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

A hands/brains-on demo
31 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

Campus

Home
Instructor-paced synchronous lecture to self-paced asynchronous home work/study

Campus to Home

Information transfer to sense-making
Instructor-paced synchronous online lecture.

Instructor-paced synchronous online lecture.

Self-paced asynchronous home work/study.
- **Campus**: Instructor-paced synchronous lecture
- **Home**: Instructor-paced synchronous recorded lecture
- **Home**: Self-paced asynchronous home work/study

**Information transfer**
- Campus
- Home
- Home

**Sense-making**
- Home
c campus
information transfer

instructor-paced synchronous lecture

instructor-paced asynchronous recorded lecture

home
information transfer

self-paced asynchronous home work/study

home
sense-making

ALONE!
online

information transfer

self-paced asynchronous

online

sense-making

instructor-led synchronous
interactive

online information transfer
self-paced asynchronous
instructor-led synchronous

online sense-making
interactive

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

- **Online Information Transfer**: self-paced, asynchronous
- **Online 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

- self-paced asynchronous online information transfer
- instructor-led synchronous online 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
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
self-paced asynchronous

information transfer

instructor-led synchronous

sense-making
Self-paced asynchronous online information transfer is not transferable to instructor-led synchronous online sense-making.
Self-paced asynchronous information transfer in online sense-making instructor-led synchronous online campus
self-paced 
asynchronous
pre-class reading

instructor-led 
synchronous
peer instruction

campus

home

sense-making

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

synchronous ↔ asynchronous
Improving education

everybody together
at the same time
Improving education

synchronous ↔ asynchronous

instructor-paced ↔ self-paced
Improving education

synchronous \[\leftrightarrow\] asynchronous

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

everybody together at the same *pace*
Improving education

lecture

synchronous \(\leftrightarrow\) asynchronous

instructor-paced \(\leftrightarrow\) self-paced
Improving education

recorded lecture

synchronous ↔ asynchronous

instructor-paced ↔ self-paced
Improving education

lab

synchronous ↔ asynchronous

instructor-paced ↔ self-paced
Improving education

homework/study

synchronous $\leftrightarrow$ asynchronous

instructor-paced $\leftrightarrow$ self-paced
Improving education

synchronous \(\rightarrow\) asynchronous

instructor-paced \(\leftrightarrow\) self-paced
Improving education

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

synchronous \rightarrow \textit{asynchronous}

instructor-paced \rightarrow \textit{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
Next webinar (spread the word!):

Friday, April 3, 9:30 am EDT

(same Zoom link)