

Promoting self-directed learning in a remote teaching setting



Educamp 2021
13 July 2021

Promoting self-directed learning in a remote teaching setting



@eric_mazur

Educamp 2021
13 July 2021



Weekend long reads



© Graziano Pantili

Life & Arts

Yuval Noah Harari: the world after coronavirus

This storm will pass. But the choices we make now could change our lives for years to come

Yuval Noah Harari MARCH 20 2020



Save

Humankind is now facing a global crisis. Perhaps the biggest crisis of our generation. The decisions people and governments take in the next few weeks will shape the world for years to come. They will shape not just our lives but the lives of future generations. We must act



Many short-term emergency measures will become a fixture of life. That is the nature of emergencies. They fast-forward historical processes. Decisions that in normal times could take years of deliberation are passed in a matter of hours. Immature and even dangerous technologies are pressed into service, because the risks of doing nothing are bigger. Entire countries serve as guinea-pigs in large-scale social experiments. What happens when everybody works from home and communicates only at a distance? What happens when entire schools and universities go online? In normal times, governments, businesses and educational boards would never agree to conduct such experiments. But these aren't normal times.





Many short-term emergency measures will become a fixture of life. That is the nature of emergencies. They fast-forward historical processes. Decisions that in normal times could take years of deliberation are passed in a matter of hours. Immature and even dangerous technologies are pressed into service, because the risks of doing nothing are bigger. Entire countries serve as guinea-pigs in large-scale social experiments. What happens when everybody works from home and communicates only at a distance? What happens when entire schools and universities go online? In normal times, governments, businesses and educational boards would never agree to conduct such experiments. But these aren't normal times.

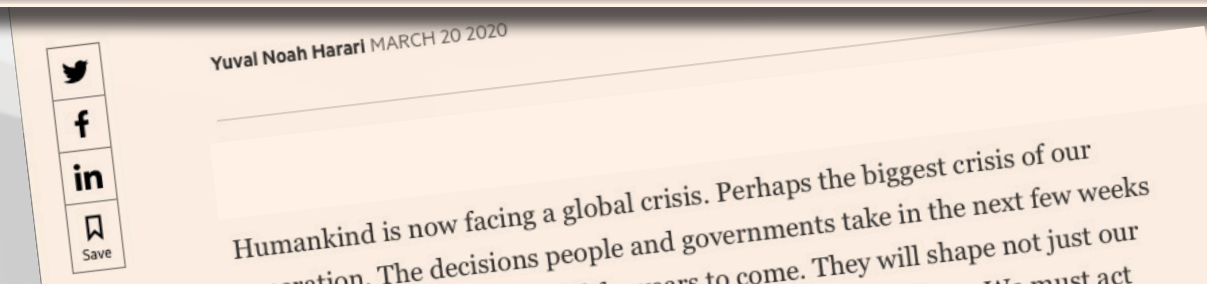


Yuval Noah Harari MARCH 20 2020

Humankind is now facing a global crisis. Perhaps the biggest crisis of our generation. The decisions people and governments take in the next few weeks will shape the world for years to come. They will shape not just our lives but the lives of our children. We must act

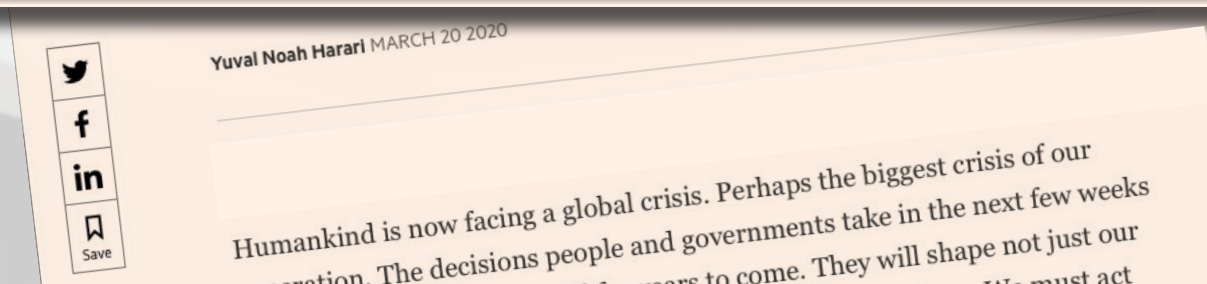


Many short-term emergency measures will become a fixture of life. That is the nature of emergencies. They fast-forward historical processes. Decisions that in normal times could take years of deliberation are passed in a matter of hours. Immature and even dangerous technologies are pressed into service, because the risks of doing nothing are bigger. Entire countries serve as guinea-pigs in large-scale social experiments. What happens when everybody works from home and communicates only at a distance? What happens when entire schools and universities go online? In normal times, governments, businesses and educational boards would never agree to conduct such experiments. But these aren't normal times.





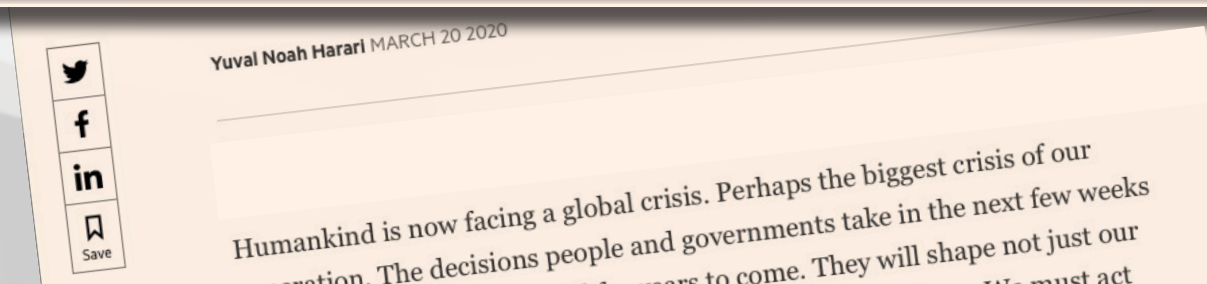
Many short-term emergency measures will become a fixture of life. That is the nature of emergencies. They fast-forward historical processes. Decisions that in normal times could take years of deliberation are passed in a matter of hours. Immature and even dangerous technologies are pressed into service, because the risks of doing nothing are bigger. Entire countries serve as guinea-pigs in large-scale social experiments. What happens when everybody works from home and communicates only at a distance? What happens when entire schools and universities go online? In normal times, governments, businesses and educational boards would never agree to conduct such experiments. But these aren't normal times.





Many short-term emergency measures will become a fixture of life. That is the nature of emergencies. They fast-forward historical processes. Decisions that in normal times could take years of deliberation are passed in a matter of hours. Immature and even dangerous technologies are pressed into service, because the risks of doing nothing are bigger. Entire countries serve as guinea-pigs in large-scale social experiments. What happens when everybody works from home and communicates only at a distance? What happens when entire schools and universities go online?

In normal times, governments, businesses and educational boards would never agree to conduct such experiments. But these aren't normal times.

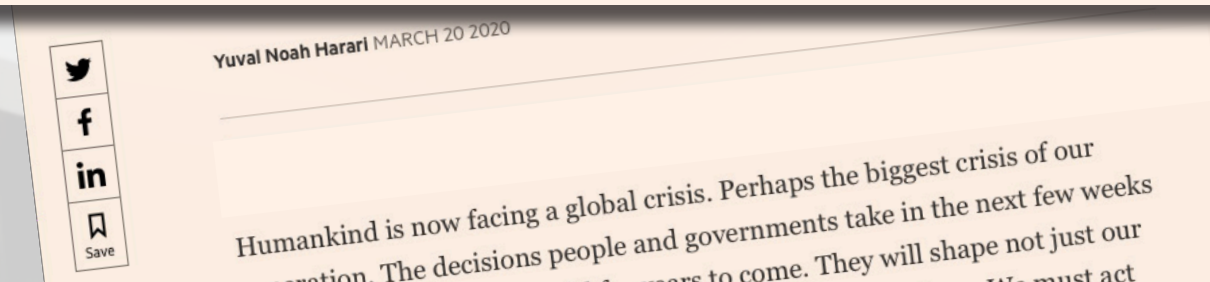




Many short-term emergency measures will become a fixture of life. That is the nature of emergencies. They fast-forward historical processes. Decisions that in normal times could take years of deliberation are passed in a matter of hours. Immature and even dangerous technologies are pressed into use. Entire countries

Will remote teaching become a fixture of life?

happens when everybody works from home and communicates only at a distance? What happens when entire schools and universities go online? In normal times, governments, businesses and educational boards would never agree to conduct such experiments. But these aren't normal times.





ng Wing School P.S. 124 who wished not be identified remote teaches on her laptop from her roof on March 24, 2020 in New York City. | Photo by Michael Loccisano/Getty Images

TEACHING & CLASSROOM

America's great remote-learning experiment: What surveys of teachers and parents tell us about how it went

By Matt Barnum and Claire Bryan | Jun 26, 2020, 12:18pm EDT



REPUBLIC

Spring America's schools underwent an unprecedented experiment: tens of
ing into school, and instead began receiving

lkbeat

SUBSCRIBE | ABOUT | RSS

EDSCOOP

BROUGHT TO YOU BY

HIGHER EDUCATION

How higher education leaders tried to stave off disaster in 2020



(Getty Images)

lkbeat

SUBSCRIBE | ABOUT | RSS

THE WALL STREET JOURNAL.

A photograph of a woman with long brown hair, wearing a green shirt and jeans, sitting on a tan sofa in a living room. She is looking at a laptop. To her left, a boy in a blue shirt and red shorts is sitting on the sofa, looking at a tablet. To her right, a boy in a red and blue plaid shirt and blue shorts is sitting on the sofa, looking at a tablet. In the foreground, a girl in a white dress and blue headband is standing, looking down. Another boy in a red shirt is sitting on the floor in the foreground. The living room has two lamps, a coffee table with a blue tablet, and a patterned rug.

The Results Are In for Remote Learning: It Didn't Work

The pandemic forced schools into a crash course in online education. Problems piled up quickly. 'I find it hectic and stressful'

Lucia Curatolo-Boylan supervises the online schooling of her four children, ages 4 to 10, in Staten Island, N.Y. KEVIN HAGEN FOR THE WALL STREET JOURNAL

by Howard and Lee Hawkins

lkbeat

SUBSCRIBE | ABOUT | RSS

THE WALL STREET JOURNAL.



Popular

Latest

The Atlantic

IDEAS

Remote Learning Is a Bad Joke

My kid can't handle a virtual education, and neither can I.

AUGUST 18, 2020

Emily Gould

Author and essayist



RECOMMEN
READING

Put Anthony Fauci in
Dunk Tank

CONOR FRIEDERSDORF

Why Millennials Can
Up

Remote learning has been a disaster and it can't continue

Randy Feldman

Published 5:30 a.m. ET Jun. 9, 2020

[View Comments](#)



Perspective. Few public policy issues are about one's own personal predisposition to live with risk and uncertainty than how we approach the coronavirus pandemic in the coming months. Scientific facts notwithstanding, how each of us evaluates the probability of contracting or spreading coronavirus



lkbeat

SUBSCRIBE | ABOUT | RSS

THE WALL STREET JOURNAL.

Intelligencer



Remote learning has been a disaster
and it can't continue

Randy Feltman

October 7, 2020

Remote learning has been a disaster
and it can't continue

Remote learning has been a disaster
and it can't continue

THE NATIONAL INTEREST | OCT. 7, 2020

Remote Learning Is a Catastrophe. Teachers Share the Blame.

By Jonathan Chait

lkbeat

SUBSCRIBE | ABOUT | RSS

THE WALL STREET JOURNAL.

Intelligencer



News

Research

Events

Jobs Board

More ▾

COLUMN | HIGHER EDUCATION

✉ Newsletter

Why Emergency Online Learning Got Low Grades From Many College Students

By Robert Ubell (Columnist) Mar 8, 2021



lkbeat

SUBSCRIBE | ABOUT | RSS

THE WALL STREET JOURNAL.

Intelligencer

 EdSurge

News

Research

Events

John

PLAY T

COLUMN | HIGHER

The New York Times

he Coronavirus Outbreak >

LIVE Latest Updates

Maps and Cases

State Reopening Tracker

Vaccine Rollout

Second D

Research Shows Students Falling Months Behind During Virus Disruptions

The abrupt switch to remote learning wiped out academic gains for many students in America, and widened racial and economic gaps. Catching up in the fall won't be easy.

Online distance learning for schools and colleges has been a great disaster.

Research Shows Students Falling Months Behind During Virus Disruptions

The abrupt switch to remote learning wiped out academic gains for many students in America, and widened racial and economic gaps. Catching up in the fall won't be easy.

The background is a collage of various news and education-related elements. At the top left, there's a small 'ikbeat' logo. Next to it are links for 'SUBSCRIBE | ABOUT | RSS'. Below these, 'THE WALL STREET JOURNAL.' is visible. To the right, the word 'Intelligence' is partially shown in a large, bold font. Further down, the 'EdSurge' logo is present, followed by navigation links for 'News', 'Research', and 'Events'. On the right side, there are more links: 'Vaccine Rollout' and 'Second D'. At the bottom left, a headline about 'the Coronavirus Outbreak' is partially visible. The central focus is a black rectangular box containing the text 'Was it really *that* bad?'.

Was it really *that* bad?

Research Shows Students Falling Months Behind During Virus Disruptions

The abrupt switch to remote learning wiped out academic gains for many students in America, and widened racial and economic gaps. Catching up in the fall won't be easy.



MINERVA[®]
SCHOOLS AT KGI

Higher Education with Purpose



Prepare to make a
positive impact with our
unique approach to
university education.

UNDERGRADUATE PROGRAM





MINERVA[®]
SCHOOLS AT KGI

Higher Education with Purpose



[Online Degrees](#)

[Admissions](#)

[Tuition & Financial Aid](#)

[Student Success](#)

[About WGU | 866.225.5948](#)

[Request Info](#)

[APPLY NOW](#)

An online university helping individuals achieve success.

