The Flipped Classroom

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Agenda

Flipped model and tools
45 min

Choose your own lesson
5 min

Large group share, Q&A
10 min
Traditionally

Content delivered in class via lecture

Homework is where students apply what learned in class
What is flipped?

Pedagogical model

Lectures watched at home (content delivery)

Homework done in class (application activities)

Flipped explained
Homework time for content: students watch short video lectures

Class time for application: activities, projects, discussions
What is flipped?

Home - Teacher centered learning, explicit instruction

Class - Student centered, interactive activities
Use of technology for outside class time crucial

Reading as homework, discussion in class doesn’t constitute flipped
Concepts involved

Active learning
Student engagement
Hybrid delivery
Course podcasting
Important elements of flipped

1. Exposure prior to class

2. Incentive to come to class prepared (quizzes, small assignment)

3. Assessment of student understanding (home: quizzes, small assignment, in-class: clickers/polls)

4. In-class activities that focus on application to deepen understanding
Why Flip?

Free up class time for interaction

In-class interaction can enhance learning  
(Crouch, & Mazur, 2001; Deslauriers, Schelew & Wieman, 2011)

Technology making it easier to deliver content in new ways: lecture capture, videos, podcasts and other online information

Once recorded, can use multiple times

Students report that they prefer courses that have online components  
(ECAR, 2012)
What might that look like?

Ed Tech class example

Objective - Students will learn the concepts of digital native and immigrant and will identify technology skills used teachers

At Home

Watch this video. Write a reflection about how it made you feel. Bring this to class.

Read this article by Prensky. Complete a Venn Diagram comparing and contrasting the Digital Immigrants and Digital Natives.

Bring three ideas about what teachers can do to be more like digital natives.

In Class

In groups of 4 students share venn diagrams. Do they look the same or different? Why?

In small groups make a list of what you think are the top 10 technology skills a teacher needs to have today.

As a class let’s compare that list. How do teachers who don’t have those skills get them? Whose responsibility is it? Can you be a good teacher and not use technology? Why or Why not?
How much to flip?

Spectrum:

Starting small
Record a short video, lecture 5-10 minutes less, then integrate a 5-10 minute hands-on learning activity into a class period.

Full flip
Content delivered completely through video segments, pre-class reading and exercises, with class time is used entirely for group work activities.
Video content

Often recorded by instructor

Can be from elsewhere

Videos most typical since easily accessed
Online teaching video

Salman Khan, Khan Academy

Video can “reinvent” education

Salman Kahn TED Talk
5 min
Salman Khan

Audience preferred video instruction

Learning concepts through video couldn’t get in other formats

Class time shifted from one sided, one size fits all lecture, to interaction amongst peers and teacher

Humanizing the classroom

When able to go at own pace “slow” students catch up and race ahead
Tips for success

Make sure students have access
Teach students how to watch videos
Build in safeguards to keep accountable for watching
Let videos be imperfect
Start small
Teach to watch video?

Video for learning vs entertainment

Encourage students to lean in vs lean back

Watching a video like you’d read a textbook
Before Viewing
Anchor Strategies: Viewing Purpose, Preview, Predict, Connect

During Viewing
Anchor Strategies: Stop, Clarify, Question, Infer

After Viewing
Anchor Strategies: Summarize, Analyze, Create, Socialize

Extended
Anchor Strategies: Reflect, Create, Critique, Design
Video learning design

Before
Introduce concepts, why watching
Help students make connections with prior knowledge
Introduce guiding questions up front
Provide anticipation guide
Video learning design

**Durring**

Provide clarifications

Make connections

Ask questions

Adjust video speed (demonstrations)
Video learning design

After, students:
- Retell what happened;
- Paraphrase “standout” ideas
- Summarize main idea, key details
- Recall own thinking and/or emotions during video (metacognition)
- Analyze, create visual idea organization of video
- Discuss online

TeachThought - Viewing comprehension strategies
Easy Video Creation

Powerpoint
Screencastify - includes webcam
Jing
Quicktime

Recording narrated PPT tutorials
Interactive videos

Building in watching strategies

Add assessment for accountability and check for understanding

Example H5P
Adding interactivity

https://vizia.co/

add interactive questions

ask students to provide name and email

responses download as spreadsheet
Existing Video

online discussion of video

Developed by Teachers College, Columbia Univ

Vialogue example
How to start?

Start small, one lesson

Choose something students struggle with

Student benefits: stop, rewind, review, slow down

Procedure demonstration of well suited to flipping
Variations

In-class flip:

Stations, with one being the video content

Others are activities

How it works

Versions of the in-class flip
Variations

Flip the Teacher:
Students use of video to demonstrate proficiency
- role-playing
- demo teaching a skill to “teach the teacher”
- present ideas

LTEC 112 example
Variations

Group-Based Flip:
Students learn from each other
Still do work prior
Students work in teams to complete activity/assignment
Learn from each other, also have to explain to peers why answers are right
Peer Instruction

Eric Mazur “converted lecturer”
Harvard physics prof
Now uses “peer instruction” in large lectures
Students need to apply concepts to fully understand
Experts have the “curse of knowledge” whereas new learners still understand the challenges for new learners are better able to teach each other

Eric Mazur describing - video
Twilight of the Lecture - Article
Peer instruction

Exposed prior to class
Assignment/quiz to ensure prepared
In-class alternate mini lectures and questions on concepts
All students answer (using polling system)
If many incorrect, discuss in small groups
Question asked again
Instructor feedback, Q&A
Typically 15 min cycle per concept

Peer instruction in action
Other things to flip

Faculty meetings

Communicate admin info ahead of time, use time for deeper conversations about teaching and learning
Additional Resources

Flipped Learning Network
flippedclassroomworkshop.com/

Flipped Institute
flippedinstitute.org/learning-resources

Edutopia
edutopia.org/blogs/tag/flipped-classroom
Discussion Instructions

1. Choose one or more lesson or topic you might flip. How might you do it?

2. Discuss with your neighbor

3. Share flip ideas with larger group