

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



A hands/brains-on demo  
17 April 2020





A group of students in a classroom setting, working on laptops and discussing projects. The students are seated around a white table, with several laptops open. One student in the foreground is looking at a laptop screen, while others are engaged in conversation. The background shows more students working at desks, creating a busy, collaborative learning environment.

**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**

**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

information  
transfer

instructor-paced  
synchronous  
lecture

home

information  
transfer

instructor-paced  
**asynchronous**  
**recorded** lecture

home

sense-making

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asynchronous  
recorded lecture

home

sense-making

self-paced  
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](https://app.perusall.com)
2. if you have an account, log in, then wait

self-paced  
asynchronous

instructor-led  
synchronous

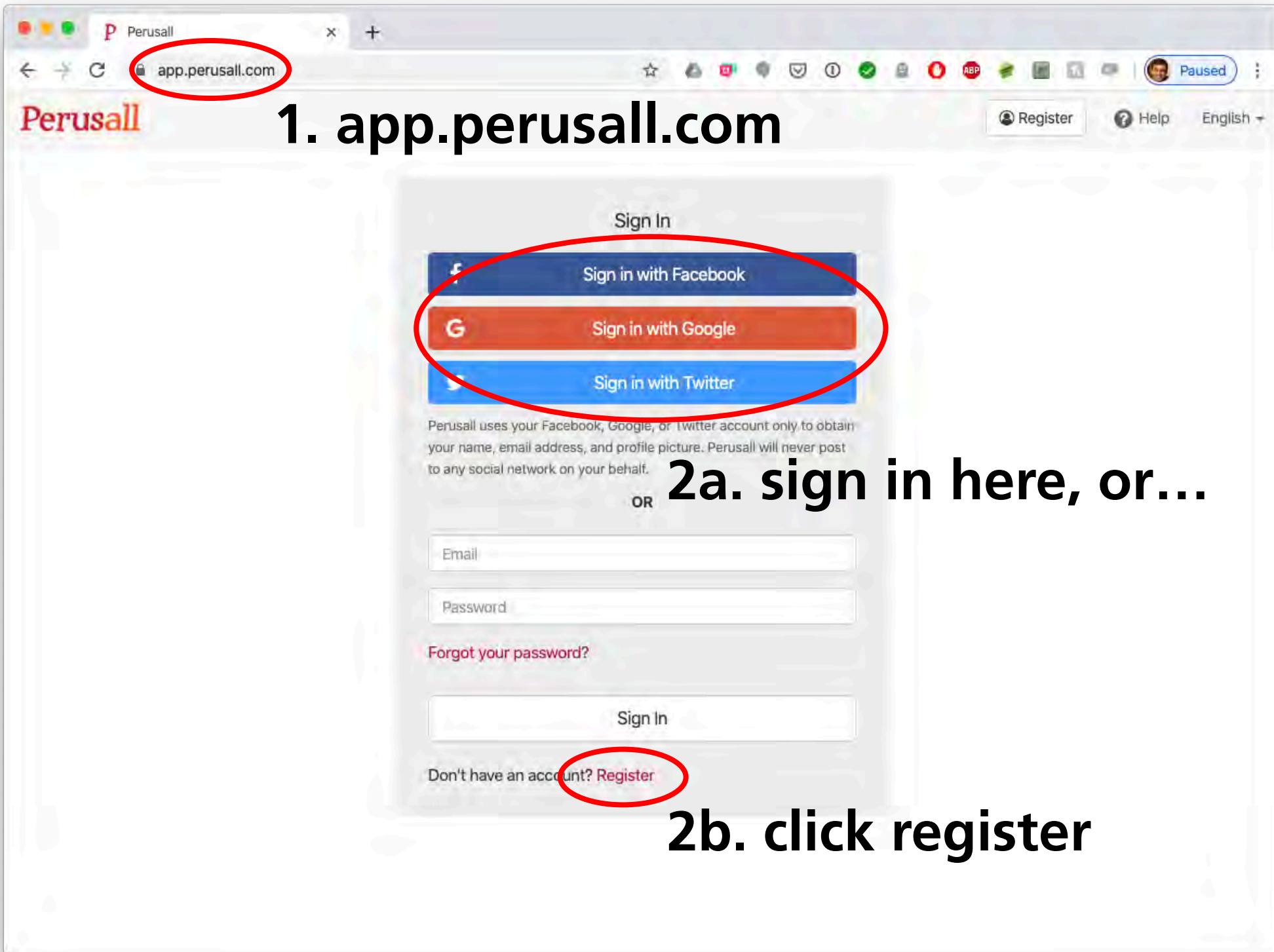


# asynchronous information transfer

online

online

1. in your browser go to: [app.perusall.com](http://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

The image shows a browser window with the Perusall website. The address bar shows 'app.perusall.com/welcome'. The page has a header with the Perusall logo and a 'Paused' button. The main content area is titled 'Welcome to Perusall! Let's finish setting up your account.' There are two buttons: 'Create or enroll in a course' (circled in red) and 'Start or join a club'. To the right of these buttons are two paragraphs of text explaining courses and clubs. A large red '1' is positioned to the left of the buttons. Below the screenshot, there is a large black text overlay.