Find your degree 



March 2020

AP50

1 before (and just after) pandemic

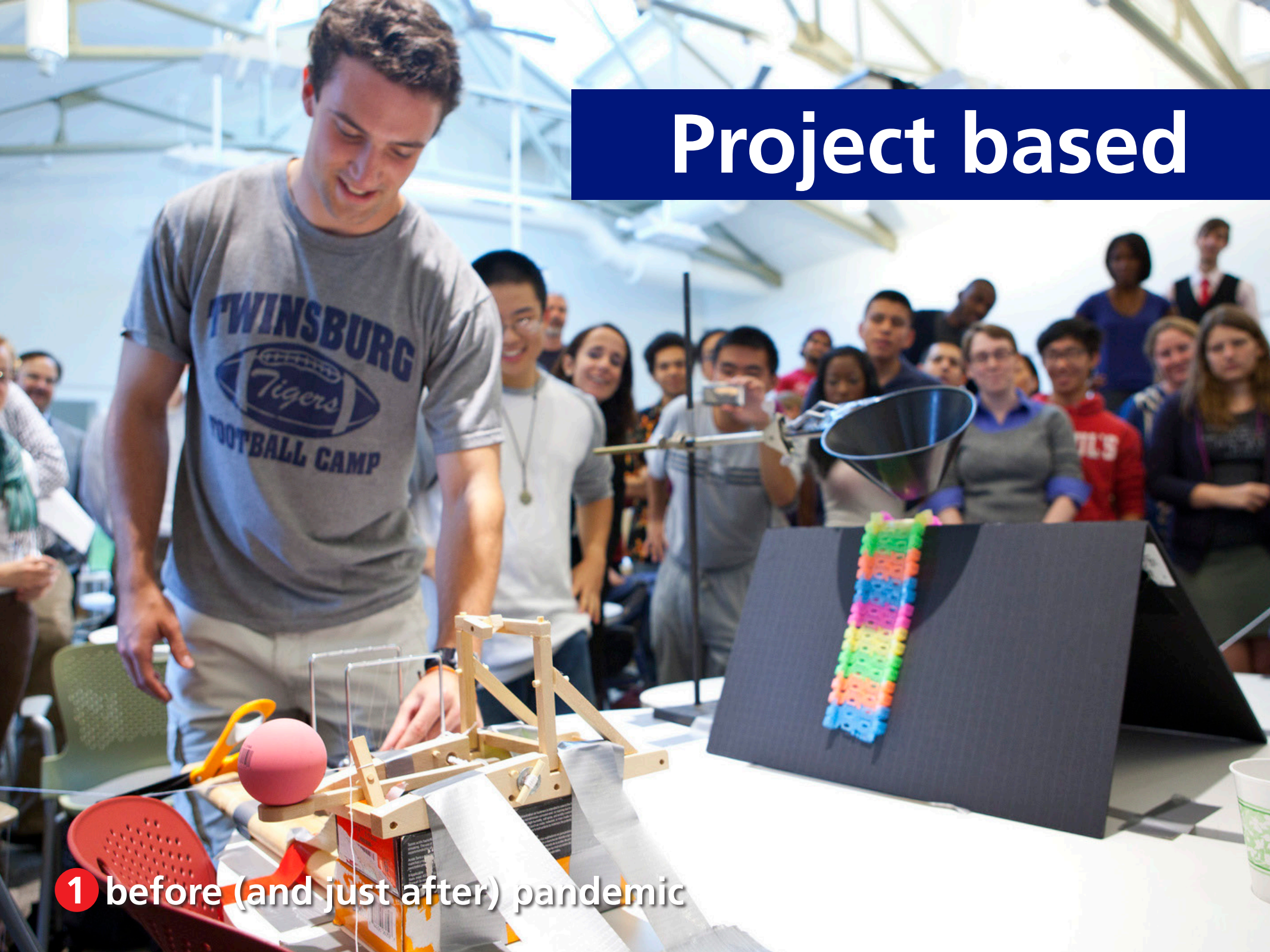


Team based

1 before (and just after) pandemic

Project based

1 before (and just after) pandemic

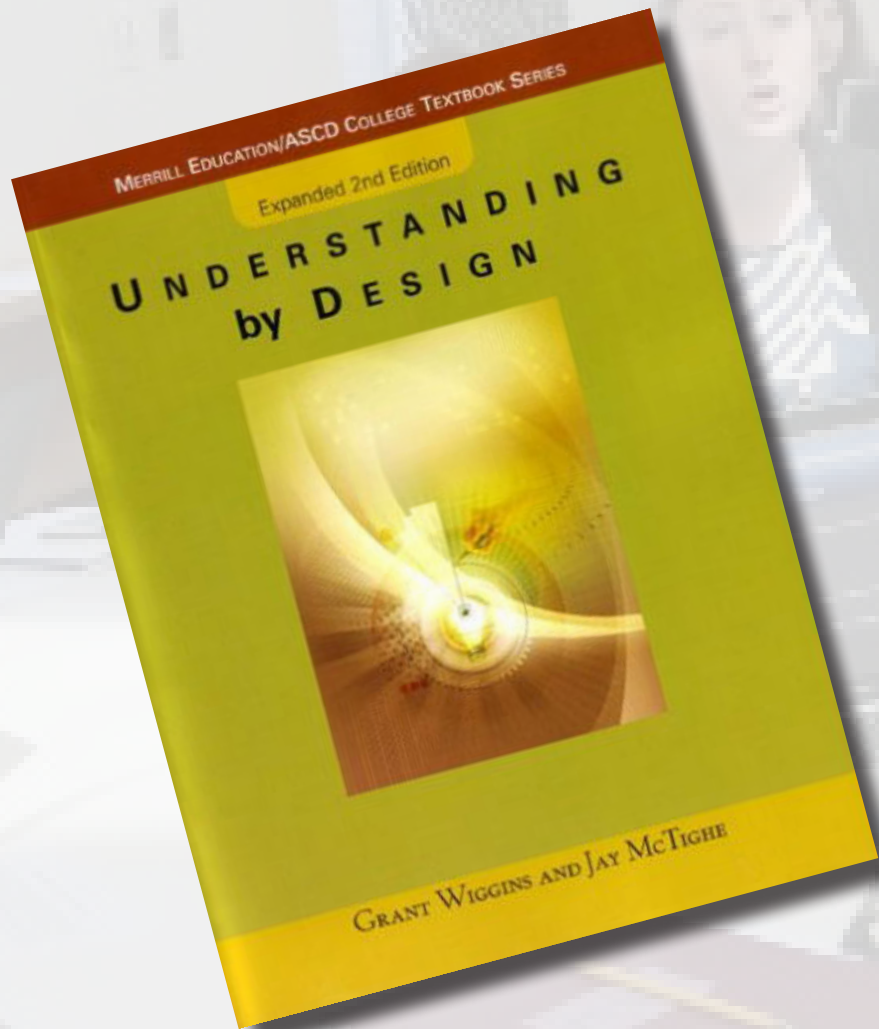




Intrinsic motivation

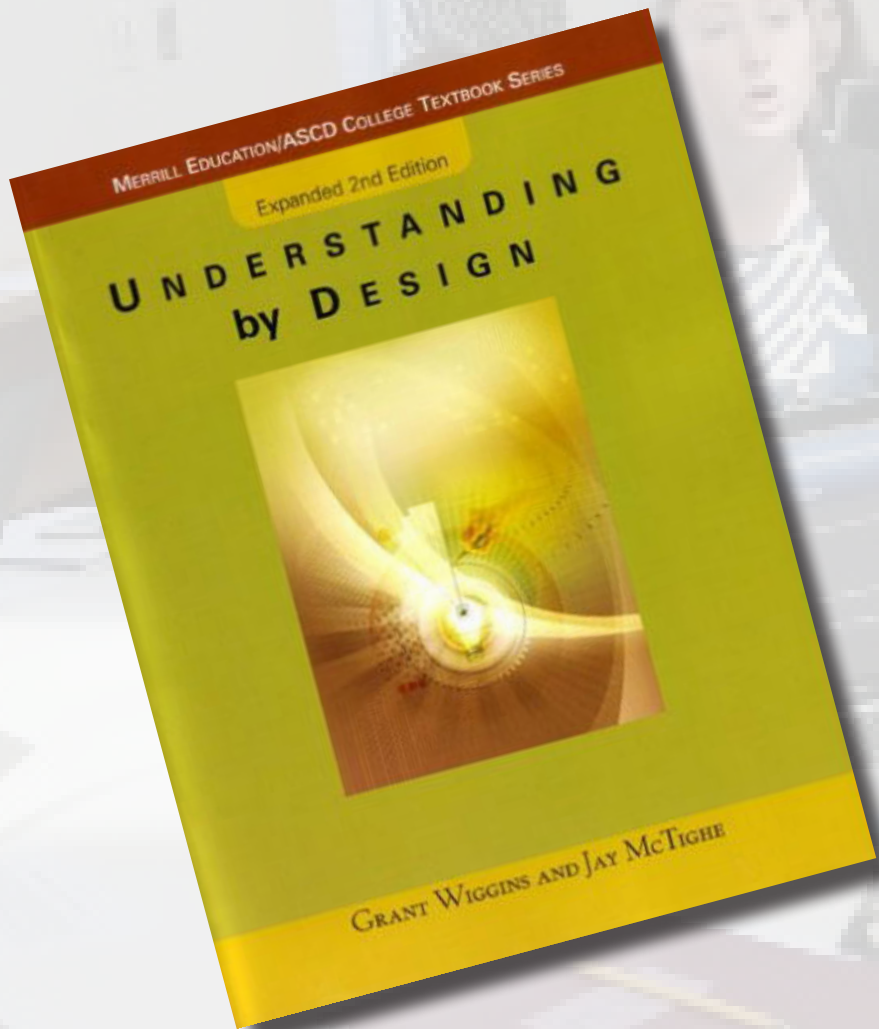
1 before (and just after) pandemic

Setting learning goals



Grant Wiggins and Jay McTighe, *Understanding by Design* (Prentice Hall, 2001)

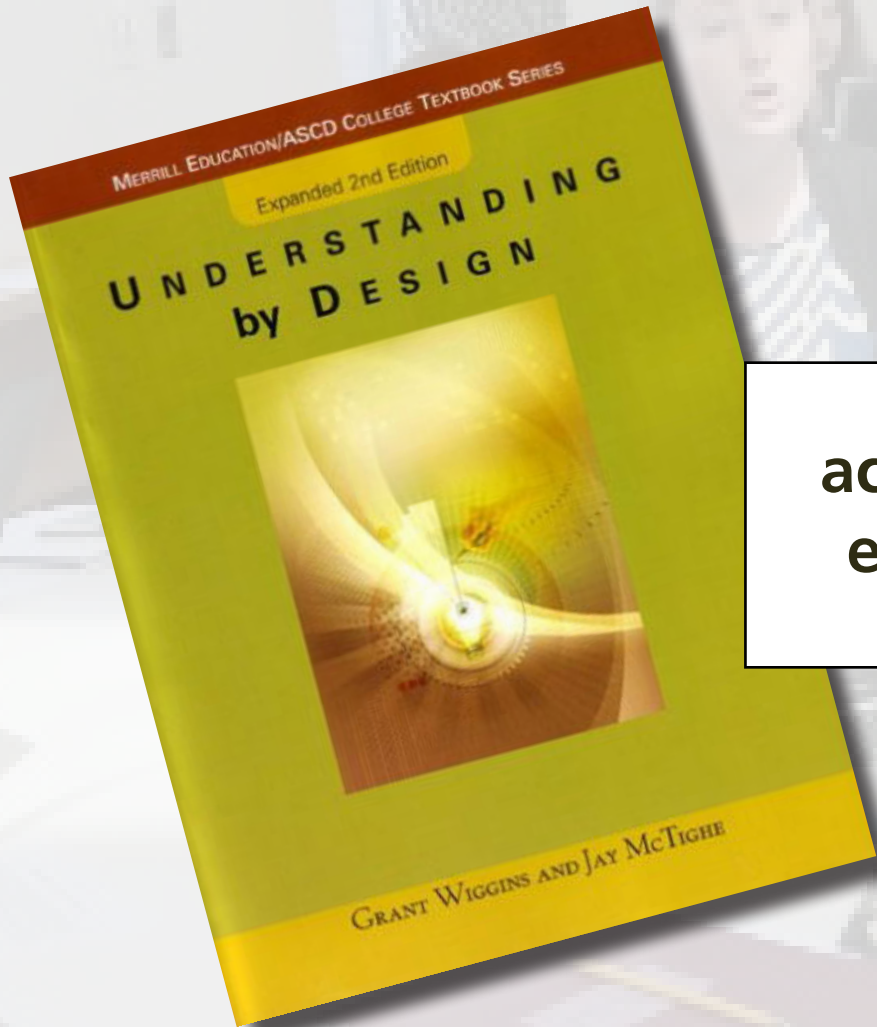
Backward design



**desired
outcomes**

Grant Wiggins and Jay McTighe, *Understanding by Design* (Prentice Hall, 2001)

Backward design



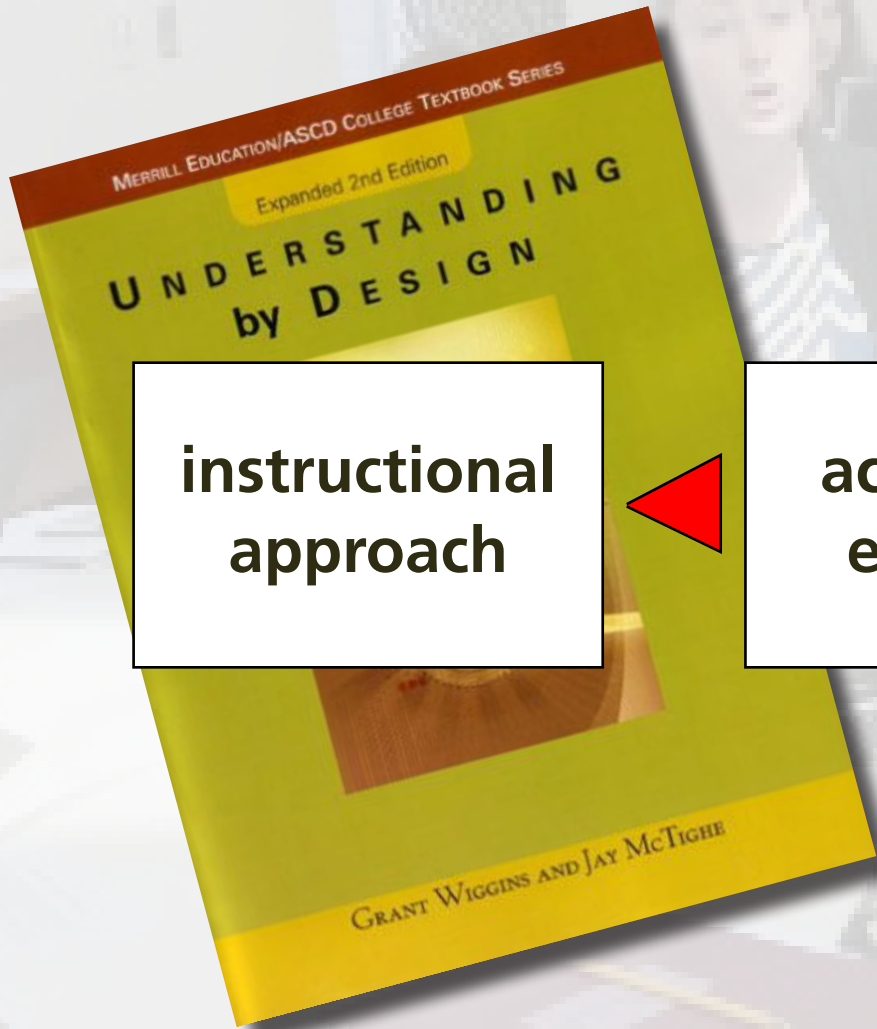
**acceptable
evidence**



**desired
outcomes**

Grant Wiggins and Jay McTighe, *Understanding by Design* (Prentice Hall, 2001)

Backward design



**instructional
approach**

**acceptable
evidence**

**desired
outcomes**



Grant Wiggins and Jay McTighe, *Understanding by Design* (Prentice Hall, 2001)

Course goals

- self-directed learning
- content mastery
- team work
- professionalism

1 before (and just after) pandemic



1 before (and just after) pandemic



information transfer

faculty-centered

1 before (and just after) pandemic




1 before (and just after) pandemic



interaction student-centered

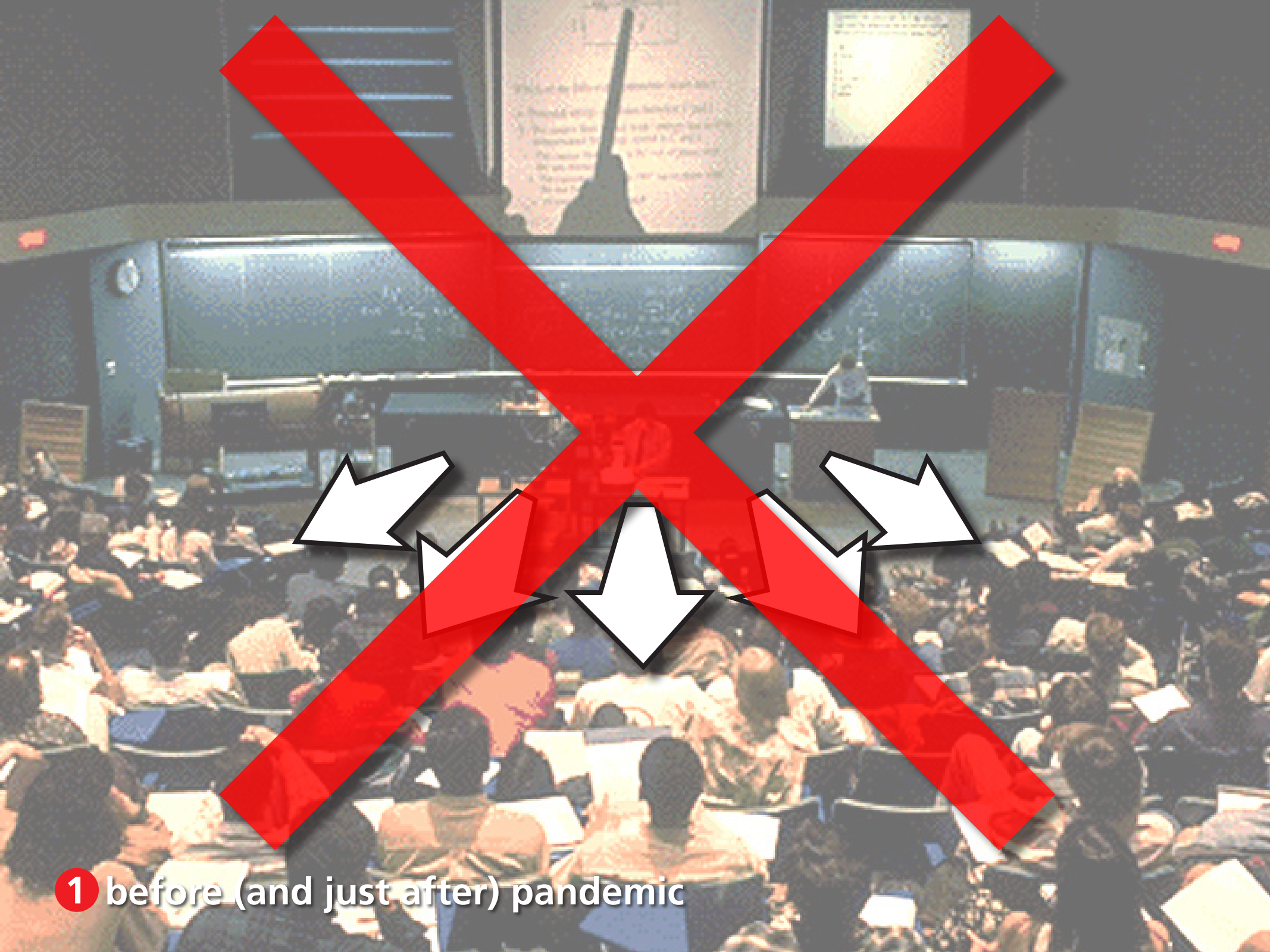
1 before (and just after) pandemic



no lectures

no exams

① before (and just after) pandemic



1 before (and just after) pandemic

A stylized illustration of a classroom with several students sitting at desks. The students are represented by simplified, colorful shapes in shades of yellow, green, blue, purple, and pink. They are all facing forward, and some are holding pens or pencils. The desks are white, and the background is a light gray.

Solution

**turn out-of-class component
also into a social interaction!**

1 before (and just after) pandemic

An illustration of a classroom with several students sitting at their desks. The students are depicted in a stylized, semi-transparent manner with various colors like yellow, green, blue, and purple. They are all facing forward, some with their hands on their desks, suggesting a typical classroom setting.

Perusal

every student prepared for every class

1 before (and just after) pandemic

A group of four students are gathered around a wooden box in a classroom. A female student with glasses is pouring liquid from a white cup into the box. Another female student is smiling and looking at the box. A male student in a plaid shirt is standing behind them, also smiling. A female student in a maroon hoodie is sitting in front of the box, looking up at it. The box contains various items, including a blue bowl, a white cup, and some papers. The background shows a classroom setting with desks and chairs.

what about class activities?

1 before (and just after) pandemic

blend of 6 scaffolded "best practices"

understand

LC: Learning Catalytics

90 min



Instructor poses question
Answer alone
Discuss in team
Answer again



Tutorial

60 min



Work on worksheet with team
Explore concepts
Discuss with staff

apply

EA: Estimation Activity

30 min



Estimate quantities
Develop individual strategy
Discuss and solve as team

EDA: Experimental Design Activity

90 min



Conduct experiment with team
Take measurements
Analyze data
Carry out simulations



evaluate

Problem Set & Reflection

90 min



Work problems alone BEFORE class
Discuss with team, mark up
Self-assess & turn in

RAA: Readiness Assurance Activity

90 min



Part 1: solve problems alone
Open book, open internet
Part 2: solve with team



1 before (and just after) pandemic

A group of four students are gathered around a wooden box containing a project. A female student with glasses is pouring liquid from a white cup into a grey tube. Another female student is smiling and looking at the project. A male student in a plaid shirt is standing and smiling. A female student in a maroon hoodie is sitting and smiling. The box contains various components, including a blue bowl, a white cup, and a circuit board with many small components. The background shows a classroom or lab setting with other students and equipment.

bit.ly/ap50class

1 before (and just after) pandemic



March 13, 2020

1 before (and just after) pandemic



instructional continuity between first and second half?

