skepticism-can-students-really-learn-on-their-own/>

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

<http://chronicle.com/blognetwork/castingoutlines/2014/04/01/toward-a-common-definition-of-flipped-learning/>

Four pillars:

- F**lexible environment (various modes of learning)
- L**earning culture (student-centered inquiry)
- I**ntentional content (direct instruction b4 class)
- P**rofessional educator (reflective and accessible; collaborates and perfects one’s craft)

Flexible Environment

- | | |
|------------|---|
| F.1 | <input type="checkbox"/> I establish spaces and time frames that permit students to interact and reflect on their learning as needed. |
| F.2 | <input type="checkbox"/> I continually observe and monitor students to make adjustments as appropriate. |
| F.3 | <input type="checkbox"/> I provide students with different ways to learn content and demonstrate mastery. |

Learning Culture

- | | |
|------------|---|
| L.1 | <input type="checkbox"/> I give students opportunities to engage in meaningful activities without the teacher being central. |
| L.2 | <input type="checkbox"/> I scaffold these activities and make them accessible to all students through differentiation and feedback. |

Intentional Content

- | | |
|------------|--|
| I.1 | <input type="checkbox"/> I prioritize concepts used in direct instruction for learners to access on their own. |
| I.2 | <input type="checkbox"/> I create and/or curate relevant content (typically videos) for my students. |
| I.3 | <input type="checkbox"/> I differentiate to make content accessible and relevant to all students. |

Professional Educator

- | | |
|------------|--|
| I.1 | <input type="checkbox"/> I prioritize concepts used in direct instruction for learners to access on their own. |
| I.2 | <input type="checkbox"/> I create and/or curate relevant content (typically videos) for my students. |
| I.3 | <input type="checkbox"/> I differentiate to make content accessible and relevant to all students. |

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<http://chronicle.com/blognetwork/castingoutlines/2014/04/01/toward-a-common-definition-of-flipped-learning/>

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

<http://www.tagoras.com/2014/05/13/flipped-learning-microcredentials-moocs/>

Essential Goals of the Flipped Class:

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



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May Require:

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

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<http://www.tagoras.com/2014/05/13/flipped-learning-microcredentials-moocs/>

Flipped Content Includes:

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



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<http://www.tagoras.com/2014/05/13/flipped-learning-microcredentials-moocs/>

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-flipped-classroom#sthash.tm2eSgl4.dpbs>

- 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)



"Flipping", TechSmith's e-learning trainers series part 5 (Video: 2:54)

<https://www.youtube.com/watch?v=BXSBCM0RhB0&feature=relmfu>



The Flipped Classroom (Video: 2:14)

<https://www.youtube.com/watch?v=2H4RkudFzlc>



February 2013

7 Myths about the Flipped Classroom, debunked, Julie Schell, Director at the Center for Teaching and Learning and an Assistant Clinical Professor at The University of Texas at Austin

<http://blog.peerinstruction.net/7-myths-about-the-flipped-classroom-debunked/>

- 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)

Flipped Classroom Research



Influences on cooperation, innovation and task orientation

Strayer, J. F. (2012). How learning in an inverted classroom influences cooperation, innovation and task orientation. *Learning Environments Research*, 15(2), 171-193.

- This article compares the learning environments of an inverted introductory statistics class with a traditional introductory statistics class at the same university
- Students in the introductory statistics class were first **less satisfied** with the structure of flipped classroom than the traditional one, but became **comfortable and open to cooperative learning and innovative teaching techniques**.
- **The stability and connectedness of classroom learning communities seem to be high at the end of the class.**

How to embed inquiry and design projects

Warter-Perez, N., & Dong, J. (2012). Flipping the classroom: How to embed inquiry and design projects into a digital engineering lecture. In *Proceedings of the 2012 ASEE PSW Section Conference*.

- Faculty at California State University flipped one introduction to Digital Engineering course with the goal of increasing quality of learning for collaborative project-based learning.
- The intention of the class was to address the prevalence of passive learning in engineering classroom and the limitation of professor-student interaction in the large-scale classroom.
- **In the course of analysis, they found that flipping classroom was effective in general, especially improving understanding of course materials and develop design skills.**

Inverted classroom model in engineering statistics

Papadopoulos, C., & Roman, A. S. (2010). Implementing an inverted classroom model in engineering statistics: Initial results. *American Society for Engineering Statistics*.

