• What’s your highest level of experience with flipping?
  • What’s flipping?
  • Someone described it to me
  • Researched on my own
  • Tried it already
THINK

• Pick a class—what does it look like?
  • What do you do in the classroom?
  • What do you do outside of class time?
  • What do your students do in the classroom?
  • What do they do outside of class time?
• What is the best use of my face-to-face time with my students?
WHAT IS A FLIP?

• A flip lesson inverts the traditional classroom by delivering instruction online outside of class and moving homework and application activities into the classroom.
• In other words: Lecturing on a particular concept happens outside the class and work putting the concept into action happens inside the class.
WHY DO A FLIP?

• Your students learn at different rates
• While you’re up there lecturing students are not 100% paying attention so they are missing important info.
• Students don’t do their homework
• You spend many hours re-explaining to students who didn’t “get it” in class.
“BUT I LOVE LECTURING - IF I’M NOT A LECTURER, WHO AM I?”

• You’re a facilitator, a guide on the side, the ultimate tutor, the ultimate mentor
“WHAT DO I FACILITATE?”

• Instead of lecturing you run activities and problem solving sessions
• Activities change your face-to-face time into student-focused time (instead of teacher focused time)
• The activities, which you guide, promote higher order thinking – critical thinking. (listening to you lecture and copying down info is lower level thinking)
FLIPPING AND BLOOM’S

Overview

Engaging activities during class

Instructional resource before class

- Evaluate
- Create
- Analyze
- Apply
- Understand
- Remember
ORIGINS OF CURRENT APPROACH

http://www.youtube.com/watch?v=2H4RkudFzlc
ORIGINS OF CURRENT APPROACH

• “The Inverted Classroom”
  • Lage, Platt, and Treglia (2000)

• “The Flipped Classroom” term usually attributed to:
  • Jon Bergman/Aaron Sams (2006)
  • Published The Flipped Classroom in 2012

• Khan’s Ted Talk:
  • Popularized and became identified with “Flipped Classroom” in March, 2011
CONSTRUCTIVIST

Flipped Classroom Model:

It’s not new!

- Based on concepts from Dewey:
  - Student centered
  - Hands-on, experiential
  - Flexible demonstration of mastery

- Pre-Tech:
  - Read at home, collaborative projects in class.

Devin Hess – Educational Technology Consultant (2013)
FLIPPED CLASSROOM MODEL

• There is no single “Flipped Classroom Model”
  • It is an approach.
  • Multiple models of implementation.
    • Represent different learning theories.
  • Pedagogical considerations are key.

“The Flipped Classroom isn’t a methodology. It’s an ideology.”

– Brian Bennett
RESEARCH

• No meta-analysis yet, but early research indicates benefits
  • At-risk students achieve more with increased one-to-one time
  • Advanced students can proceed through videos at own pace
  • Attendance and satisfaction increase
  • Short videos match with stimulus response curve
“HOW DO I DELIVER THE INFO STUDENTS NEED TO DO THE IN-CLASS ACTIVITIES?”

• Make your own videos (with or without you actually appearing in them) and give students the links.
  a) Use a video camera, cell phone, I-pad etc., or use a laptop or a tablet PC with Camtasia or Snag-it (screen recorders) and post on You-tube, your faculty page, screencast.com – then email or post the links for students
  b) Put your voice over a PowerPoint
  c) Record a pencast pdf
  d) Find someone else’s videos. That’s fine, you’ll get over it.
“WHAT DO MY STUDENTS GET OUT OF A FLIP VIDEO?”

• They can rewind, pause, or stop you.
• They can ask you targeted questions one-to-one in class (instead of suffering through you answering questions in class from students that are totally lost).
• They take ownership over their learning by watching and taking notes on the videos and then coming to class and working.
• They like videos.
“WHAT DO MY STUDENTS GET OUT OF A FLIP VIDEO?” – CONT’

- They get real time support on the homework or activity
- They can review the videos as needed (some bring their cell phones or I-pads to class to review a video or talk about it with other students)
“WHAT DO I GET OUT OF THE FLIP?”

You get more class time to do the kinds of things you never had time for before:

• Having groups or individuals report out on the results of the activity
• Running clicker questions
• Calling attention to an issue and having students actually understand what you are talking about
• Helping students in class and assessing them on the spot
“WHAT DO I GET OUT OF THE FLIP?” – CONT’

• You record your lecture (presentation) once instead of repeating it over and over for the next 20 years.
• Students do more work than you.
• You get involved with technology that is here to stay and you might as well get on board.
“IF MY STUDENTS WON’T DO HOMEWORK, THEN HOW DO I GET THEM TO WATCH THE VIDEOS?”

• You have to make video notes count points in the class – have students keep an organized portfolio or journal and check it periodically

• Give pop quizzes on the content of the videos.

• And?
TECHNOLOGY

• You can be a good teacher and never use technology, and technology won’t turn a bad teacher into a good one. However, a good teacher who uses technology well can make great things happen! – Rushton Hurley

• Any teacher that can be replaced by a computer deserves to be. - rewording by David Thomburg of the original Arthur C. Clark quote (“Teachers that can be replaced by a machine should be.”)