1 before (and just after) pandemic



instructional continuity between first and second half?

86% agreed

1 before (and just after) pandemic



Summer 2020

Moving online

"How can I transfer online what I do in the classroom?"

Moving online

***"How can I transfer online what I do in the classroom?"
(challenge)***

Moving online

***"How can I transfer online what I do in the classroom?"
(challenge)***

Moving online

"How can I transfer online what I do in the classroom?"
(challenge)

"What can I do online that I cannot do in the classroom?"
(opportunity)

Changes implemented

- **Minimize sync/instructor-paced**
- **Personalize instruction**

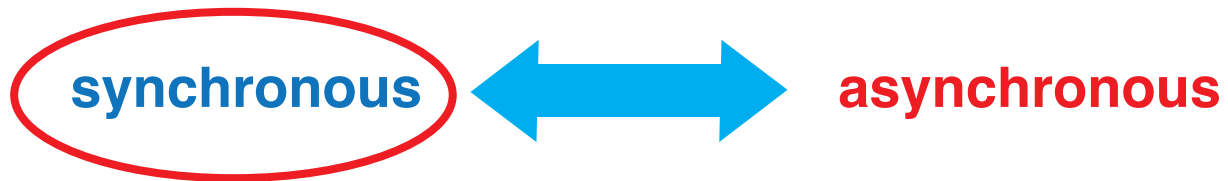
Changes implemented

- **Minimize sync/instructor-paced**
- **Personalize instruction**
- **Specifications Grading**

Minimize sync/instructor-paced

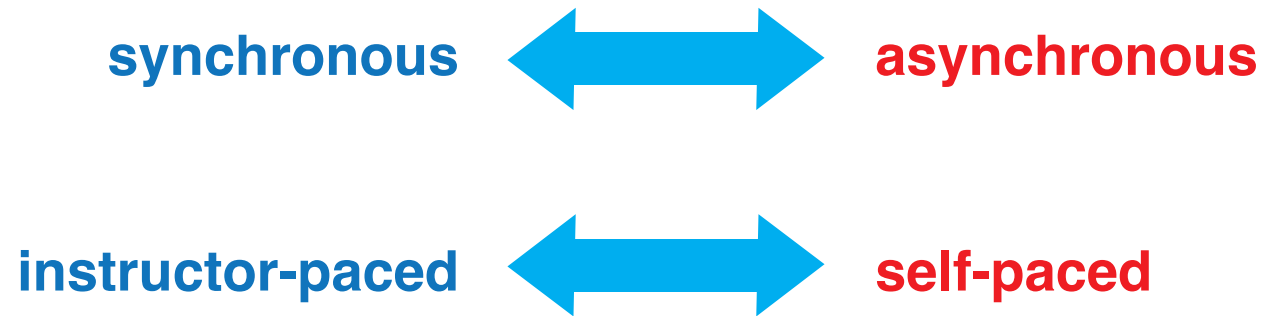
synchronous ↔ asynchronous

Minimize sync/instructor-paced

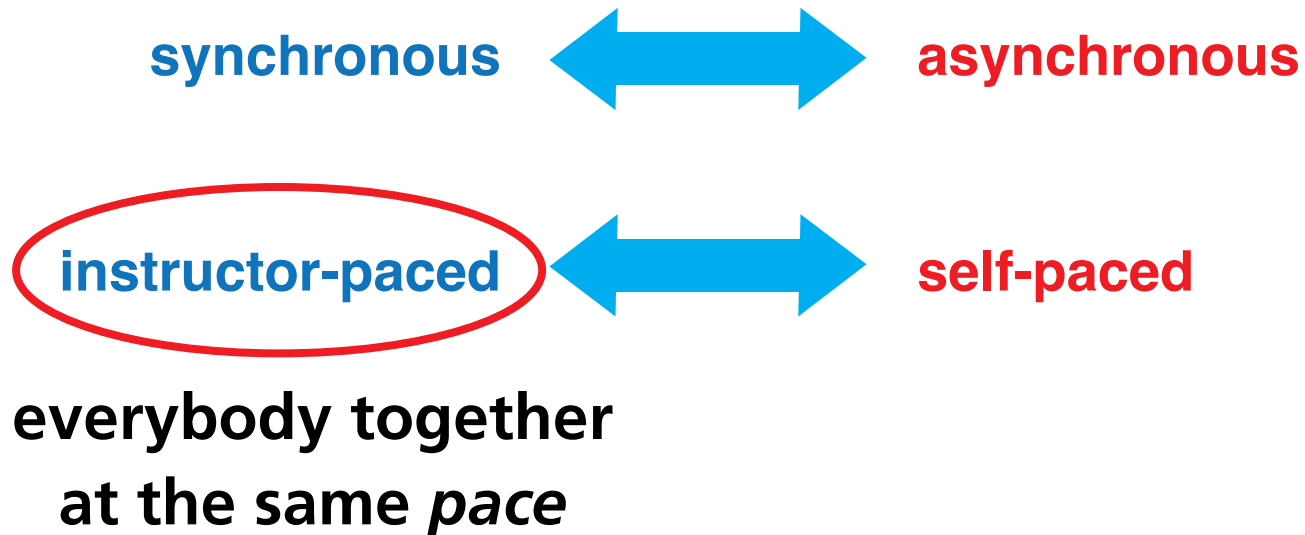


everybody together
at the same *time*

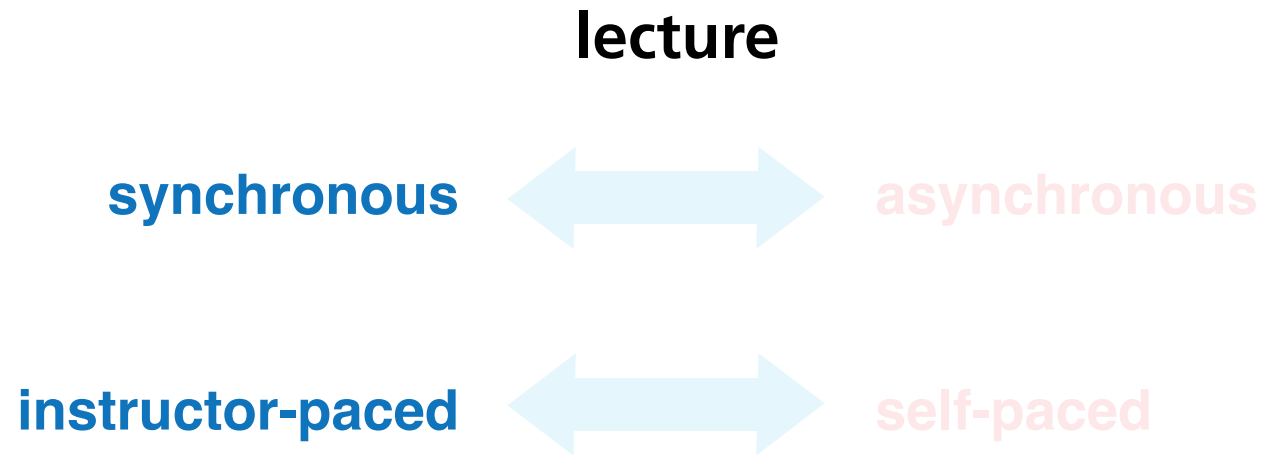
Minimize sync/instructor-paced



Minimize sync/instructor-paced



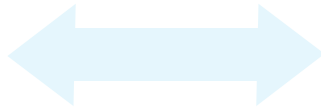
Minimize sync/instructor-paced



Minimize sync/instructor-paced

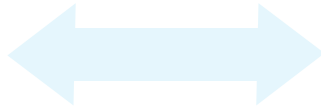
recorded lecture

synchronous



asynchronous

instructor-paced

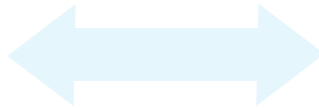


self-paced

Minimize sync/instructor-paced

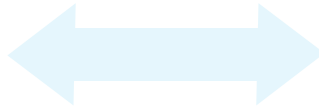
recorded lecture

synchronous



asynchronous

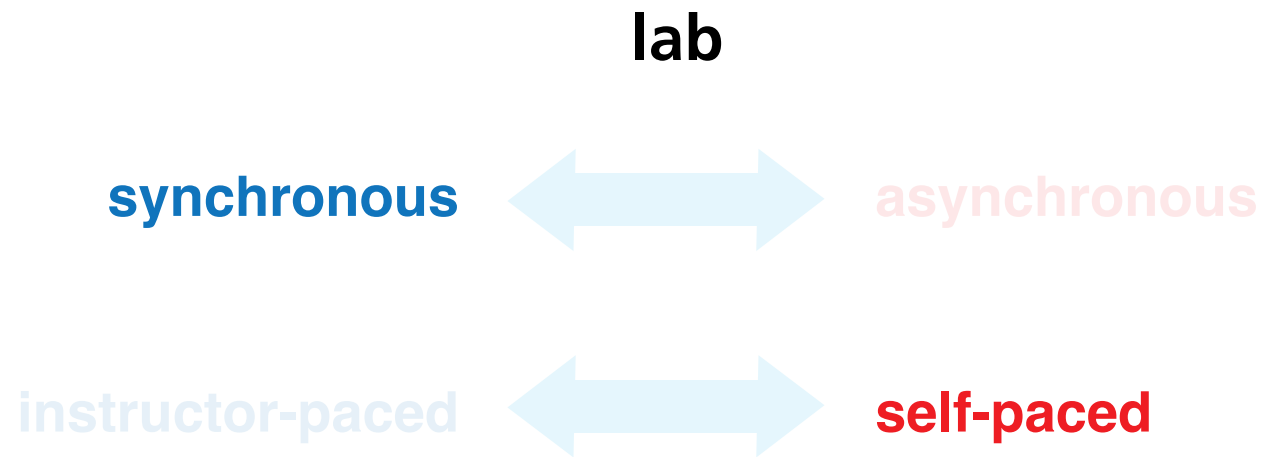
instructor-paced



self-paced

1.5x!

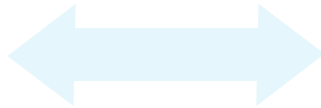
Minimize sync/instructor-paced



Minimize sync/instructor-paced

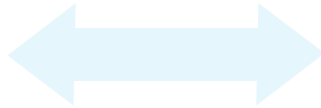
homework/study

synchronous



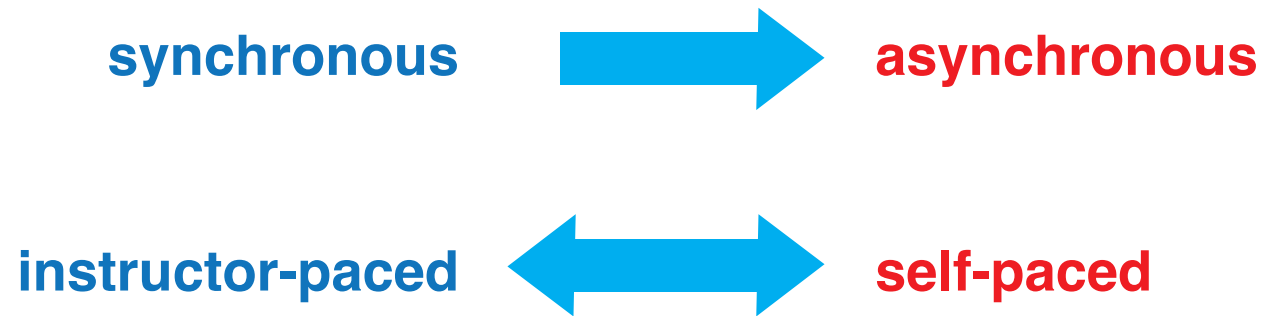
asynchronous

instructor-paced

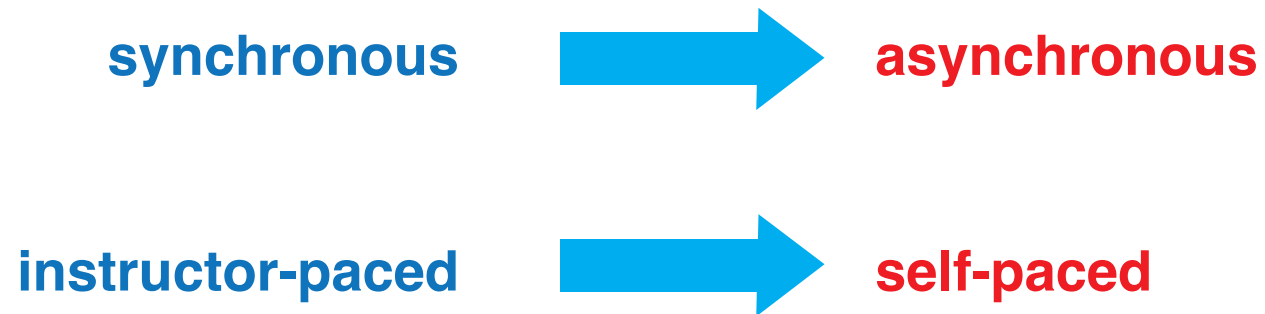


self-paced

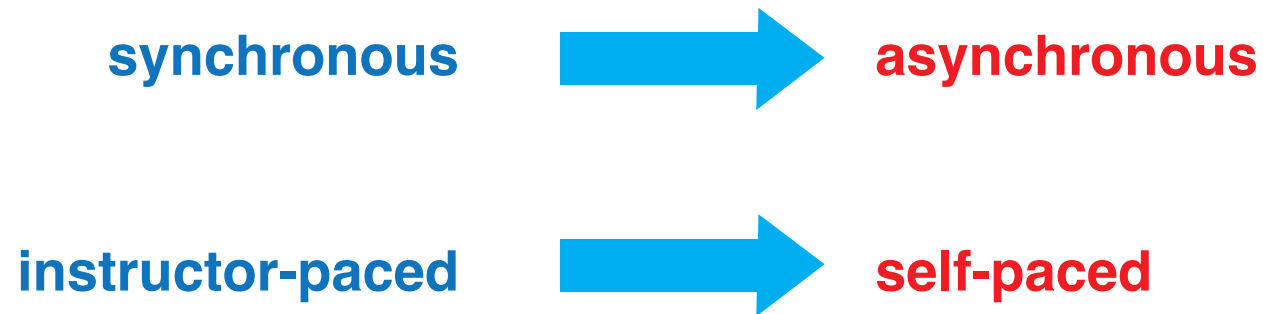
Minimize sync/instructor-paced



Minimize sync/instructor-paced



Minimize sync/instructor-paced



**more time to help students
where it really matters!**

A background image of a modern classroom or meeting space. Several students are seated around a large, light-colored circular table. They are engaged in collaborative work, with some looking at laptops and others in discussion. The room has large windows in the background, letting in natural light. The overall atmosphere is one of active learning and collaboration.

Personalize instruction

instead of all students coming to instructor's room...

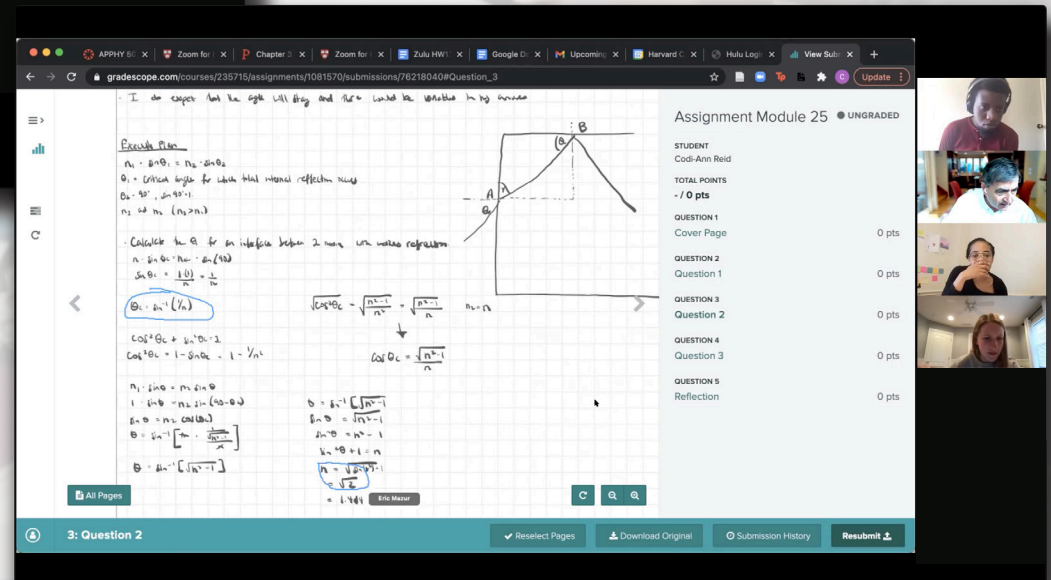
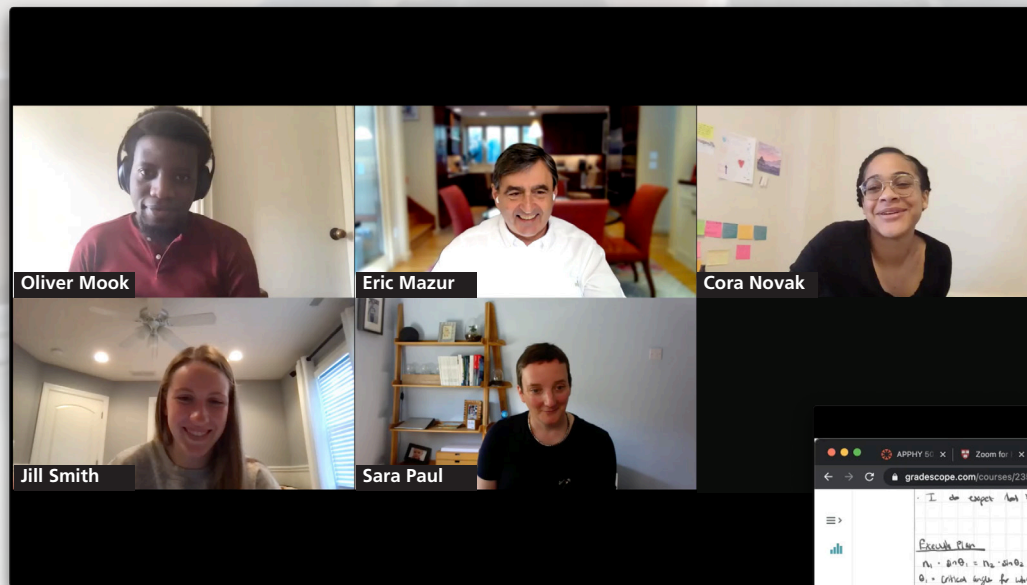
Personalize instruction

instead of all students coming to instructor's room...

