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

A hands/brains-on demo
20 March 2020
75-student team & project based class!
information transfer
sense-making
Information transfer
instructor-paced
synchronous lecture

Sense-making
self-paced
asynchronous
home work/study
Instructor-paced synchronous online lecture

Instructor-paced synchronous online lecture

Self-paced asynchronous home work/study
Campus

- Information transfer
  - Instructor-paced synchronous lecture

Home

- Information transfer
  - Instructor-paced asynchronous recorded lecture

Home

- Sense-making
  - Self-paced asynchronous home work/study
campus

information transfer

instructor-paced synchronous lecture

home

instructor-paced asynchronous recorded lecture

home

sense-making

self-paced asynchronous home work/study
instructor-paced
synchronous
lecture

instructor-paced
asynchronous
recorded lecture

self-paced
asynchronous
home work/study

ALONE!
self-paced asynchronous

instructor-led synchronous

information transfer

sense-making
interactive

online
information transfer
self-paced
asynchronous
instructor-led
synchronous

online
sense-making
interactive

online

information transfer

self-paced asynchronous

online

sense-making

instructor-led synchronous

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
asynchronous information transfer

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
instructor-led interactive sense-making

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 online

discuss
Why Peer Instruction works

• engages students to think
• individualizes learning
• students use similar discourse
• helps avoid the “expert blind spot”
A few notes

Peer Instruction...

- greatly improves learning outcomes
- actively engages students *online*
- integrates with Perusall
online
information transfer
self-paced asynchronous

online
sense-making
instructor-led synchronous
home

- information transfer
  - self-paced
  - asynchronous
  - pre-class reading

campus

- sense-making
  - instructor-led
  - synchronous
  - peer instruction
projects
tutorials
experimental activities
problem sets
assessment

home
information transfer
self-paced asynchronous pre-class reading

campus
sense-making
instructor-led synchronous peer instruction
Improving education

synchronous ↔ asynchronous
Improving education

synchronous

asynchronous

everybody together
at the same time
Improving education

synchronous <-> asynchronous

instructor-paced <-> self-paced
Improving education

everybody together at the same pace

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

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

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

synchronous → asynchronous
instructor-paced → self-paced

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
for a copy of this presentation:
mazur.harvard.edu

resource sheet: bit.ly/fliponline

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