Perusall

Help FE

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

**2** I am a student **I am an instructor** ...select "instructor" and...

**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

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.

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Select materials

# ...for students to access directly at perusall.com

Perusall

app.perusall.com/welcome

Help FE

2 I am a student I am an instructor

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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

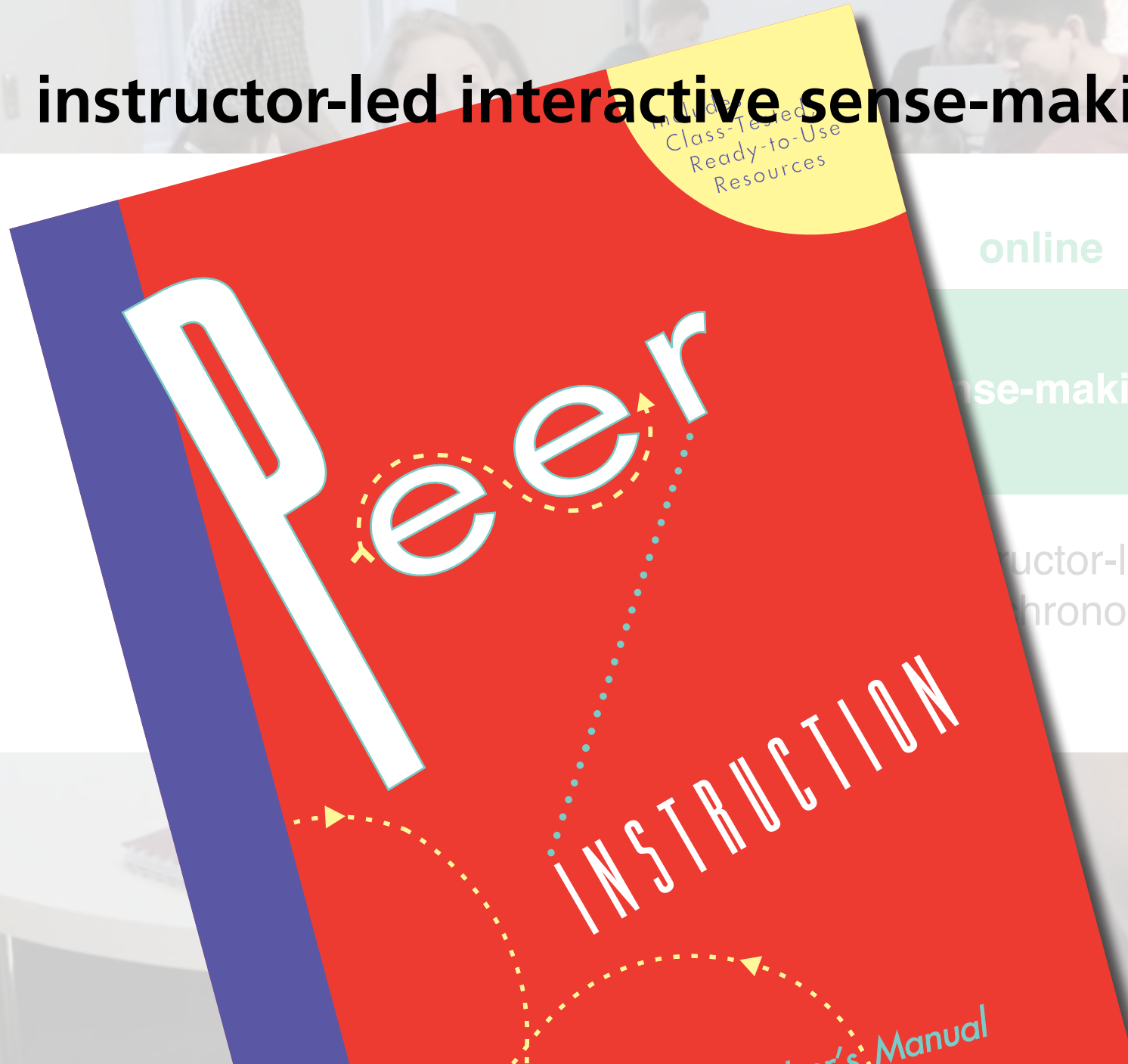
self-paced  
asynchronous

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](https://Pollev.com/ericmazur615)**