...instructional staff visits each team's own room

Personalize instruction

80 students in one room → 20 rooms with 4 students



Assignment Module 25 • UNGRADED

STUDENT: Codi-Ann Reid

TOTAL POINTS: 0 / 0 pts

QUESTION 1: Cover Page (0 pts)

QUESTION 2: Question 1 (0 pts)

QUESTION 3: Question 2 (0 pts)

QUESTION 4: Question 3 (0 pts)

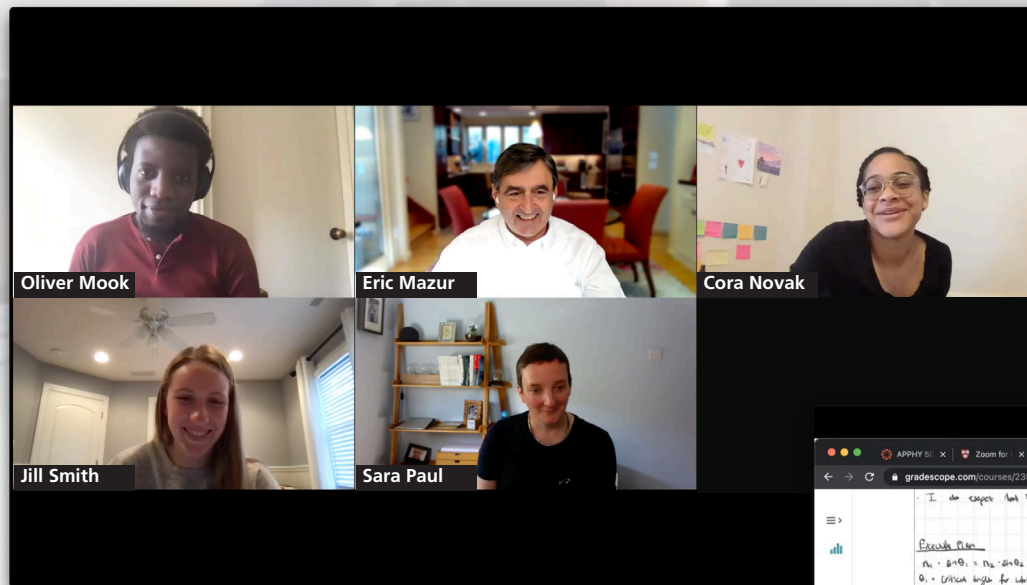
QUESTION 5: Reflection (0 pts)

3: Question 2

Reselect Pages Download Original Submission History Resubmit

Personalize instruction

every student on front row



The screenshot shows a Gradescope assignment interface for 'Assignment Module 25'. The main area displays handwritten mathematical work on a grid background, including a diagram of a light ray reflecting off a surface. The work involves calculating the critical angle for total internal reflection using Snell's law and trigonometric identities. The right sidebar shows the assignment details, including the student's name (Codi-Ann Reid), total points (0/0), and a list of questions with their respective point values. The bottom of the interface includes navigation buttons like 'Reselect Pages', 'Download Original', 'Submission History', and 'Resubmit'.

2 reimagining course

Personalize instruction

every student on front row & address each by their name

Oliver Mook

Eric Mazur

Cora Novak

Jill Smith

Sara Paul

Assignment Module 25 • UNGRADED

STUDENT: Codi-Ann Reid

TOTAL POINTS: - / 0 pts

QUESTION 1: Cover Page 0 pts

QUESTION 2: Question 1 0 pts

QUESTION 3: Question 2 0 pts

QUESTION 4: Question 3 0 pts

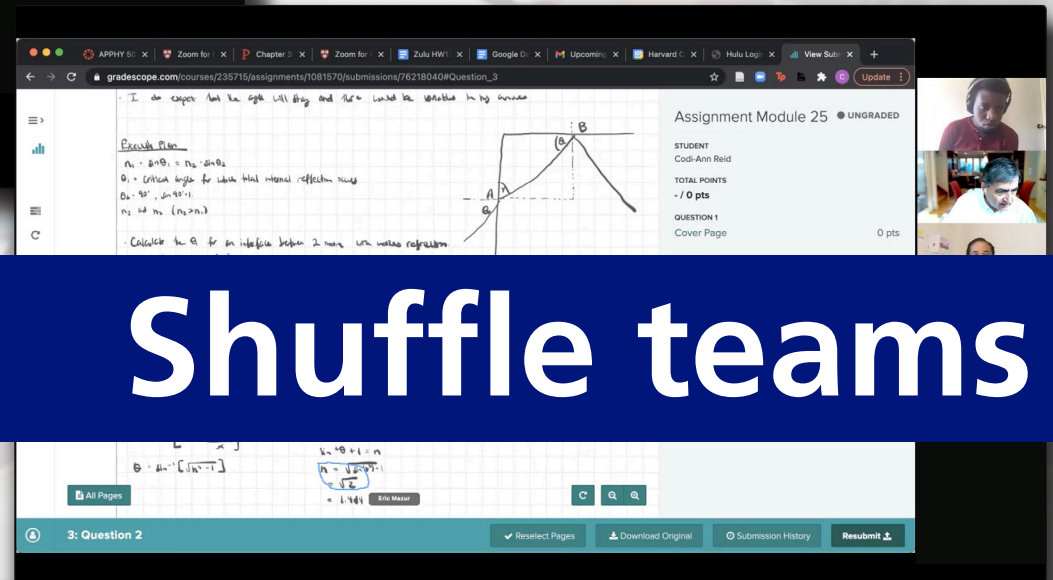
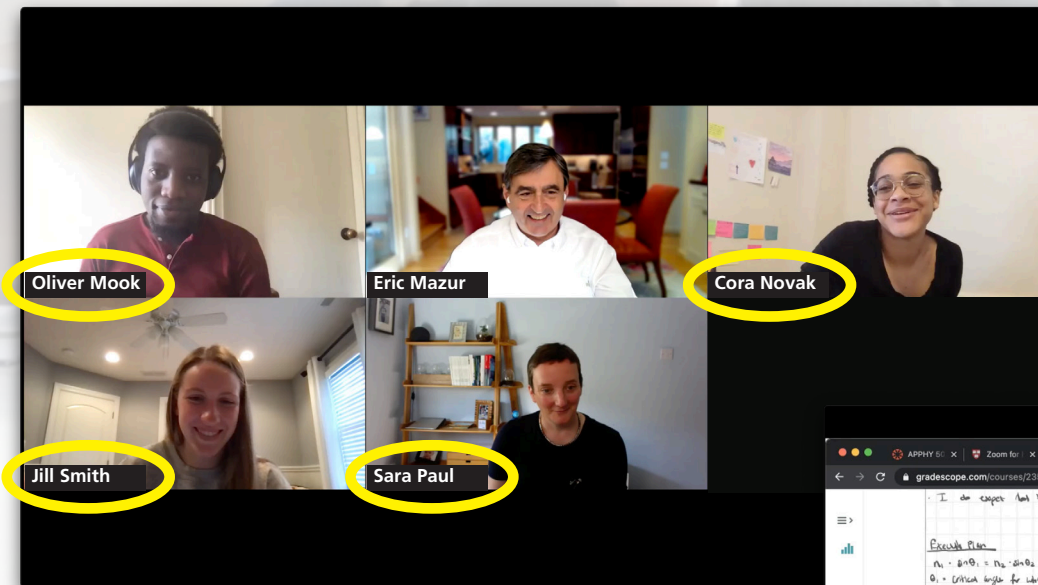
QUESTION 5: Reflection 0 pts

3: Question 2

2 reimagining course

Personalize instruction

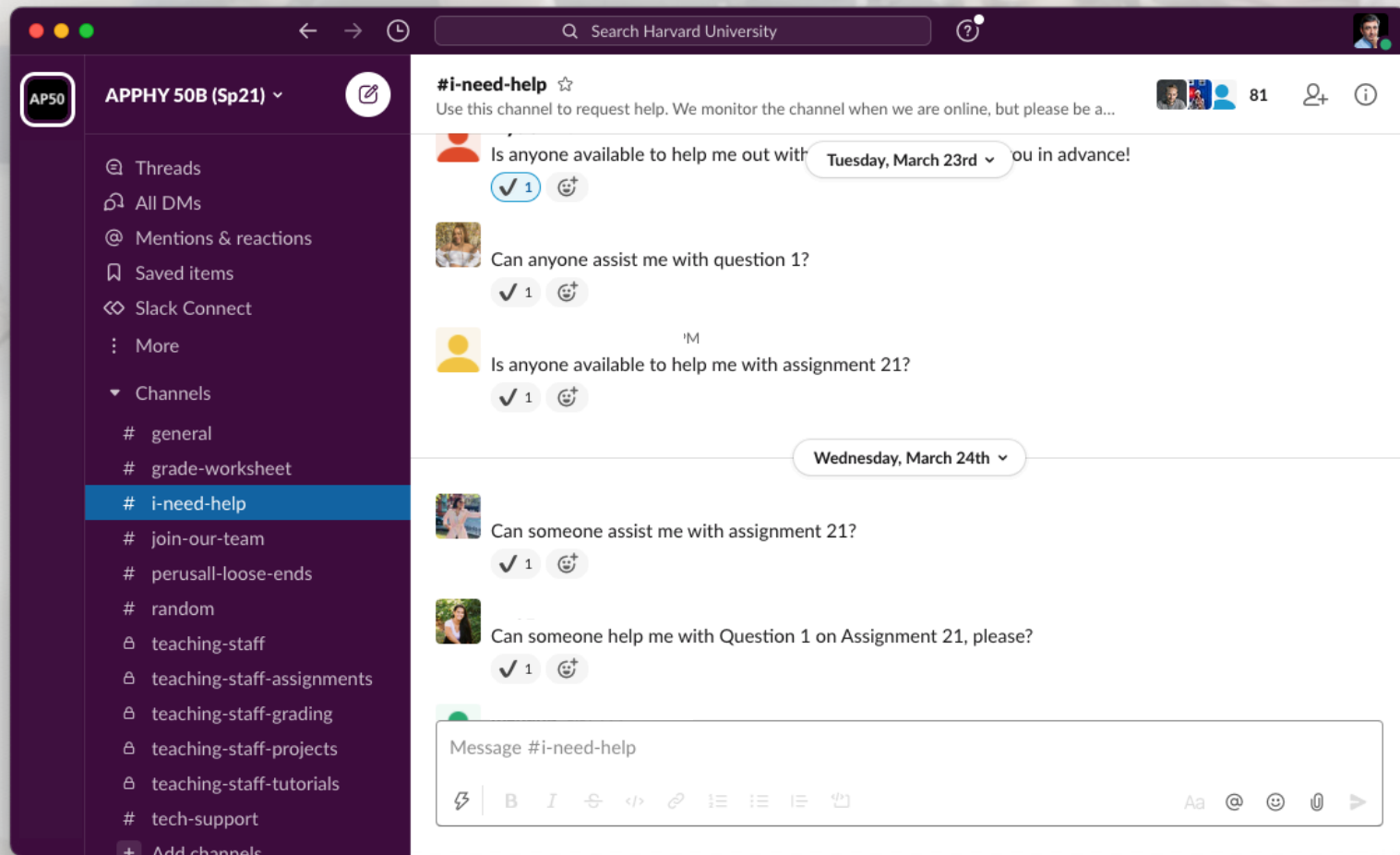
every student on front row & address each by their name



2 reimagining course

Personalize instruction

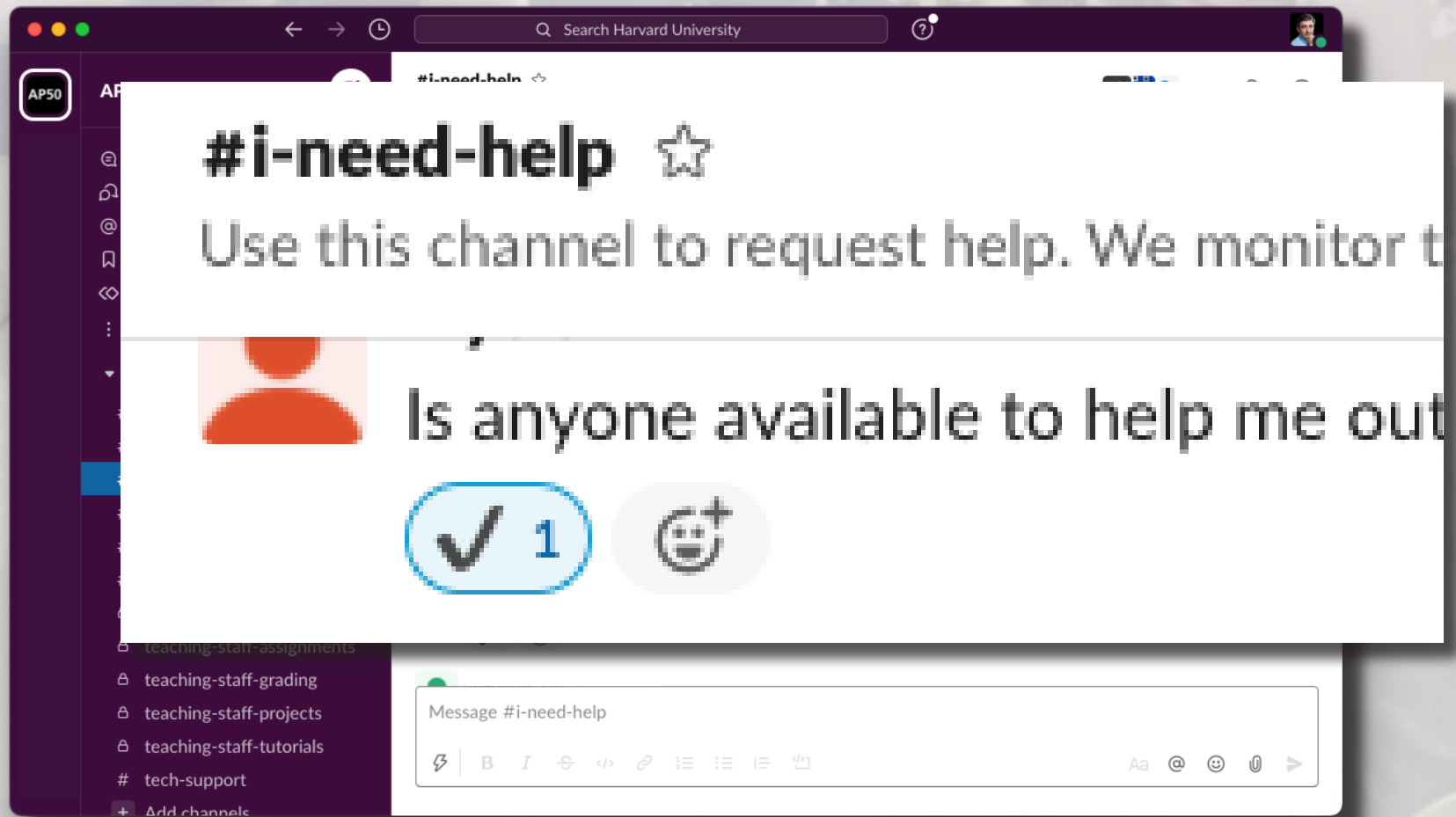
Use Slack to provide (nearly) continuous support



