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# Fundamentals of the flipped classroom

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# Learning objectives

- To define the flipped classroom.
- To understand benefits and challenges of the flipped classroom.
- To understand key pedagogical considerations in the design of the flipped classroom.

#### Video: How does the flipped classroom work?



(Source: Penn State University <a href="http://www.tubechop.com/watch/1601618">http://www.tubechop.com/watch/1601618</a>)

#### Definition

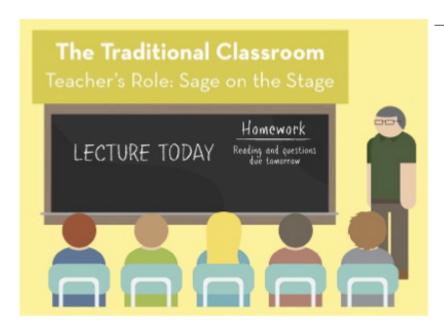
What is traditionally done in class is now done at home, and what is traditionally done as homework is now completed in class (Bergmann & Sams, pioneers of the flipped classroom, 2012).

Foundational content is delivered online and more class time is used for students to inquire about the content, apply knowledge, and interact with peers and the instructor (Educause Learning Initiative, 2012).

#### "What will I talk about?"

V.S

#### "What will students do?"





#### Main drivers

- Development and popularity of learning technology.
- Educational policies and calls for innovation in higher ed.
- The need to improve learning effectiveness.
- The need to develop students' higher order skills.

# The flipped classroom IS:

- An approach to active and personalized learning.
- An approach to focusing on lower and higher level learning objectives.
- A combination of self-paced and directed learning.
  learning.
- A classroom where the teacher is the "guide on the side".

## The flipped classroom is NOT:

- A synonym for online videos.
- Replacing teachers with online videos.
- Students working in isolation.



#### Examples of the flipped classroom

Pacific Dugoni: ICSII, IPT, Physiology, IDS

#### **UNC** (Pharmacy)

- http://tinyurl.com/m45m4f2
- McLaughlin, et al. 2012. The Flipped Classroom: A Course Redesign to Foster Learning and Engagement in a Health Professions School, *Academic Medicine*, 89(2),236-243.

## Benefits of the flipped classroom

- Personalized learning.
- More peer-peer and student-instructor interaction.
- Enhanced engagement and learning.
- Development of students' higher level skills.
- Archived content for student review.
- Students who are absent don't get left behind.

Berrett, D. (2012). How 'flipping' the classroom can improve the traditional lecture. *The Chronicle of Higher Education,* Retrieved from http://chronicle.com/article/How-Flipping-the-Classroom/130857/

Houston, M., & Lin, L. (2012, March). Humanizing the classroom by flipping the homework versus lecture equation. Paper presented at Society for information technology & teacher education international conference (site) 2012, Austin, TX.

## Challenges of the flipped classroom

- Student preparation before class
- Student resistance
  - Shock, denial, resistance
  - Surrender and acceptance
  - Struggle and exploration
  - Return of confidence
  - Integration and success

#### How to improve student preparedness?

- Keep online lecture/videos short.
- Make your online materials engaging.
  - Use various types of materials.
  - Avoid passive delivery of content.
- Frequent formative assessment.

## How to fight student resistance?

- Introduce the concept early on in the course.
- Show them evidence of benefits.
- Start small by flipping "moments" of your course.

## How to find your "flippable" moments?

- Look for fundaments
- Look for confusion
- Look for boredom