- The researchers implemented an inverted classroom model in engineering statistics.
- Students were cooperative each other, and progressed through the learning materials faster with a greater depth of understanding.
- **The researchers have done both pre and post tests, and it turned out that student performance is promising, exceeding test scores those in the traditional learning environment.**

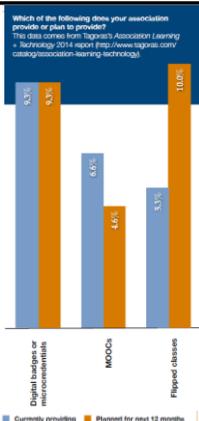
Flipped classrooms give every student a chance to succeed

Green, G. (2012). My view: Flipped classrooms give every student a chance to succeed. *Cnn, May, 31*.

- Teachers in Clintondale High School located in Detroit implemented the flipped classroom.
- Students received three videos per week, and they are all about 5 to 7 minute videos.
- With the students come prepared, the instructors were able to use the classroom time for facilitating interactive activities or discussions.
- **The increased ability to receive instant feedback, more one-on-one time with their teacher when they did not understand difficult concepts, less frustration with new content, and extra time at home to revisit content as needed.**

**May 13,
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May 21, 2014

Missouri State U Improves Learning Outcomes With Flipped Course, Leila Meyer
<http://campustechnology.com/Articles/2014/05/21/Missouri-State-U-Improves-Learning-Outcomes-with-Flipped-Classroom.aspx?p=1>

CAMPUS TECHNOLOGY
Flipped Classroom | Project Spotlight

Missouri State U Improves Learning Outcomes With Flipped Course

- By Leila Meyer
- 05/21/14

Missouri State University (MSU) has implemented a flipped classroom model for its introductory Psychology course, resulting in dramatic improvements in student learning outcomes and course completion rates.

Challenge

In 2010, four-year public higher education institutions throughout the state of Missouri embarked on an initiative of academic collaboration and course transformation to improve student learning outcomes and reduce costs. As part of this initiative, each institution committed to redesigning one large enrollment course with academic problems such as poor learning outcomes or high D/F/W rates (rates of students earning grades of D- or F- or withdrawing from the course).

May 21, 2014

Missouri State U Improves Learning Outcomes With Flipped Course, Leila Meyer
<http://campustechnology.com/Articles/2014/05/21/Missouri-State-U-Improves-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."

May 21, 2014

Missouri State U Improves Learning Outcomes With Flipped Course, Leila Meyer
<http://campustechnology.com/Articles/2014/05/21/Missouri-State-U-Improves-Learning-Outcomes-with-Flipped-Classroom.aspx?p=1>

"We've had a lot of great response from colleagues about what we've done to the class and the kind of outcomes we've achieved," she said. "Students love the course. They understand that engaging with the material in this way has really helped them to learn and ultimately perform better on exams."

May 21, 2014

Missouri State U Improves Learning Outcomes With Flipped Course, Leila Meyer
<http://campustechnology.com/Articles/2014/05/21/Missouri-State-U-Improves-Learning-Outcomes-with-Flipped-Classroom.aspx?p=1>

Hudson thinks the flipped classroom model has helped her as an instructor, too. "I feel like I'm freed up from the content," said Hudson. "I don't feel like I'm tied to going through the content in class because I can check MyPsychLab to see what content the students are understanding and what they've already mastered and where I need to put my focus and my energy for that class time together."

May 21, 2014

MyPsychLab from Pearson

MyPsychLab

Features

- Dynamic Study Modules
- Personalized Learning
- Interactive Content
- Writing Space

May 21, 2014 MyPsychLab from Pearson



Virtual Case Studies

Virtual Case Studies let students explore how a number of risk factors and genetic factors may impact the development of a psychological disorder. These interactive scenarios help students understand, and then articulate about, the influence of biological, psychological, social, and cultural factors in the development or progression of a disorder.

Visual Brain

The interactive Visual Brain offers hands-on experience that makes course content and terminology relevant, helping students better understand neuroanatomy, physiology, and human behavior. Available for Psychology and Introductory Psychology courses.

May 21, 2014 MyPsychLab from Pearson Integrated with Blackboard



Blackboard

K-12 Higher Education Government Business

On a mission to Reimagine Education

We're shaping the future of education with ideas that challenge conventional thinking. The world of education is changing.

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
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 classroom")

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
http://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
http://uvamagazine.org/articles/adjusting_the_prescription/

Rx for Education

The traditional structure of medical education is undergoing a transformation from internal and external pressures alike. Old paradigms are giving way to fresher approaches.

IN	OUT
Applying knowledge	Regurgitating facts
Problem solving	Role learning
Dialogue	Lecture
Facilitating	Telling
Critical thinking	Memorizing
Simulation	Observation
Teams	Sole practitioners
Hands on	Passive listening
Individualized learning	One-size-fits-all
Self-directed learning	Top-down learning

Flipped Class Example: Mobile Apps for the CPR Training



Previous Step 5 Next

Repeat 30 compressions and 2 rescue breaths

Return to the chest and provide ongoing cycles of 30 compressions and 2 rescue breaths.