2 reimagining course

Personalize instruction

Use Slack to provide (nearly) continuous support

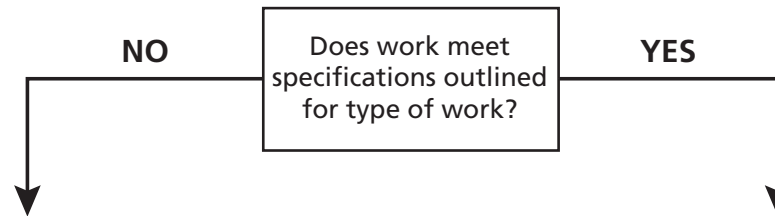


Specifications grading

Inside Higher Ed, Yes, Virginia, there is a better way to grade

2 reimagining course

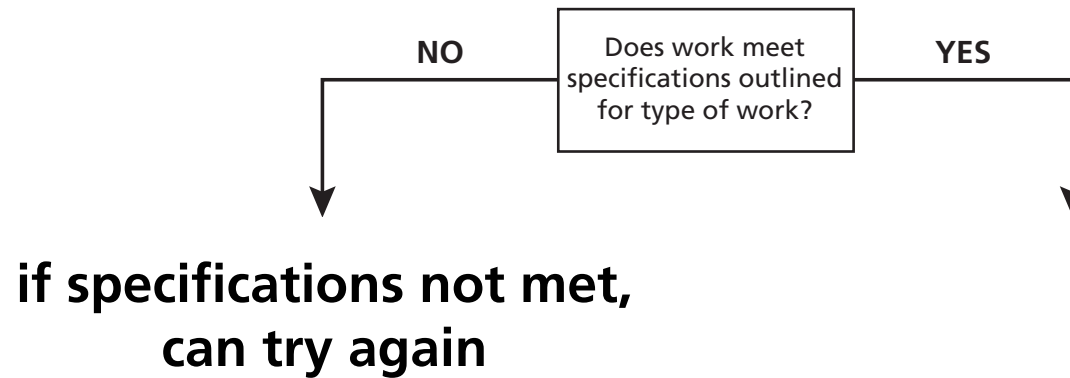
Specifications grading



Inside Higher Ed, *Yes, Virginia, there is a better way to grade*

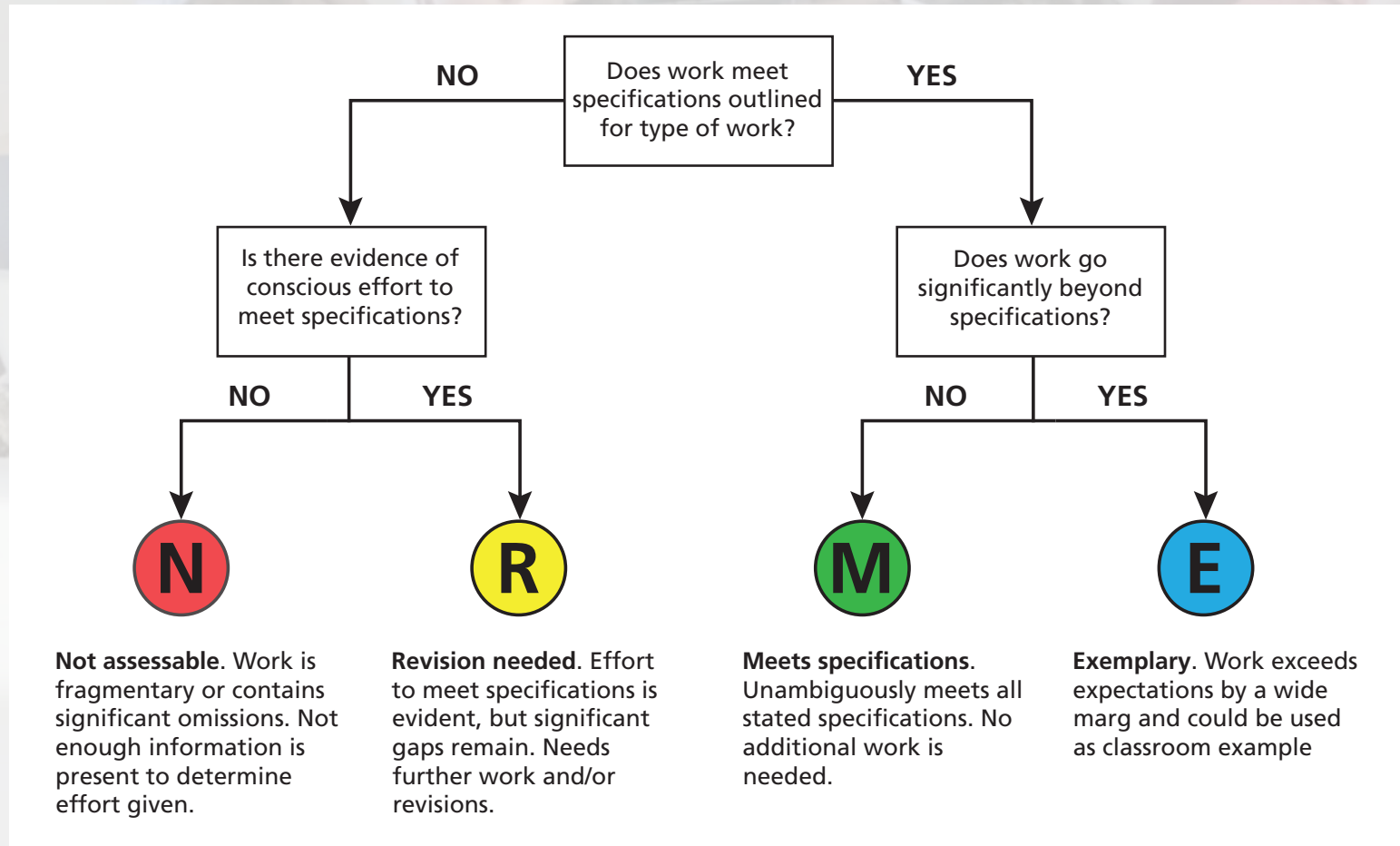
2 reimagining course

Specifications grading



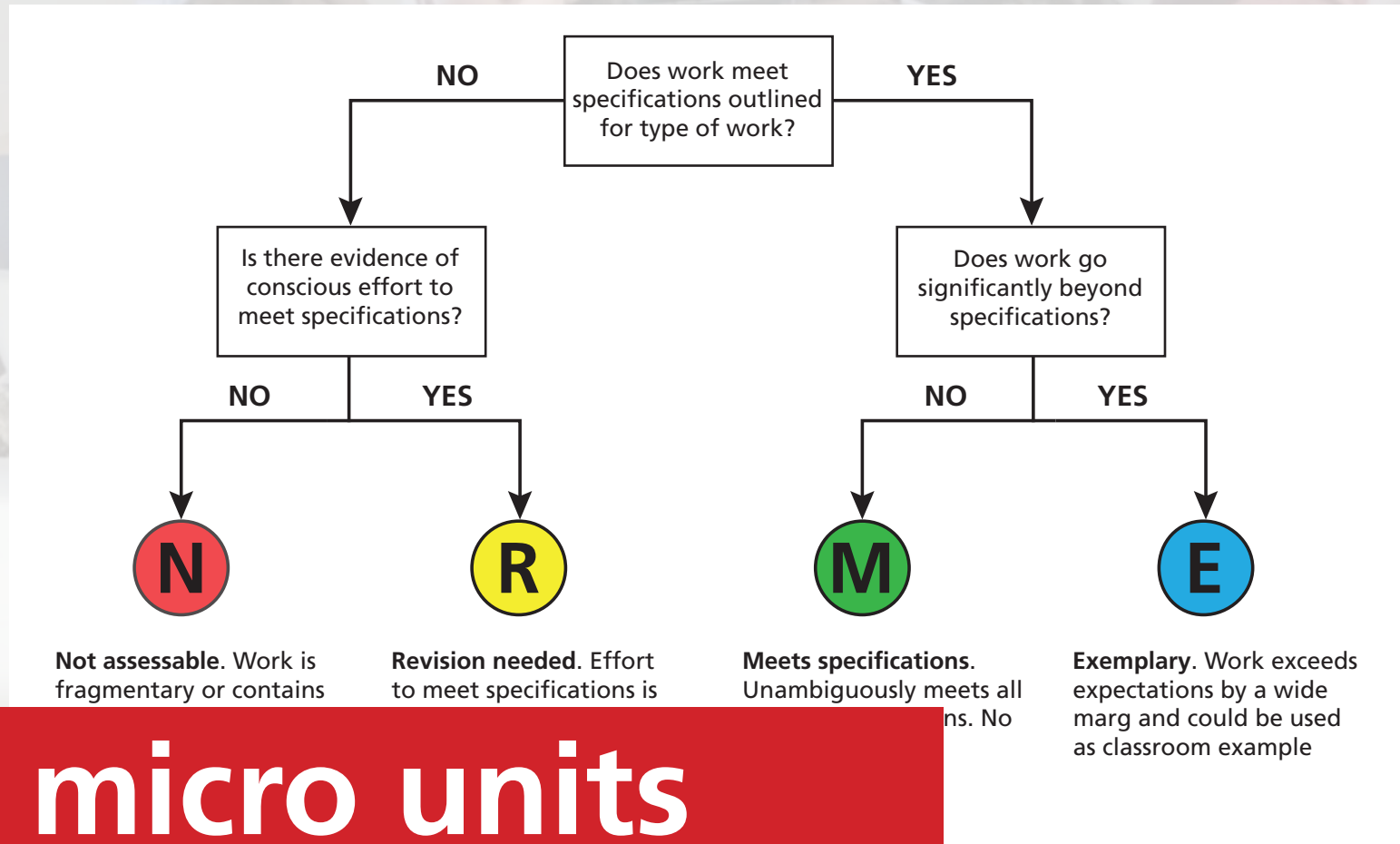
Inside Higher Ed, *Yes, Virginia, there is a better way to grade*

Specifications grading



Inside Higher Ed, Yes, Virginia, there is a better way to grade

Specifications grading



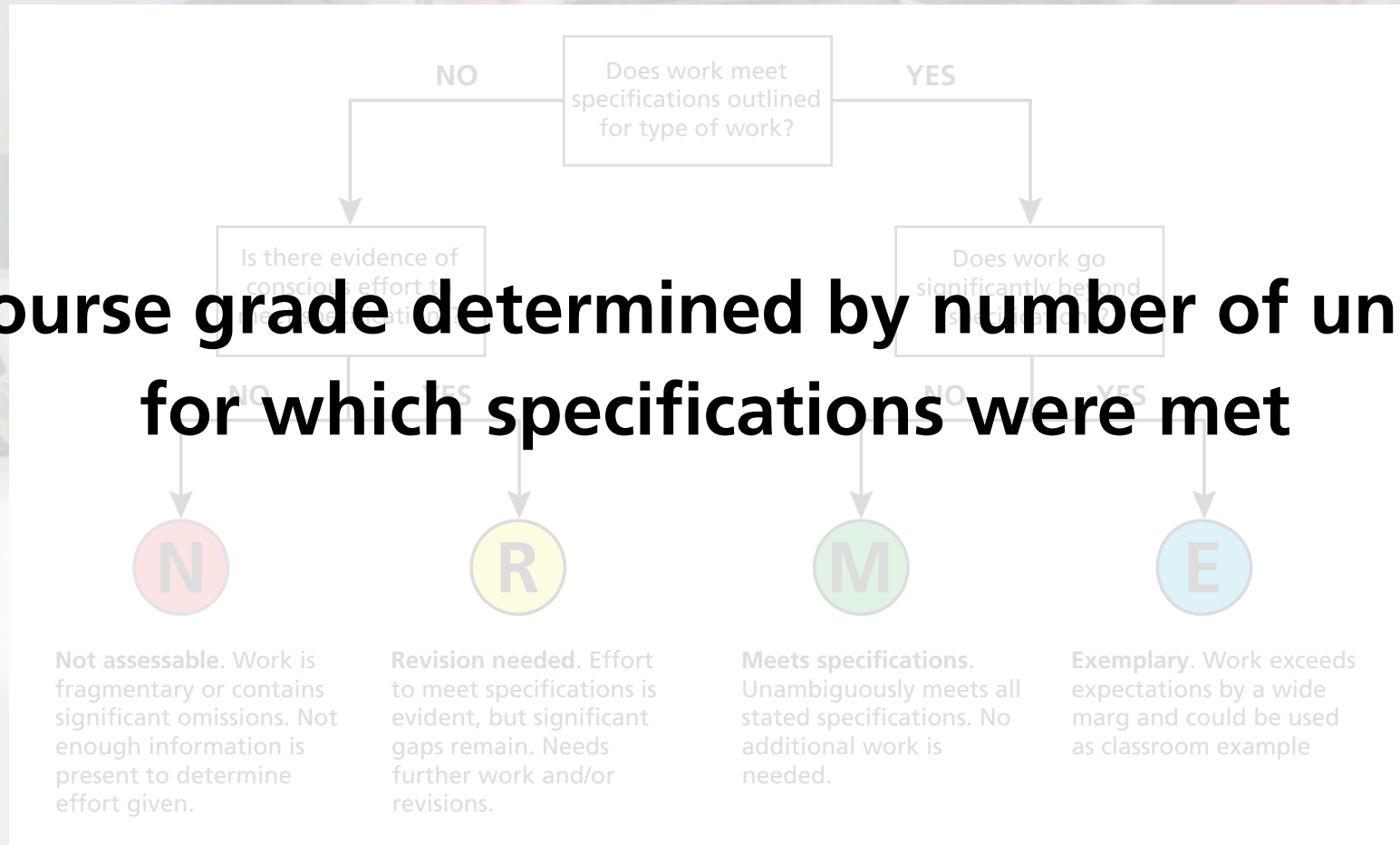
68 micro units

Inside Higher Ed, Yes, Virginia, there is a better way to grade

2 reimagining course

Specifications grading

course grade determined by number of units for which specifications were met

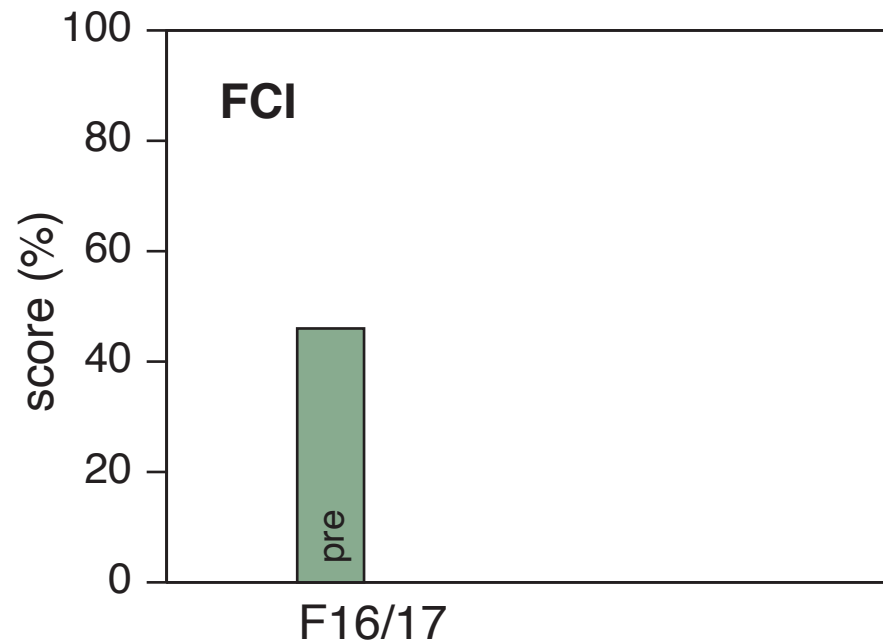


Inside Higher Ed, Yes, Virginia, there is a better way to grade

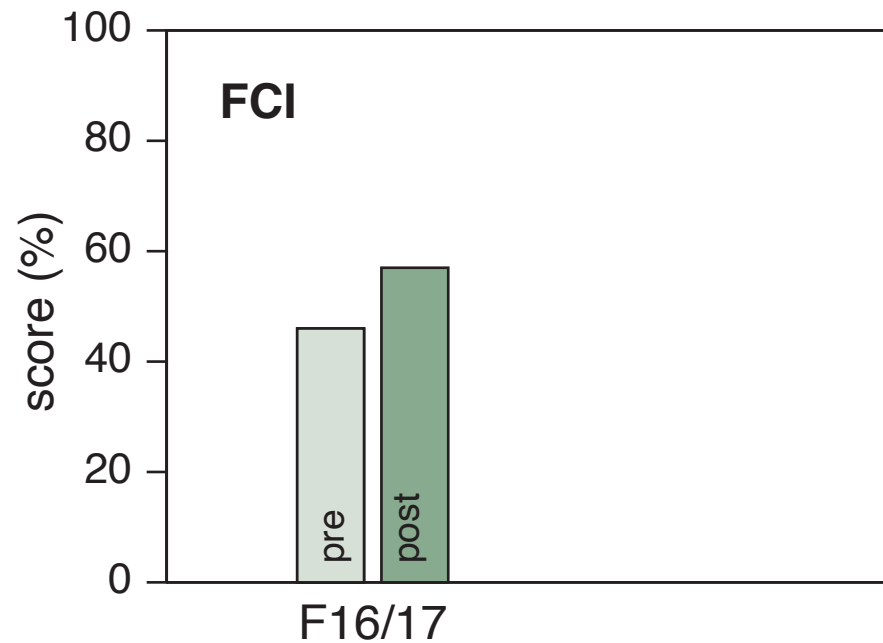


Did it work?

