How to flip your class online, when the world is flipping out

A hands/brains-on demo

3 April 2020
75-student team & project based class!
information transfer

sense-making
Campus:
- Information transfer
- Instructor-paced
- Synchronous
- Lecture

Home:
- Sense-making
- Self-paced
- Asynchronous
- Homework/study
information transfer

instructor-paced
synchronous
lecture

campus

sense-making

self-paced
asynchronous
home work/study

home
instructor-paced synchronous online lecture

instructor-paced synchronous online lecture

self-paced asynchronous home work/study

campus

information transfer

home

information transfer

home

sense-making
**Campus**
- Information transfer
- Instructor-paced synchronous lecture

**Home**
- Information transfer
- Instructor-paced asynchronous recorded lecture

**Home**
- Sense-making
- Self-paced asynchronous home work/study
ALONE!

Information transfer

Instructor-paced synchronous lecture

Instructor-paced asynchronous recorded lecture

Self-paced asynchronous home work/study
online

information transfer

self-paced asynchronous

sense-making

instructor-led synchronous
interactive

two evidence-based approaches
let’s explore these two steps

- **online**
  - information transfer
    - self-paced
    - asynchronous
  
  - sense-making
    - instructor-led
    - synchronous
let’s explore these two steps

(using two free tools)
asynchronous information transfer

Perusall
asynchronous information transfer

Perusall...

• is a text-based social learning platform

• takes information transfer out of classroom
You will…

1. create a (dummy) course (while I create mine)

2. join my course to get the student experience
asynchronous information transfer

1. in your browser go to: app.perusall.com
2. if you have an account, log in, then wait
1. in your browser go to: app.perusall.com
2. if you have an account, log in, then wait
3. if you don’t have an account, follow along
1. app.perusall.com

2a. sign in here, or...

2b. click register
create a course...

(if you logged in with existing account, click “Create course” at top left of page)
...select “instructor” and...
...for students to access directly at perusall.com
can’t find your institution? enter “Example Institution”
Why Perusall works

• social connection/interaction in context
• incentivizes/motivates participation
• machine learning analysis of engagement
• provides “Confusion Report” to instructor
A few notes

• Perusall is free
• Many textbooks free until summer
• Nearly 100% reading-assignment completion
• Students using Perusall perform better
instructor-led interactive sense-making

- online
  - information transfer
    - self-paced
    - asynchronous
  - sense-making
    - instructor-led
    - synchronous
instructor-led interactive sense-making
instructor-led interactive sense-making

Peer Instruction...
- interactive teaching method
- promotes meaningful thinking
You will experience Peer Instruction by...

1. answering question individually
2. discussing question in breakout rooms
3. reanswering question
instructor-led interactive sense-making

Go to: PollEv.com/ericmazur615
Self-paced asynchronous online information transfer sense-making

- question
  - think
  - poll
  - discuss
  - repoll
  - explain

Instructor-led synchronous

1. Poll
2. Think
3. Discuss
4. Repoll
5. Explain
Why Peer Instruction works

• engages students to think
• individualizes learning
• students use similar discourse
• helps avoid the “expert blind spot”
Peer Instruction…

• greatly improves learning outcomes
• actively engages students online
• integrates with Perusall
Online information transfer (self-paced, asynchronous) vs. online sense-making (instructor-led, synchronous).
campus

online

information transfer

self-paced asynchronous

sense-making

instructor-led synchronous
campus

sense-making

instructor-led
synchronous
peer instruction

home

information transfer

self-paced
asynchronous
pre-class reading
self-paced asynchronous
pre-class reading
instructor-led synchronous
peer instruction
assessment
preference transfer
information sense-making
experimental activities
problem sets
tutorials
campus
home
projects
Improving education

synchronous ↔ asynchronous
Improving education

synchronous  ⇔  asynchronous

everybody together at the same *time*
Improving education

synchronous ↔ asynchronous

instructor-paced ↔ self-paced
Improving education

synchronous ↔ asynchronous

instructor-paced ↔ self-paced

everybody together at the same pace
Improving education

- **synchronous**
- **asynchronous**
- **instructor-paced**
- **self-paced**

lecture
Improving education

recorded lecture

synchronous ↔ asynchronous

instructor-paced ↔ self-paced
Improving education

lab

synchronous ↔ asynchronous

instructor-paced ↔ self-paced
Improving education

homework/study

synchronous ↔ asynchronous

instructor-paced ↔ self-paced
Improving education

synchronous \[\rightarrow\] asynchronous

instructor-paced \[\leftrightarrow\] self-paced
Improving education

- synchronous → asynchronous
- instructor-paced → self-paced
Improving education

more time to help students
where it really matters!
Publishers offering textbooks free until May 25

- Broadview Press
- Cambridge University Press
- CRC Press
- McFarland
- McGraw-Hill Education
- Oxford University Press
- Princeton University Press
- Routledge
- SAGE
- Taylor & Francis
- Wiley
- W.W. Norton & Company
Next webinar (spread the word!):

Friday, April 3, 9:30 am EDT

(same Zoom link)
for a copy of this presentation:

mazur.harvard.edu

resource sheet: bit.ly/fliponline

Follow me! eric_mazur