Tips/Warnings

April 30, 2014

New Learning Hubs Locations Hosted by The New York Public Library and Seven Other International Partners, Coursera Blog

<https://blog.coursera.org/post/84322385012/new-learning-hubs-locations-hosted-by-the-new-york>



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

http://chronicle.com/article/Multimedia-Assignments-Not-Just-for-Film-Majors-Anymore/145929/?cid=at&utm_source=at&utm_medium=en



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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

<http://chronicle.com/article/Microflipping-a-Modest-Twist/145951/>

"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

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a Modest Twist on the 'Flipped' Classroom

Chronicle of Higher Education, Sam Buemi

<http://chronicle.com/article/Microflipping-a-Modest-Twist/145951/>

"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

<http://chronicle.com/article/Microflipping-a-Modest-Twist/145951/>

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 Make Flipped Learning Work

April 21, 2014, eSchool News

<http://www.eschoolnews.com/2014/03/11/make-flipped-learning-work/>



Life in a Drop of Water (Video 1:19)

<http://www.youtube.com/watch?v=5qf0Mh50wE8&feature=share&list=TLvscCJWHG9ucfbwmxcmehtnU8V9EoyBY>
10 must-watch videos for flipped learning,
 April 21, 2014, eSchool News

<http://www.eschoolnews.com/2013/10/24/flipped-videos-learning-190/2?ast=123&astc=11015>



What if the Death Star was real? (Video 7:40)

<http://www.youtube.com/watch?v=HD1OKAm9Cbs&feature=share&list=TLvscCJWHG9ucfbwmxcmehtnU8V9EoyBY>

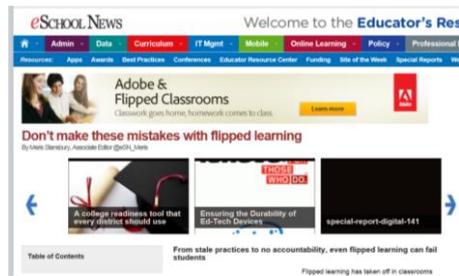
How to Make Flipped Learning Work, April 21, 2014, eSchool News
<http://www.eschoolnews.com/2014/03/11/make-flipped-learning-work/>



Don't make these mistakes with flipped learning

By Meris Stansbury, Associate Editor, April 21, 2014, eSchool News

http://www.eschoolnews.com/2013/12/12/mistake-flipped-learning-171/?ast=123&astc=&utm_source=website&utm_medium=article&utm_campaign=silder



Try these free resources for the flipped classroom

Meris Stansbury, April 21, 2014, eSchool News

<http://www.eschoolnews.com/2013/04/02/try-these-free-resources-for-the-flipped-classroom/?ast=123&astc=11015>

Try these free resources for the flipped classroom

By Meris Stansbury, Associate Editor, @mrs_stansbury



Table of Contents

How to Make Flipped Learning Work

- Don't make these mistakes with flipped learning
- 10 must-watch videos for flipped learning



The flipped classroom is an education trend that has generated a lot of buzz, but some educators have struggled to create or find videos that are both short enough and engaging enough to hold students' attention. Yet, three free resources can help educators do that—and more.

During a webinar hosted by edWeb.net, a professional social network for the education

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/?ast=123&strc=11015>

Joe Zisk: <http://teacheronline.us/screencapture/>

- Screencasting software for iPads includes:

- Replay Note (\$4.99), Explain Everything (\$2.99), Screencomp (free), and ShowMe (free).

- Screencasting software for a laptop or desktop includes:

- Jing (free), Snagit (\$29.95), Screencast-o-matic (free), Camtasia Studio (\$179), 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)

<https://www.youtube.com/watch?v=ZRVmijeZ9CA>



August 5, 2013

Free Online Higher Education: 5 Best MOOCs

By **Kannan Sankaran**, *Epoch Times*

<http://www.theepochtimes.com/337229640-5-best-moocs-for-free-online-higher-education/>

MOOC at UPenn; Recession Fuels Explosion of Online Learning

<http://on.aol.com/video/recession-fuels-explosion-of-online-learning-517885097>



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

<https://www.bostonglobe.com/media/2014/05/12/harvard-harvest-explosion-online-classroom-flips-light-camera-action-by/ByPhkrX5SD9a7IpnHcSM1story.html>



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

May 18, 2014

Harvard goes all in for online courses
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The Boston Globe, Marcella Bombardieri

<https://www.bostonglobe.com/media/2014/05/12/harvard-harvest-explosion-online-classroom-flips-light-camera-action-by/ByPhkrX5SD9a7IpnHcSM1story.html>

- Two professors who teach an undergraduate course on China completely replaced in-class lectures with materials from their MOOC, to be reviewed by the students as part of their homework. Class time is now dedicated to discussion, and participation is being graded for the first time – not always to students' liking.
- Videos are only the beginning. HarvardX is building interactive mapping and timeline tools and a program that allows students to post comments inside videos uploaded by their classmates.