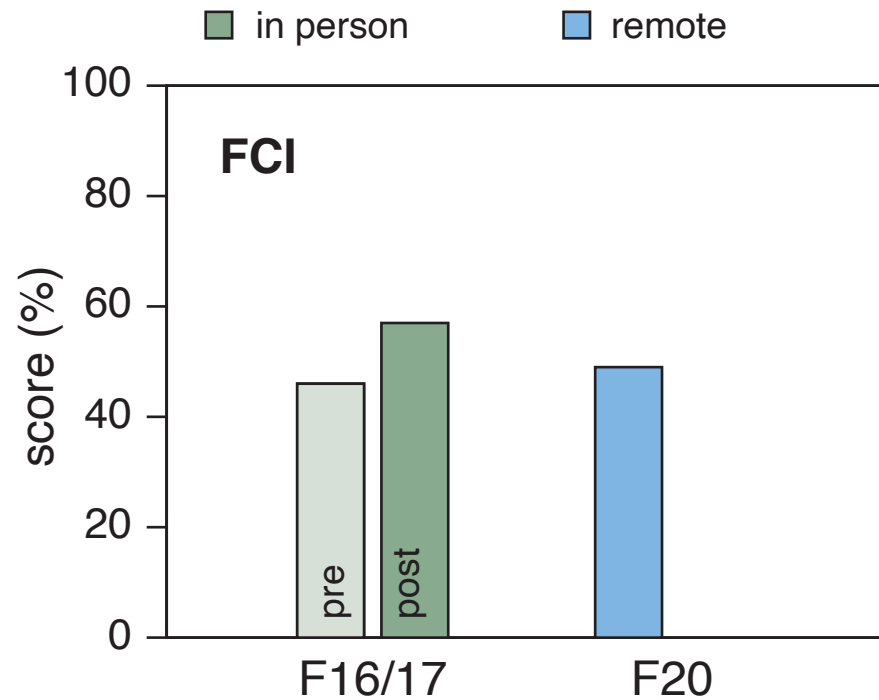
Fall Content Learning Gain



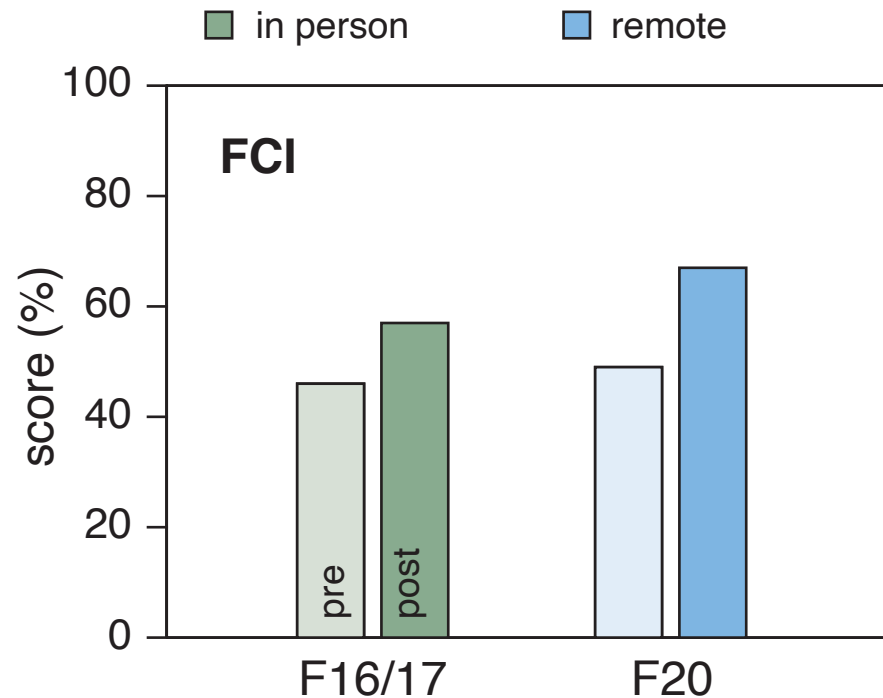
Fall Content Learning Gain



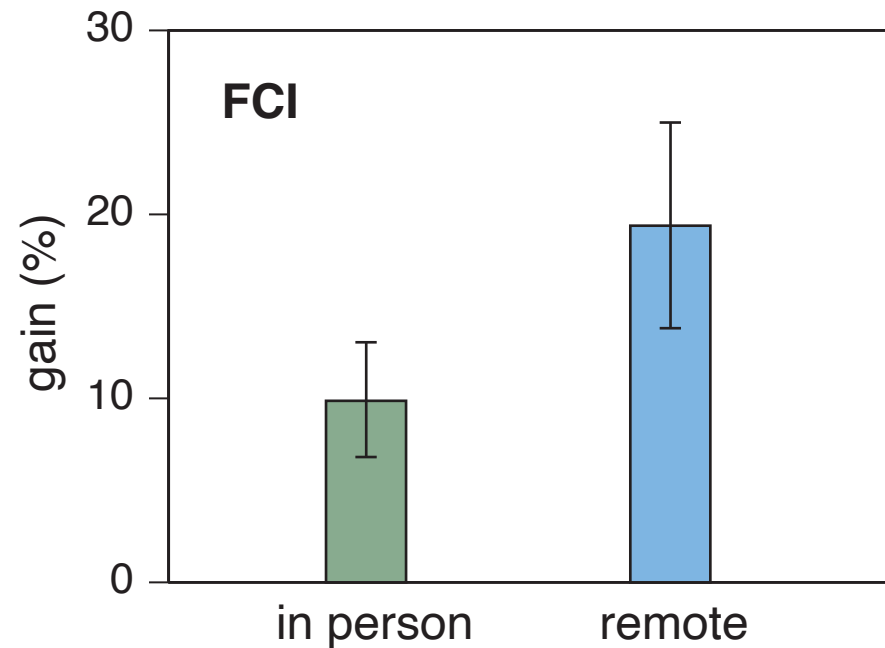
Fall Content Learning Gain



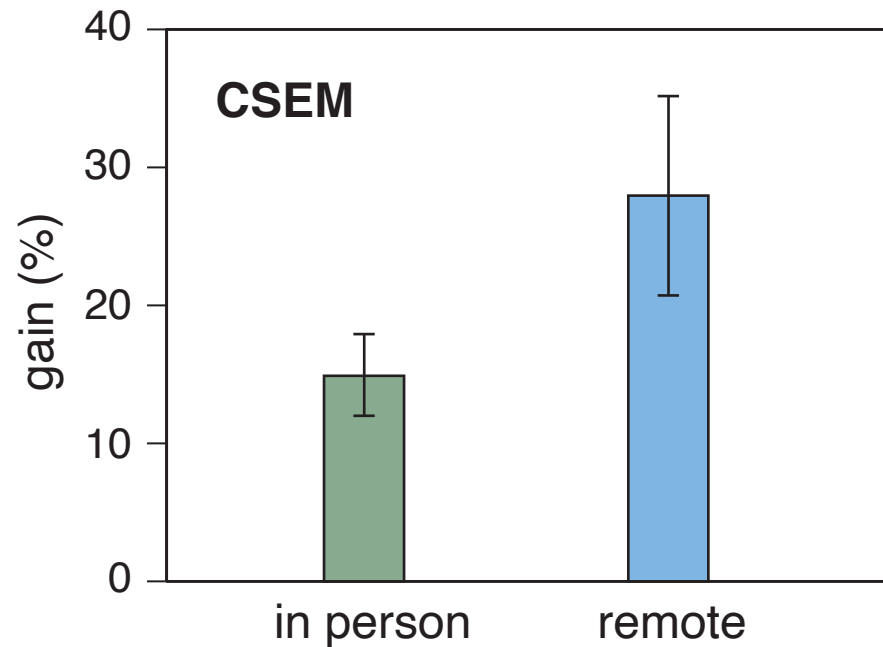
Fall Content Learning Gain



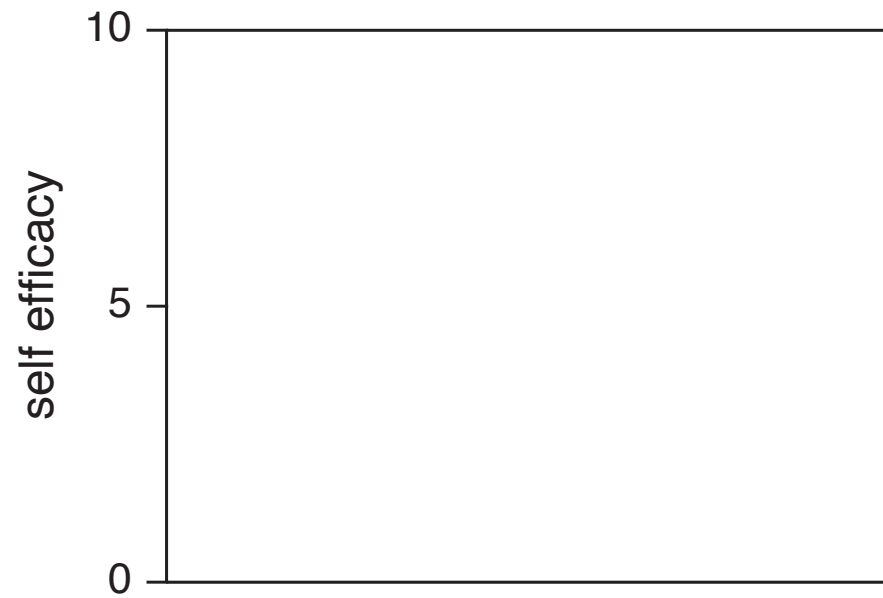
Fall Content Learning Gain



Spring Content Learning Gain



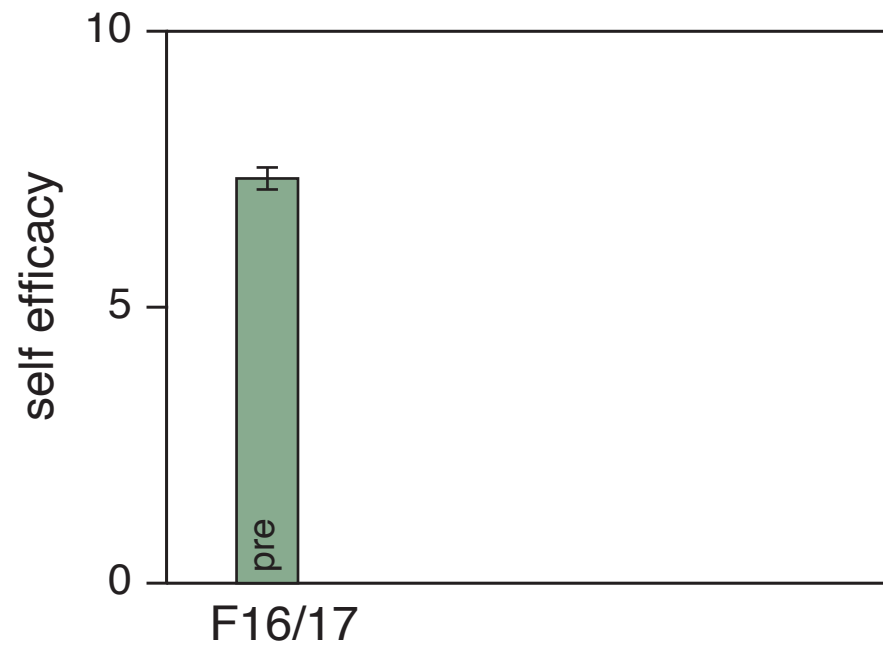
Self Efficacy



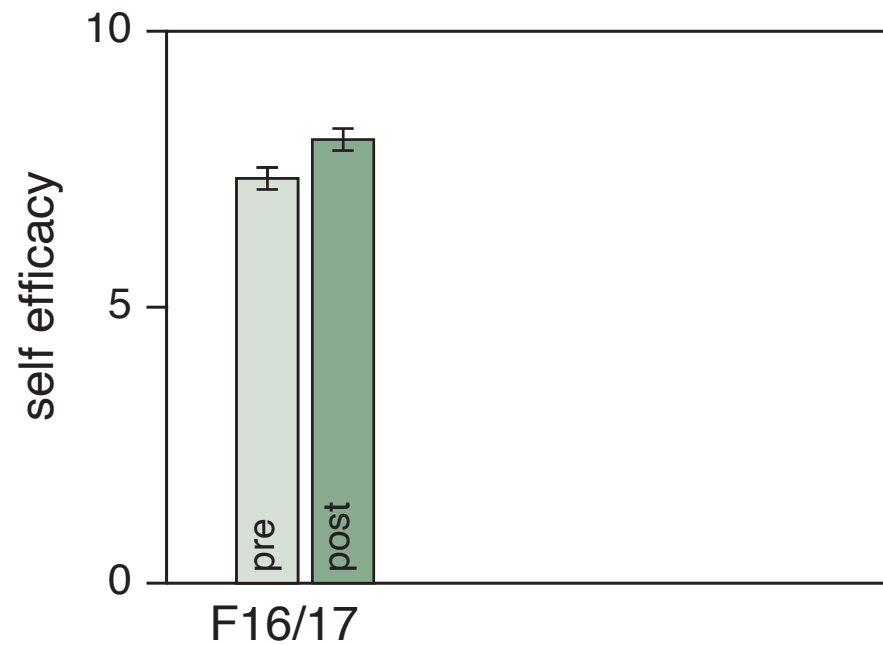
Self Efficacy

belief in ability to succeed in a certain domain

Self Efficacy

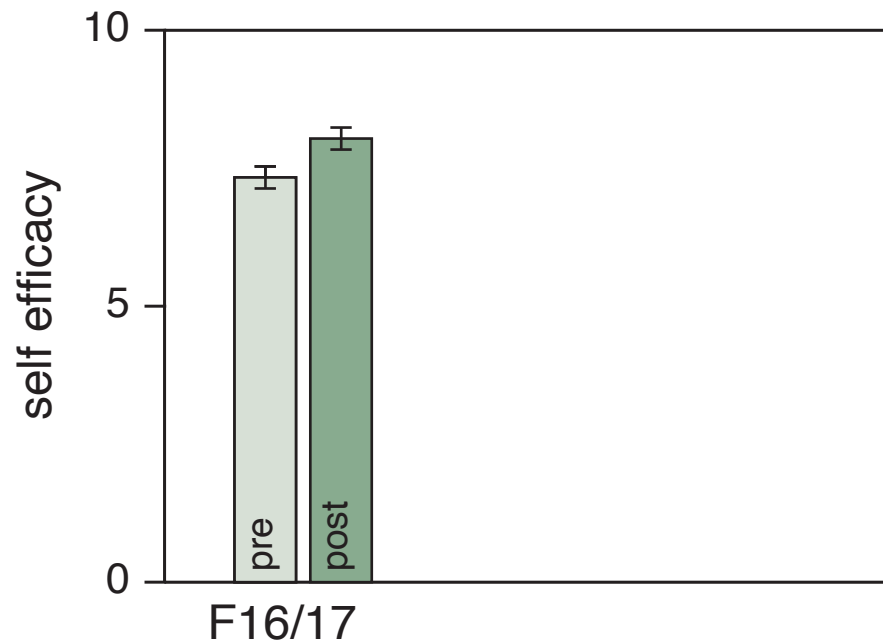


Self Efficacy

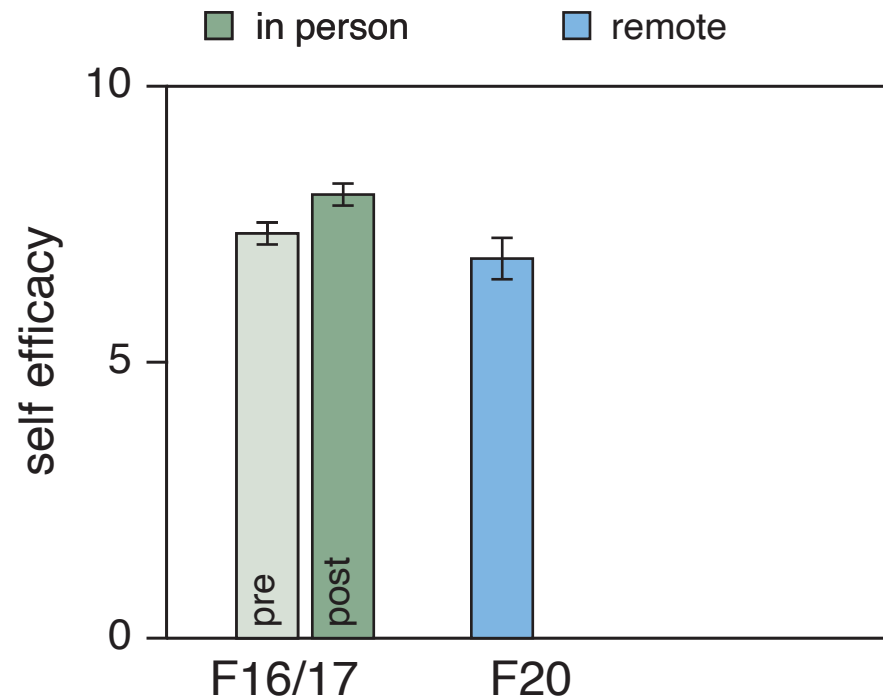


Self Efficacy

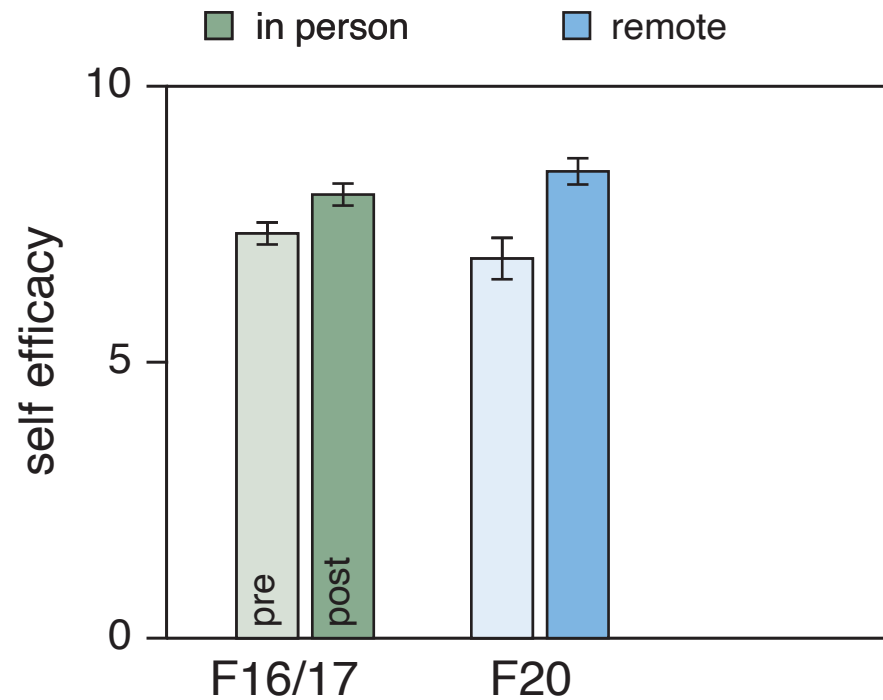
***SE down* in lecture courses!**



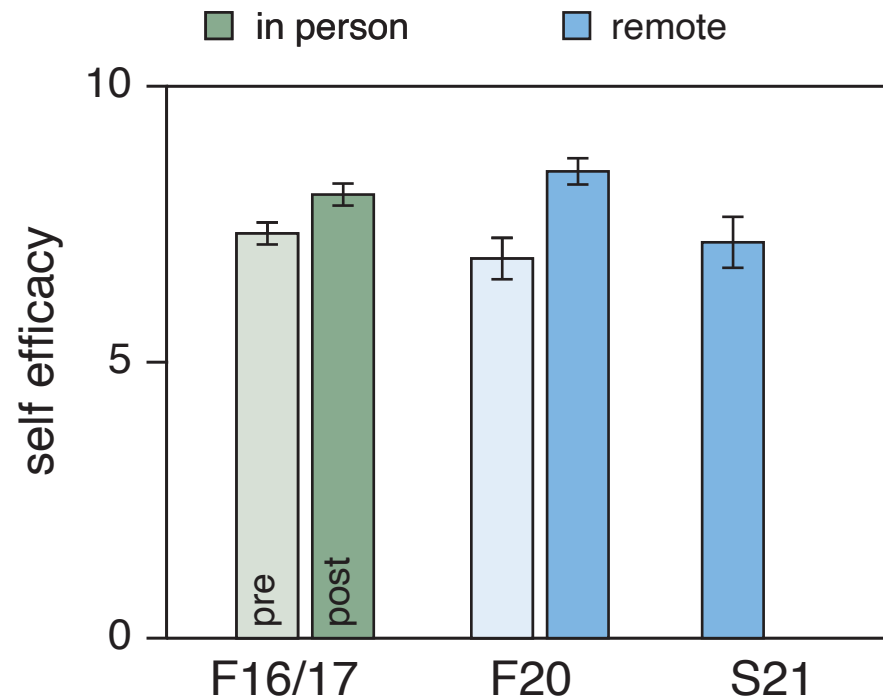
Self Efficacy



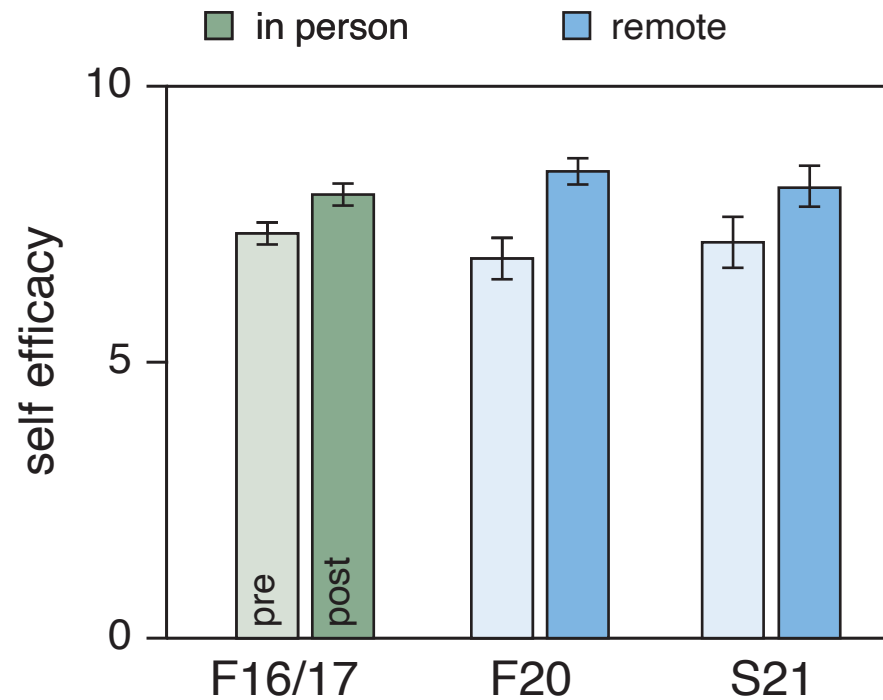
Self Efficacy



Self Efficacy



Self Efficacy



Doubling of

- content learning gains
- physics self-efficacy gains

Research Shows Students Falling Months Behind During Virus Disruptions

The abrupt switch to remote learning wiped out academic gains for many students in America, and widened racial and economic gaps. Catching up in the fall won't be easy.