self-paced  
asynchronous

instructor-led  
synchronous

**question**



**think**



**poll**



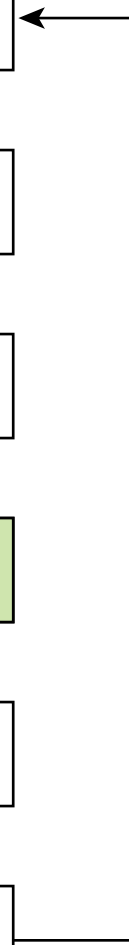
**discuss**



**repoll**



**explain**



**online**

**sense-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**

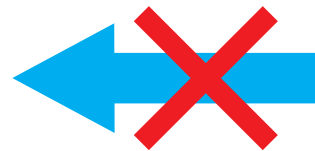
**sense-making**

instructor-led  
synchronous

**campus**

**online**

**online**



**information  
transfer**

**sense-making**

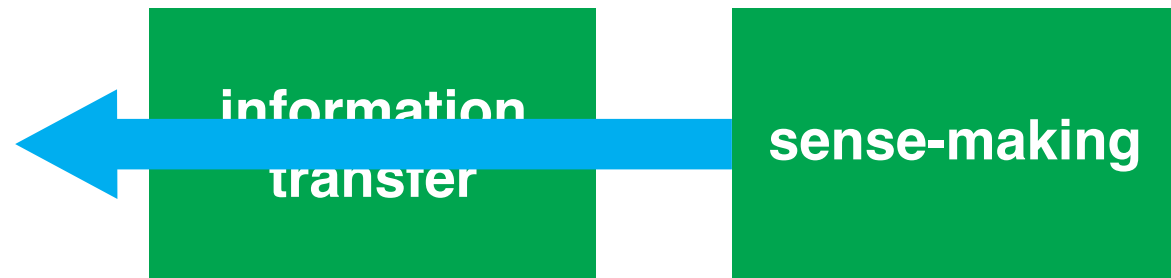
self-paced  
asynchronous

instructor-led  
synchronous

**campus**

**online**

**online**



self-paced  
asynchronous

instructor-led  
synchronous

**campus**

**sense-making**

instructor-led  
synchronous  
peer instruction

**home**

**information  
transfer**

self-paced  
asynchronous  
pre-class reading

# 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

campus

sense-making

instructor-led  
synchronous  
peer instruction

projects

home

tutorials

information  
transfer

experimental activities

self-paced  
asynchronous  
problem sets

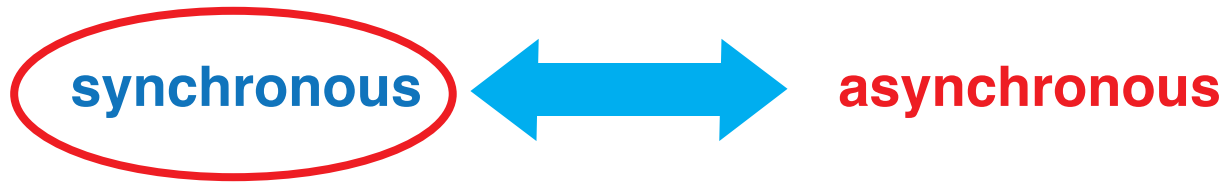
pre-class reading

assessment

# 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



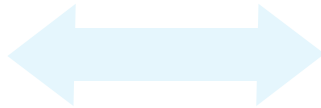
self-paced

everybody together  
at the same *pace*

# Improving education

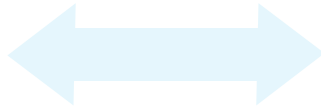
lecture

synchronous



asynchronous

instructor-paced

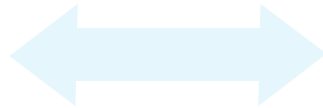


self-paced

# Improving education

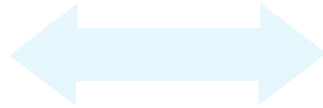
recorded lecture

synchronous



asynchronous

instructor-paced

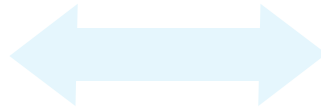


self-paced

# Improving education

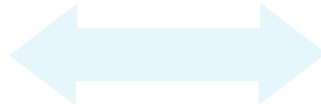
lab

**synchronous**



asynchronous

instructor-paced

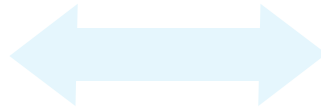


**self-paced**

# Improving education

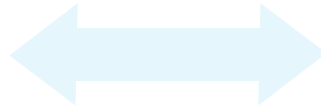
## homework/study

synchronous



**asynchronous**

instructor-paced



**self-paced**



# Improving education

**synchronous**



**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  
Hackett Publishing  
McFarland  
McGraw-Hill Education  
Oxford University Press  
Princeton University Press  
Routledge  
SAGE  
Springer  
Taylor & Francis  
Wiley  
W.W. Norton & Company**



A group of people are gathered around a white table in a meeting room. Several laptops are open on the table. One laptop in the foreground shows a calendar interface. The scene is brightly lit, suggesting a modern office environment. The text is overlaid on the image in a bold, black font.

**Help spread the word — tell your colleagues!**

**[calendly.com/ericmazur/fliponline](https://calendly.com/ericmazur/fliponline)**



**for a copy of this presentation:**

**mazur.harvard.edu**

**resource sheet: [bit.ly/fliponline](http://bit.ly/fliponline)**

**Follow me!**



**eric\_mazur**