• Get on the tech bus before it runs you over – Bob Martinez
TECHNOLOGY

• It’s not just about the video!
  • Premade tutorials and programs (e.g. Khan Academy)
  • Interactive web sites
  • Primary source images or documents
  • Simulations and animations
  • Slide-shares
  • Hyper-linked images
  • Web-quests
  • Forms, polls, questionnaires
## TECHNOLOGY

<table>
<thead>
<tr>
<th>Task</th>
<th>Level:</th>
<th>Simple</th>
<th>Intermediate</th>
<th>Advanced</th>
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<tbody>
<tr>
<td>Computer based screen capture:</td>
<td></td>
<td>Snag-It</td>
<td>Screen-O-Matic</td>
<td>Camtasia</td>
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<tr>
<td>iPad based screen and pen capture:</td>
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<td>ShowMe</td>
<td>Educreations</td>
<td>Doceri</td>
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<tr>
<td>On-line lesson creation tools:</td>
<td></td>
<td>Edcanvas</td>
<td>Sophia</td>
<td>LectureTools</td>
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<tr>
<td>iPad as whiteboard and lesson recorder</td>
<td></td>
<td>AirServer</td>
<td>Splashtop</td>
<td>Doceri</td>
</tr>
</tbody>
</table>
EDCANVAS
BOB MARTINEZ
FLIP SURVEY STUDENT RESPONSES

- Not only did I learn more than other math classes, but I worked harder because the path to it was more accessible, while others are more ambiguous and repetitive. I worked a variety of problems I never thought I could solve or understand where examples from the book leave you stranded. Technology also played a huge role in understanding calculus. I really hope next class will be flip side as well. I wish this was the standard way of teaching math.
I loved the flip class. Personally I found that I excelled in this class method much more than I did for my previous math classes. It broke down the material in a way that I could easily understand it and get things done. Also, it helped me develop my study habits that are integral (pun not intended) to my college career.
<table>
<thead>
<tr>
<th>Benefits</th>
<th>Costs</th>
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<tbody>
<tr>
<td>Students accountable</td>
<td>Student expectations</td>
</tr>
<tr>
<td>Increased engagement</td>
<td>Learn technology</td>
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<tr>
<td>Emphasis on mastery</td>
<td>Make video &amp; activities</td>
</tr>
<tr>
<td>Aligned assessment</td>
<td>Few existing materials</td>
</tr>
<tr>
<td>Content is shareable &amp; reusable</td>
<td>ADA compliance</td>
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</tbody>
</table>
THE FLIPPED CLASSROOM IS NOT...

- http://www.youtube.com/watch?v=hGs6ND7a9ac
Students watch a video at home of the instructor explaining what a visual analysis is and the various aspects it addresses about a specific work of art (patronage, historical context, intended audience, function). Then in class, each student works on a specific artwork and conducts her/his own visual analysis with the instructor walking around, checking on student work, engaging the students in further discussion of the various aspects. - Ramela Abbamontian
EXAMPLES OF FLIP LESSONS - PHILOSOPHY

• The students watch a video explanation of definitions for logical operators at home, then come to class and with guidance from the instructor work on related exercises and discuss confusing concepts (e.g., the truth-functionality of the conditional). – Mia Wood
EXAMPLES OF FLIP LESSONS - ENGLISH

• Usually, we would discuss a text in class, followed by a writing assignment to be completed at home. One way I flip this is to do an online discussion of the reading (via Moodle) and then spend the class time working on their essay (with me going around answering questions as they come up). I have found they spend more concentrated time writing their essays if I require them to do it in class (no distractions that the fridge, tv, and facebook all offer when "writing" at home). - Kim Manner
EXAMPLES OF FLIP LESSONS - BUSINESS

• Normally in class the instructor would introduce the concept of Income, Expenses and Net Profit, then explain the different parts of an Income Statement, show examples of how income, expenses and net profit fit into an income statement and then give a number of specific examples of Income Statements on the board. If time permits have students try an exercise or two that deal with the Income Statement. Students are then assigned exercises and a more detailed problem or two as homework, the homework may take a couple of hours.
EXAMPLES OF FLIP LESSONS – BUSINESS, CONT.

• In a flip classroom the students would do the same things as the math students would do, they would watch a video, take notes, perhaps be directed to a website to see actual Income Statements from well known companies such as McDonalds, Apple, etc., the students would then come to class and be assigned a light exercise and then a more complicated problem. The instructor would walk around and consult with students, perhaps not just answering questions, but posing questions to the students and allowing them to seek out the answers in order to complete the problems. The instructor might set-up groups to work on the problem and have the groups present the solutions at the end of the class. The instructor may then show the completed solution. – David Braun
CREATE YOUR OWN FLIP EXAMPLE

• Get into groups and come up with and discuss flip lesson examples from your subject areas
  • Think of the content that needs to be addressed for a single class meeting and then how you would cover this content in 5-10 minute chunks at a time via video/online.
  • i.e. what are the 5-10 talking points you’ll discuss and what will be on your computer screen to reinforce each point?
• For the corresponding other side of the flip in the classroom, think about what you’re already doing and how that could be the basis for hands-on work in the classroom: case study, role play, debate, discussion, project-based learning, problem-solving, etc.
RESOURCES FOR FLIPPING THE CLASSROOM YOURSELF

- Khan Academy
- Academic Earth
- TeacherTube
- YouTube Education
- Flipped Learning Network
- 6 Expert Tips for Flipping the Classroom
- Edcanvas
- Sophia’s Flipped Classroom Certification
- 8 Great Videos About the Flipped Classroom
- Ted Ed
THOUGHTS?

Sources:

• “My Flipped Classroom” – Crystal Kirch
  http://prezi.com/-vbtn0xnnyzx/my-flipped-classroom/

• Bob Martinez, “Do a Flip!”, Presentation at FTLA, January 2013

• Devin Hess, “Flipping the Classroom,” SlideShare presentation

• Jeremy Anderson, “Flipping the Classroom in Higher Ed,” SlideShare presentation
CHEERS!

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- http://3csn.org