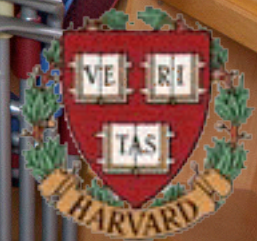


How to flip your class online, when the world is flipping out



A hands/brains-on demo
24 March 2020



A group of students in a classroom setting, working on laptops and discussing projects. The scene is a modern, bright classroom with large windows. Several students are seated at round tables, focused on their laptops. In the foreground, a student is looking at a laptop screen displaying a website or application. Other students are engaged in conversations, some looking at their devices. The overall atmosphere is one of collaborative learning and project-based work.

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

campus

information
transfer

instructor-paced
synchronous
lecture

home

information
transfer

instructor-paced
synchronous
online lecture

home

sense-making

self-paced
asynchronous
home work/study

campus

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asynchronous
home work/study

ALONE!

online

**information
transfer**

self-paced
asynchronous

online

sense-making

instructor-led
synchronous



interactive

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



interactive

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

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

online

sense-making

instructor-led
synchronous

(using two free tools)

asynchronous information transfer

online

online

information
transfer

sense-making

Perusall

self-paced
asynchronous

instructor-led
synchronous

asynchronous information transfer

online

online

Perusall...

information
transfer

sense-making

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

self-paced
asynchronous

instructor-led
synchronous

asynchronous information transfer

online

online

You will...

information
transfer

sense-making

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

2. join my course to get the student experience

self-paced
asynchronous

instructor-led
synchronous

asynchronous information transfer

online

online

1. in your browser go to: app.perusall.com

information
transfer

sense-making

2. if you have an account, log in, then wait

self-paced
asynchronous

instructor-led
synchronous

asynchronous information transfer

online

online

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

Sign In

Sign in with Facebook

Sign in with Google

Sign in with Twitter

Perusall uses your Facebook, Google, or Twitter account only to obtain your name, email address, and profile picture. Perusall will never post to any social network on your behalf.

OR

Email

Password

Forgot your password?

Sign In

Don't have an account? Register

2a. sign in here, or...

2b. click register

Welcome to Perusall! Let's finish setting up your account.

1

Create or enroll in a course

Start or join a club

Courses are for formal courses at the college, university, and K-12 levels, or for continuing education or other training.

With Perusall clubs, you can read a book, article, or other materials with friends or colleagues you choose. Your group's conversations are private: club members decide who should be in the club. Select a book you have already purchased within Perusall to use it in your club free of charge; club members that haven't yet purchased the book can rent or purchase access at the regular Perusall price.

create a course...

(if you logged in with existing account, click "Create course" at top left of page)

Perusall

app.perusall.com/welcome

Help FE

...select "instructor" and...

2 I am a student I am an instructor

3 I want to create a course...

- for students to access directly at perusall.com.
- integrated with my institution's Learning Management System.

Course name

Your unique course URL is based on this name. If you change the name, the URL will change.

Institution

Type to search for your institution, and [contact Perusall support](#) if your institution is not listed.

Course start date

Course end date

Enrollment estimate

The approximate number of students you expect to join the course. Perusall will use this value and the Target Group Size to create discussion groups for students.

Target group size

Students will be placed into groups of approximately this size and will only be able to see comments and questions within their group. Changing this setting will not retroactively apply to groups that have already been formed, to provide consistency for students.

Based on these settings, Perusall will place students into 1 discussion group(s) for each document. Discussion groups are fixed for a particular document once it is added to the course. [Learn more about discussion groups](#)

Select materials

Perusall

app.perusall.com/welcome

Help FE

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3 I want to create a course.. for students to access directly at perusall.com. Integrated with my institution's Learning Management System.

Course name ...for students to access directly at perusall.com
Your unique course URL is based on this name. If you change the name, the URL will change.

Institution
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Course start date