What do students say?

Research Shows Students Falling Months Behind During Virus Disruptions

The abrupt switch to remote learning wiped out academic gains for many students in America, and widened racial and economic gaps. Catching up in the fall won't be easy.

3 results

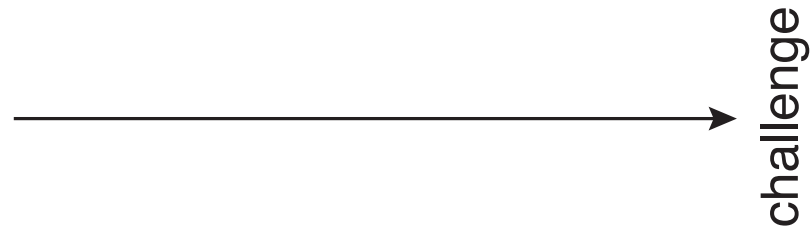
Agile Feedback Survey (Talbert)

- 1. I was challenged intellectually**
- 2. I had plenty of support**
- 3. I am closer to mastering the ideas of the course now**
- 4. I made progress because of my own efforts and choices**
- 5. I felt I was part of a community of learners**

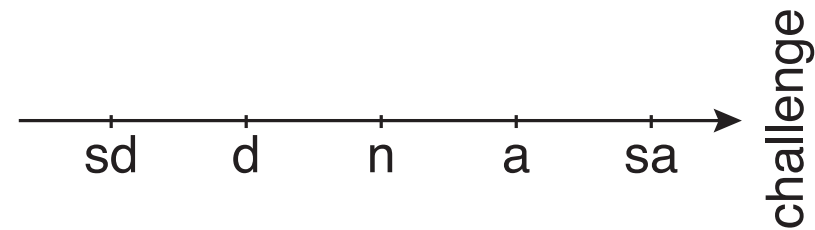
Agile Feedback Survey (Talbert)

- 1. I was challenged intellectually (challenge)**
- 2. I had plenty of support (support)**
3. I am closer to mastering the ideas of the course now
4. I made progress because of my own efforts and choices
5. I felt I was part of a community of learners

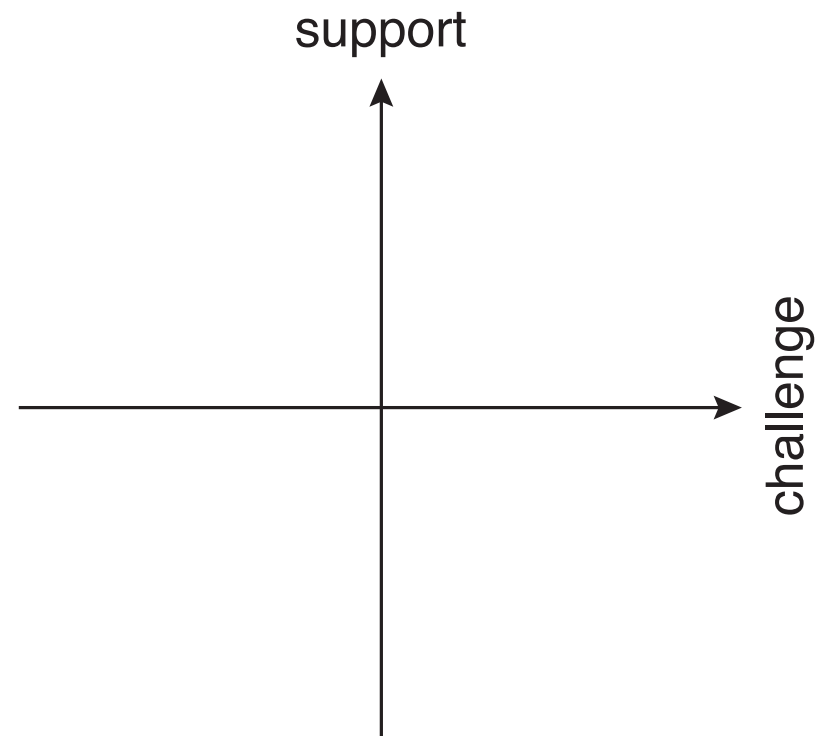
challenge vs. support



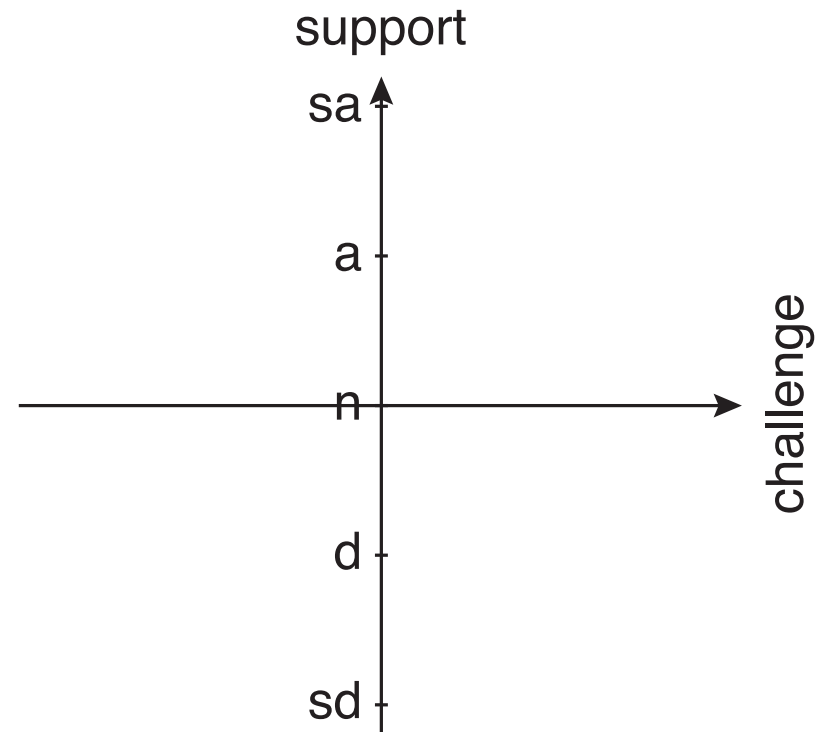
challenge vs. support



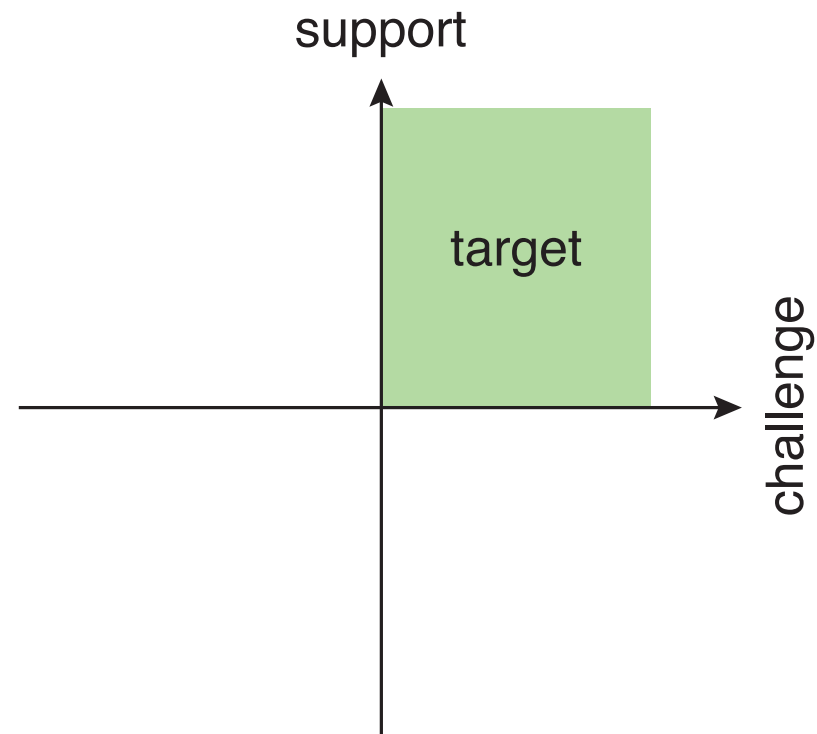
challenge vs. support



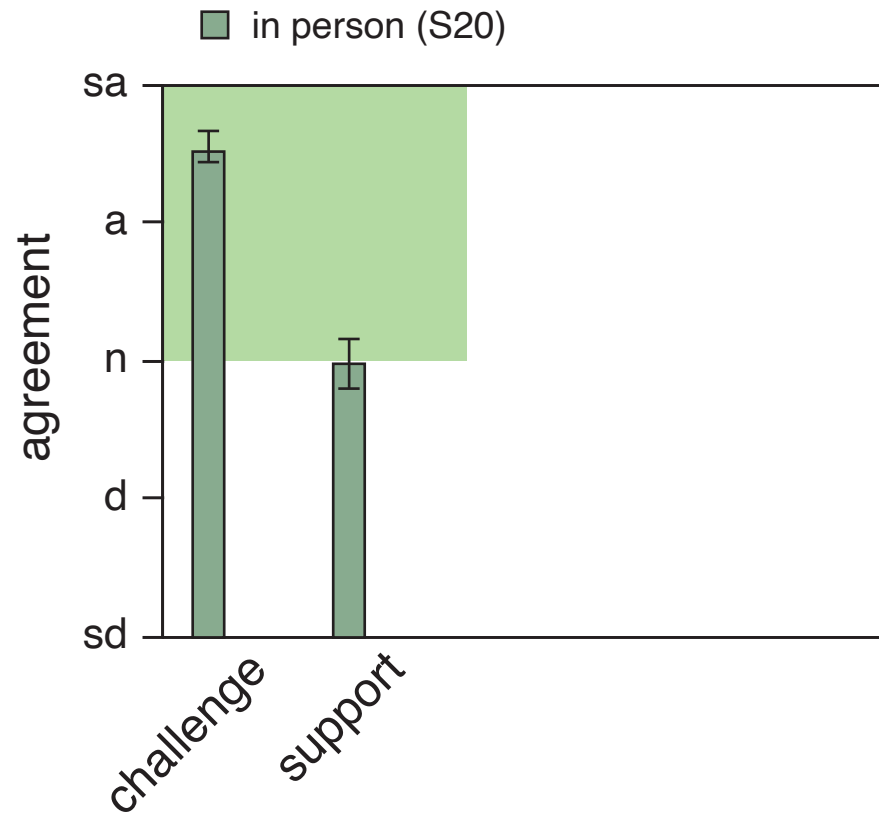
challenge vs. support



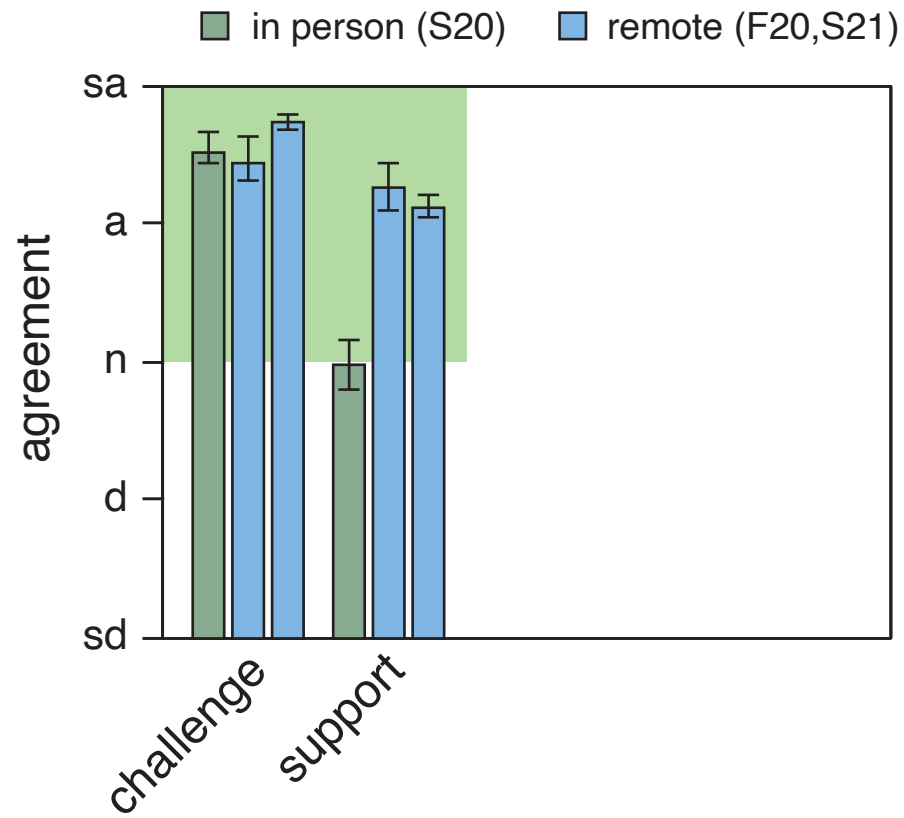
challenge vs. support



challenge vs. support



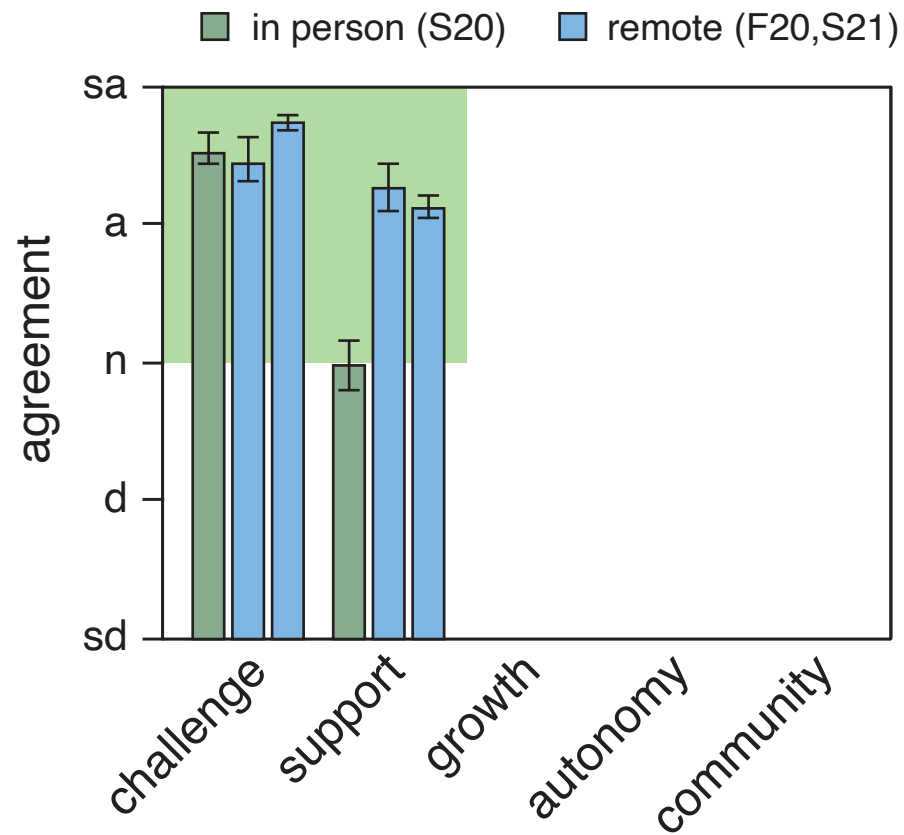
challenge vs. support



self-determination

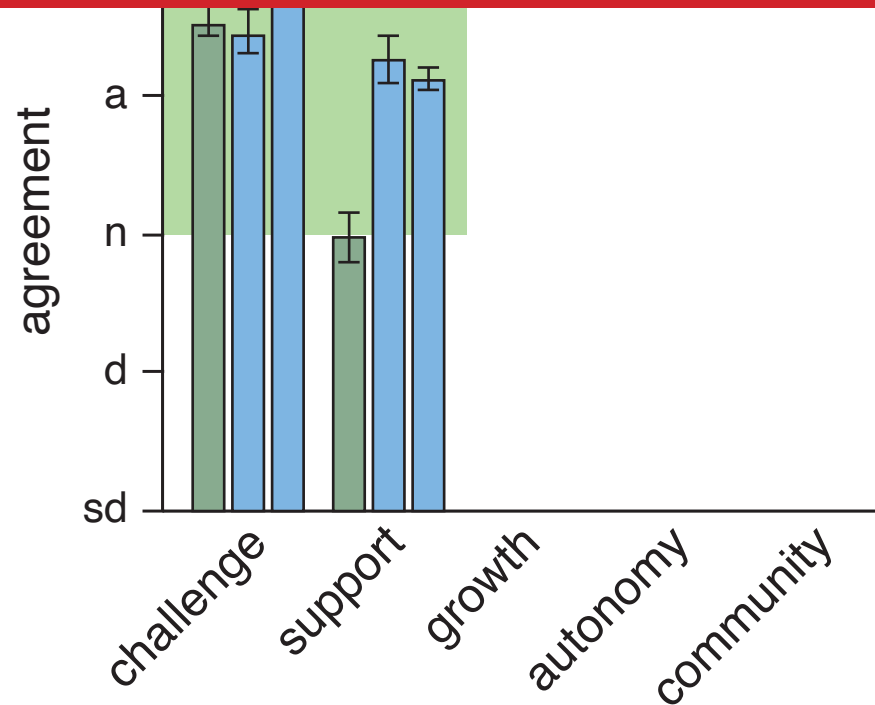
1. I was challenged intellectually (challenge)
2. I had plenty of support (support)
- 3. I am closer to mastering the ideas of the course now (growth)**
- 4. I made progress because of my own efforts and choices (auton.)**
- 5. I felt I was part of a community of learners (relatedness)**