April 14, 2014

The New Academic Celebrity
Why a different kind of scholar—and idea—
hits big today,
Chronicle of Higher Education, Christopher Shea

http://chronicle.com/article/The-New-Academic-Celebrity/145845?cid=withutm_source=withutm_medium=en



April 14, 2014

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http://chronicle.com/article/The-New-Academic-Celebrity/145845?cid=at&utm_source=at&utm_medium=em

TED Topics

On its website, TED categorizes its library of talks according to topics. Here are a few comparisons that caught our eye.

Why Use Video?

1. David Ausubel (1978) argued that knowledge was hierarchically organized.
2. New learning concepts and ideas to be subsumed under or anchored within prior learning experiences (i.e., meaningful info must be related to what already know).
3. Advance Organizers: Per Ausubel, we must provide a context, richer, deeper learning.

Why Use Video?

4. Dual coding theory (learning information verbally and visually is more richly stored): Alan Paivio.
5. Anchored instruction and macrocontexts: John Bransford and colleagues.
6. Multimedia theory: Richard Mayer.

Segment Video Anchors

(e.g., **TubeChop** of V-PORTAL: Video Primers in an Online Repository of e-Teaching and Learning; "Wikibooks Houray for Us")

<http://www.tubechop.com/watch/378752>

Discuss Videos

(e.g., Grockit Answers and Vialogues; <https://vialogues.com/>)

Collaborative Video Annotations and Discussions

(Craig Howard, IU)

<http://scholarworks.iu.edu/journals/index.php/ijdl/article/view/853/912>

June 2, 2014 Using Video Annotation Tools to Teach Film Analysis, Chronicle of Higher Education, Chuck Tryon

http://chronicle.com/blogs/profrocker/using-video-annotation-tools-to-teach-film-analysis/271213087-pmku4m_source=pmku4m_medium.com



Video is Popular in Korea



Video is Popular in the USA GETideas Channel, Cisco (Thought Leader Series uploaded to YouTubeEdu),



Experts from Lynda.com <http://www.lynda.com/>



March 9, 2012 Online Learning Polyglots

http://www.nytimes.com/2012/03/11/nyregion/teenage-master-of-languages-finds-online-tutorial-his.html?_r=1&page=weirdhall



Timothy posts videos of himself speaking several languages on YouTube.

TEDx

Aaron Doering, Chasing Seals <http://chasingseals.com/>



Speaking for Change and Humanity

From the Arctic to Africa, Aaron seeks to open the eyes of how he believes technology, education, and attention can change how we interact, regardless of the world.

Educational Video Anchors

TED-Ed:

<http://education.ted.com/>



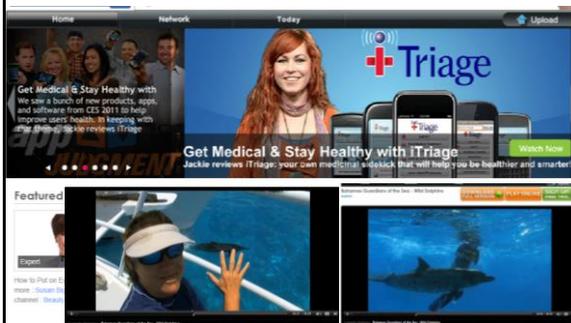
May 29, 2014

This woman has one of the coolest jobs at IU, Inside IU Bloomington (emerging technology specialist at University Information Technology Services, Nitocris Perez)

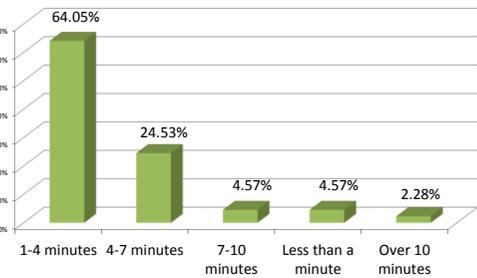
<http://inside.iub.edu/features/videos/2014-05-29-iub-vid-clb.shtml>



TV Lesson (expert videos)



How long is an ideal YouTube video? (Lin, Bonk, et al., 2010)



Ten Anchors and Enders: Instructor Centered



1. Online Video Anchoring

Online videos are used as an anchor or advance organizer of a class lecture.



