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

A hands/brains-on demo
Pearson Webinar for Benelux & Nordic Countries
29 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
home work/study
Information transfer

Instructor-paced synchronous lecture

Sense-making

Self-paced asynchronous home work/study
<table>
<thead>
<tr>
<th>Campus</th>
<th>Home</th>
<th>Home</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>instructor-paced synchronous lecture</strong></td>
<td>**instructor-paced synchronous **</td>
<td><strong>self-paced asynchronous home work/study</strong></td>
</tr>
<tr>
<td><strong>information transfer</strong></td>
<td><strong>information transfer</strong></td>
<td><strong>sense-making</strong></td>
</tr>
</tbody>
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instructor-paced synchronous lecture

home
instructor-paced recorded lecture

home
self-paced asynchronous home work/study

campus
information transfer

home
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home
sense-making
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<td>ALONE!</td>
<td></td>
<td></td>
</tr>
</tbody>
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Note: The text in the diagram is not legible due to the overlay of words.
online

information transfer
self-paced asynchronous

online
sense-making
instructor-led synchronous
interactive

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

(online)

information transfer

self-paced asynchronous

sense-making

instructor-led synchronous

(using two free tools)
asynchronous information transfer
asynchronous information transfer

Perusall...

• is a text-based social learning platform
• takes information transfer out of classroom
asynchronous information transfer

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
Documents you can use with Perusall

• PDF, Word, html, or ePub files (free)
• open access material (free)
• source code with syntax highlighting (free)
• books (purchased by students* or institution)

*via Perusall or through university bookstore (support@perusall.com)
Publishers offering free textbooks until summer

- Broadview Press
- Cambridge University Press
- CRC Press
- McFarland
- McGraw-Hill Education
- Oxford University Press
- Princeton University Press
- Routledge
- SAGE
- Springer
- Taylor & Francis
- University Science Books
- Wiley
- W.W. Norton & Company
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: learningcatalytics.com/demo

Enter information

Join Session ID: 37464430
question

think

poll

discuss

repoll

explain

online

instructor-led

synchronous

sense-making
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
self-paced asynchronous  
information transfer

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

campus

online

online
self-paced
asynchronous
pre-class reading

instructor-led
synchronous
peer instruction

sense-making

information transfer
Compare with the “old” approach

- **campus**
  - sense-making
  - instructor-led
  - synchronous
  - peer instruction

- **home**
  - information transfer
  - self-paced
  - asynchronous
  - pre-class reading
Compare with the “old” approach

campus

- information transfer
- instructor-paced synchronous lecture

home

- sense-making
- self-paced asynchronous home work/study
Self-paced asynchronous pre-class reading

Instructor-led synchronous peer instruction

Information transfer sense-making

Home campus

Tutorials

Problem sets

Assessment

Experimental activities
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
- asynchronous
- instructor-paced
- self-paced
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
- 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

synchronous → asynchronous
instructor-paced → self-paced

more time to help students where it really matters!
Please help spread the word!

calendly.com/ericmazur/fliponline

(tell your colleagues and tweet)

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mazur.harvard.edu

resource sheet: bit.ly/fliponline

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