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Select materials

**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

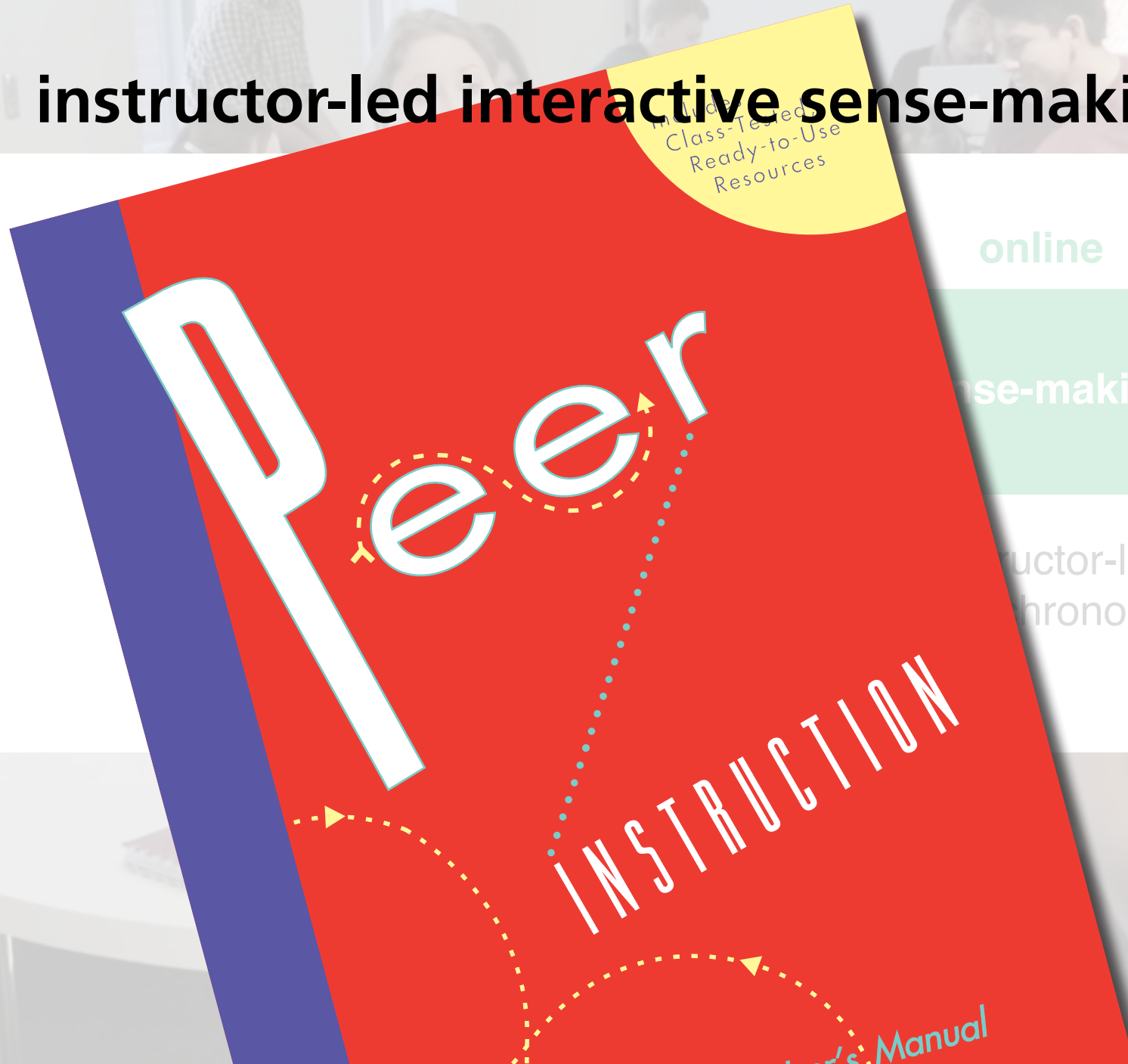
self-paced
asynchronous

online

sense-making

**instructor-led
synchronous**

instructor-led interactive sense-making



online

sense-making

instructor-led
asynchronous

instructor-led interactive sense-making

Peer Instruction...

- interactive teaching method
- promotes meaningful thinking

online

information
transfer

online

sense-making

self-paced
asynchronous

instructor-led
synchronous

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

online

online

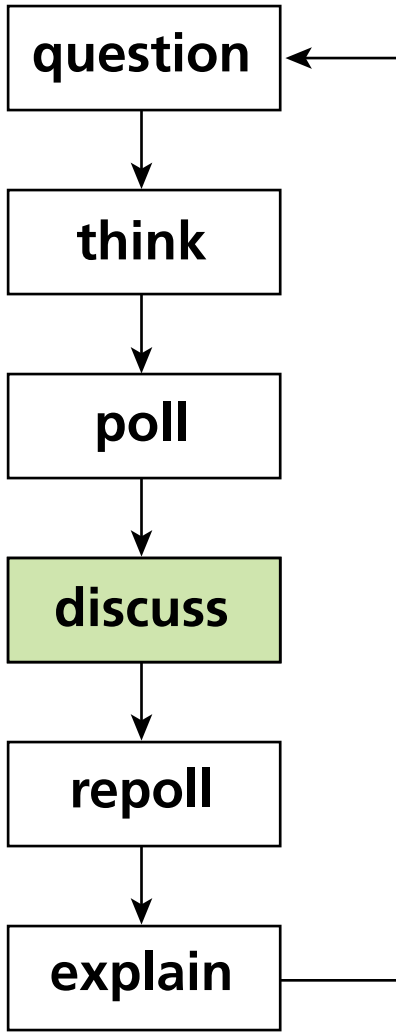
information
transfer

sense-making

Go to: Pollev.com/ericmazur615

self-paced
asynchronous

instructor-led
synchronous



online

ense-making

instructor-led
synchronous

Why Peer Instruction works

- engages students to think
- individualizes learning
- students use similar discourse
- helps avoid the “expert blind spot”

online

information
transfer

sense-making

self-paced

asynchronous

instructor-led

synchronous

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

home

information
transfer

self-paced
asynchronous
pre-class reading

projects

tutorials

experimental activities

problem sets

assessment

campus

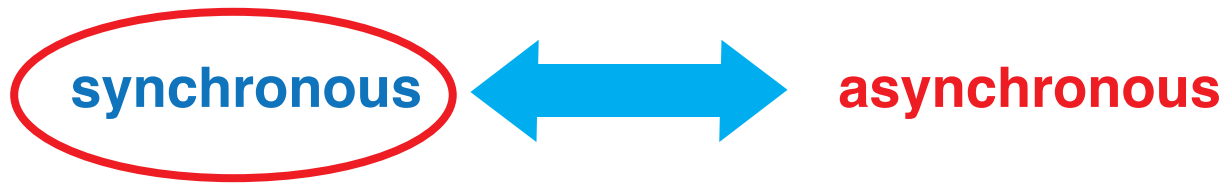
sense-making

instructor-led
synchronous
peer instruction

Improving education

synchronous  **asynchronous**

Improving education



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

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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