Learning and Memory Videos



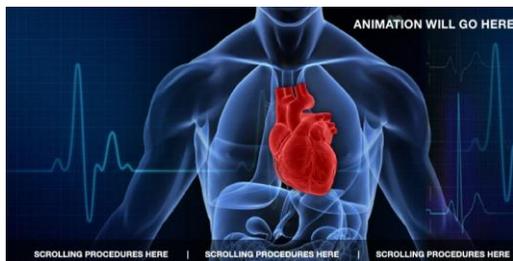
2. Online Video Ender

Online videos are used after discussion and activities as a class "ender" or capstone event.



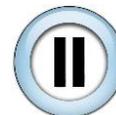
Online Labs and Simulations

<http://www.biheartinstitute.org/patient-resources.php>

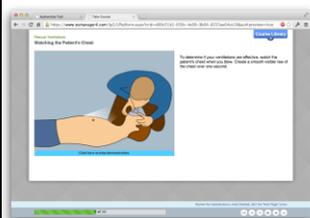


6. Pause and Reflect

The instructor(s) plays a portion of a YouTube video and pauses for reflections and then continues playing the video which is followed by still more class reflection.



Concept Demonstrations



Each abdominal thrust attempts to clear the victim's airway of the foreign object by forcing air out through the windpipe.



7. Key Concept Reflections

Instructor shows the YouTube video and asks students to reflect on concepts embedded in it. He may replay the video 1-2 more times while prompting the class for certain key concepts. He might ask students to say "pause" when they see a concept from a particular chapter or unit displayed.



Anchor Concepts in Shared Online Video

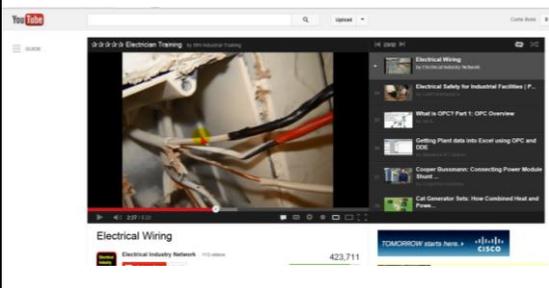


9. On-Demand Conceptual Anchoring and Review

Instructor pauses a class activity or discussion at any moment and shows a YouTube videos related to a concept, theory, or idea being presented or discussed.



Anchor Course Concepts and Activities in Brief Shared Online Videos



Advice and Guidelines

1. When using shared online videos, consider the learning theory or approach makes them more powerful than other media.
2. Assign students to reflect on why or how you used them.



Advice and Guidelines

3. Length of video for activities should be less than 10 minutes and preferably under 4 minutes.
4. Watch and approve all videos before selecting. And test for link rot.



Advice and Guidelines

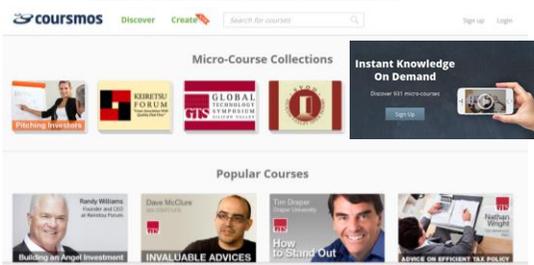
5. Have back-up videos in case do not work or are taken down.
6. Considering offering online video creation as an option—can foster student creativity.



May 5, 2014
Microcourses (Video 1:33)
New platform challenges conventional MOOCs, Mike Siegel
 eCampus News
<http://www.ecampusnews.com/top-news/new-platform-challenges-conventional-moocs/print/>



May 5, 2014
New platform challenges conventional MOOCs, Mike Siegel
 eCampus News
<http://www.ecampusnews.com/top-news/new-platform-challenges-conventional-moocs/print/>



April 25, 2014
Infographic: Why Digital Education?
 Meris Stansbury, eCampus News
<http://www.ecampusnews.com/top-news/infographic-digital-education-653/>
<http://elearninginfographics.com/the-state-of-digital-education-infographic/>

▶ THE FUTURE CLASSROOM | The education community is already adopting new technologies which will work together to result in more effective learning solutions.



Expert Access from Our Watches and Glasses



Next Steps for you...
And Next Steps for me...



Your Next Conference?
FlipCon14 -- 7th Annual Flipped Conference, June 23-25, 2014
<http://www.flippedlearning.org/site/Default.aspx?PageID=67>