self-determination

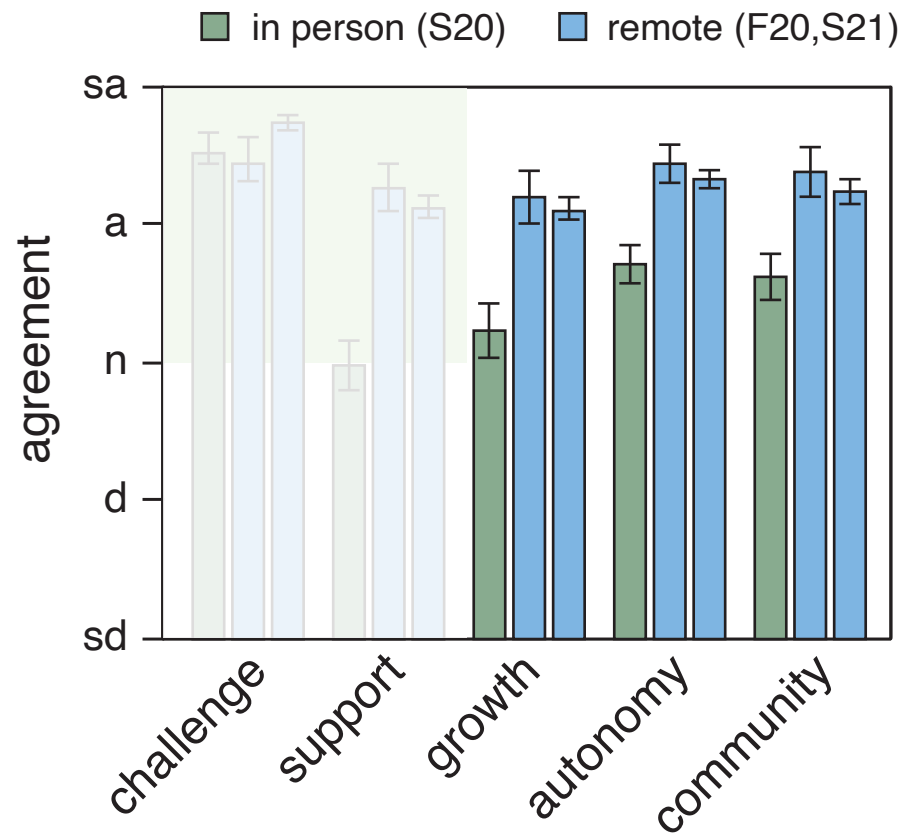


self-determination

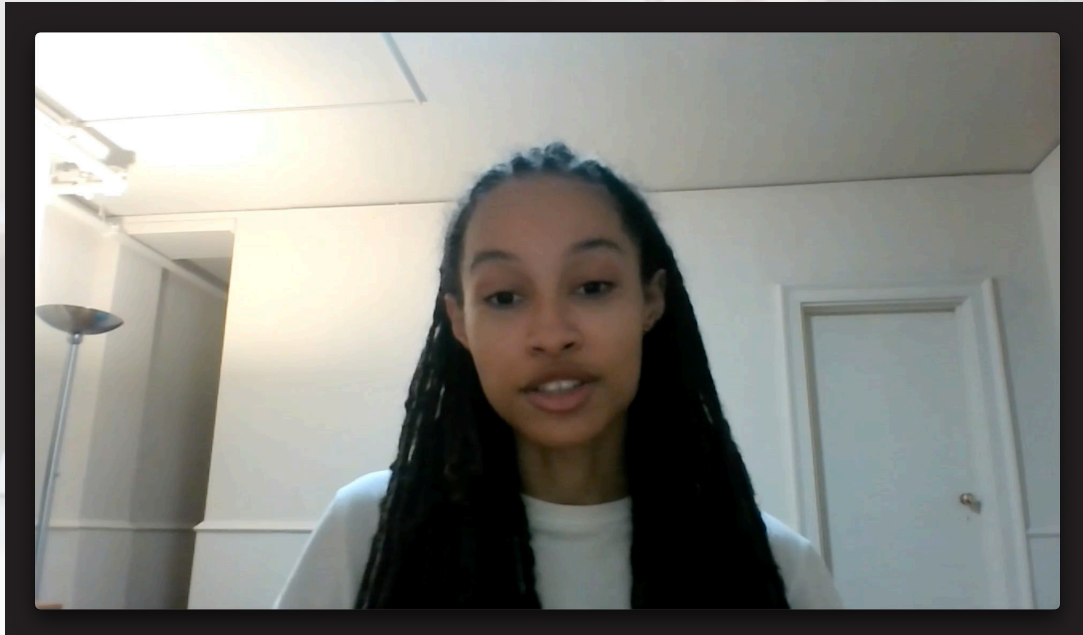
What do you predict?



self-determination



“about you” exercise



“about you” exercise

“...this will be my very first physics class that I will have ever taken in my life,

“about you” exercise

“...this will be my very first physics class that I will have ever taken in my life, so that is both equally exciting

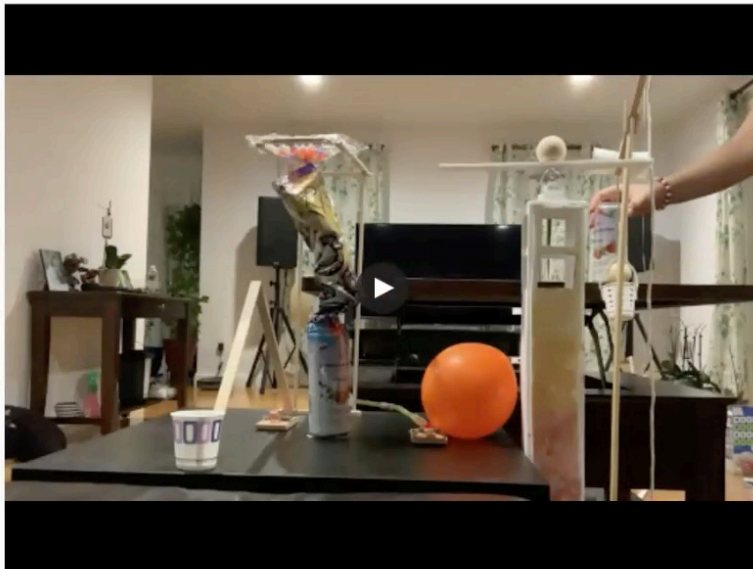
“about you” exercise

“...this will be my very first physics class that I will have ever taken in my life, so that is both equally exciting and also a bit anxiety-inducing

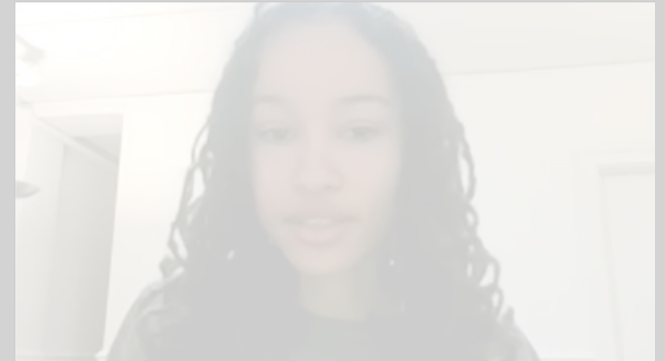
“about you” exercise

“...this will be my very first physics class that I will have ever taken in my life, so that is both equally exciting and also a bit anxiety-inducing, given that I have never felt too confident in my mathematical abilities...”

Our machine....

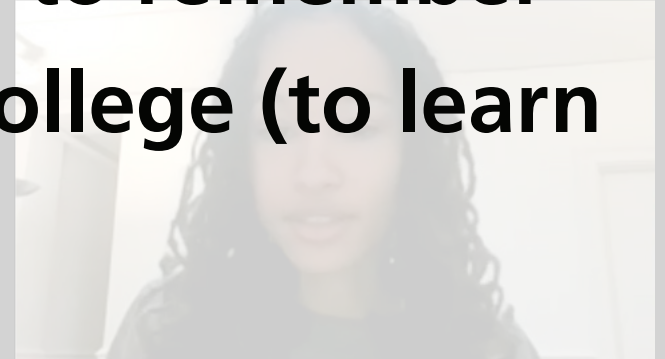
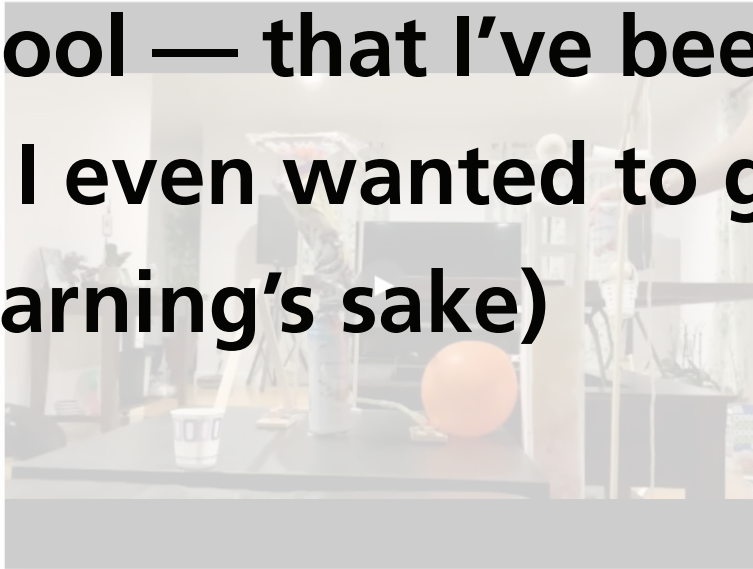


“Physics seems less “scary” to me now, because of the format of this course.



"Physics seems less "scary" to me now, because of the format of this course. I have really severe testing anxiety, but having no 'sit-down exams' has allowed me to actually learn physics because I *want* to, not because I need to do well on an exam..."

Our media **"...this semester is the first time — since high school — that I've been able to remember why I even wanted to go to college (to learn for learning's sake)**



Our media **"...this semester is the first time — since high school — that I've been able to remember why I even wanted to go to college (to learn for learning's sake) ... over the past 3 years it's mostly just been about how to scrape by academically and not let my testing anxiety ruin my GPA.**

Our motto **"...this semester is the first time — since high school — that I've been able to remember why I even wanted to go to college (to learn for learning's sake) ... over the past 3 years it's mostly just been about how to scrape by academically and not let my testing anxiety ruin my GPA. I love this class."**

unsolicited comments

unsolicited comments

“this course is amazing because the goal is learning, trying to solve hard problems, and learning from mistakes. I enjoyed the struggle of facing hard problems whether I solved them correctly or not.”

A background image showing a group of students in a classroom or computer lab. They are seated at round tables with laptops, some looking at screens and others talking. The image is faded to serve as a background for the text.

unsolicited comments

“favorite course at Harvard”



unsolicited comments

“favorite course at Harvard”

**“the critical thinking-focused learning
from the class has been truly something
that has changed the way I view the
way I learn and approach problems”**

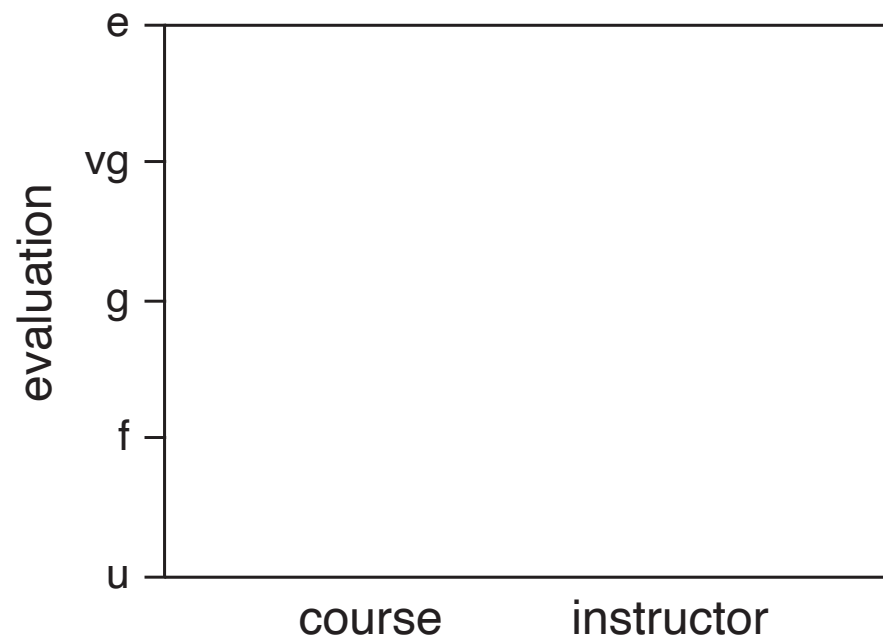
unsolicited comments

“favorite course at Harvard”

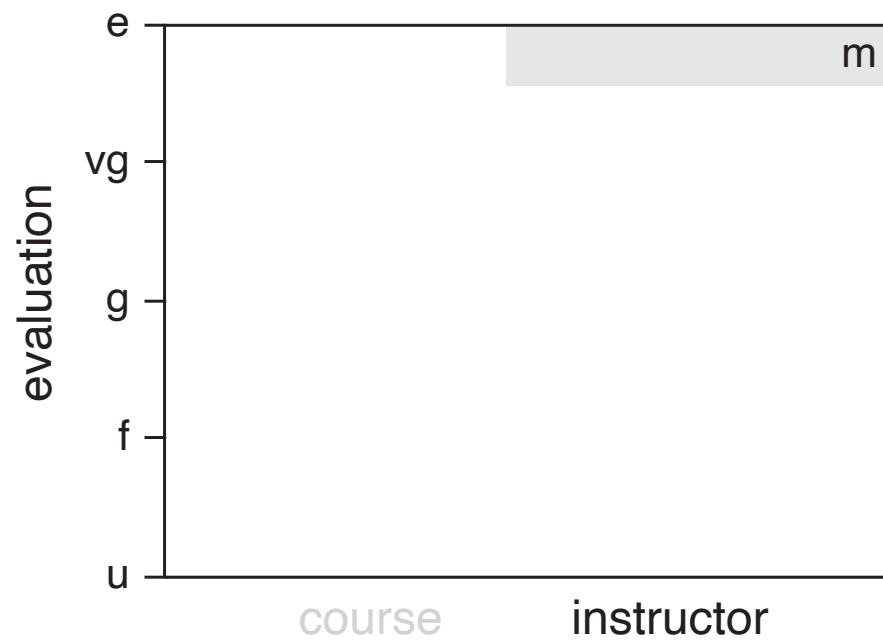
“the critical thinking-focused learning from the class has been truly something that has changed the way I view the way I learn and approach problems”

“I wish my other classes had a similar structure”

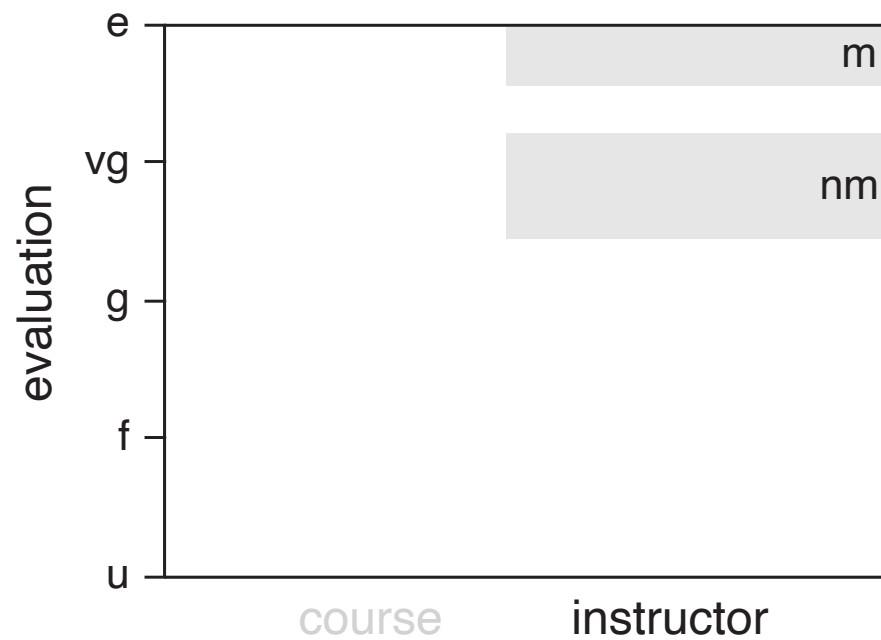
course evaluation



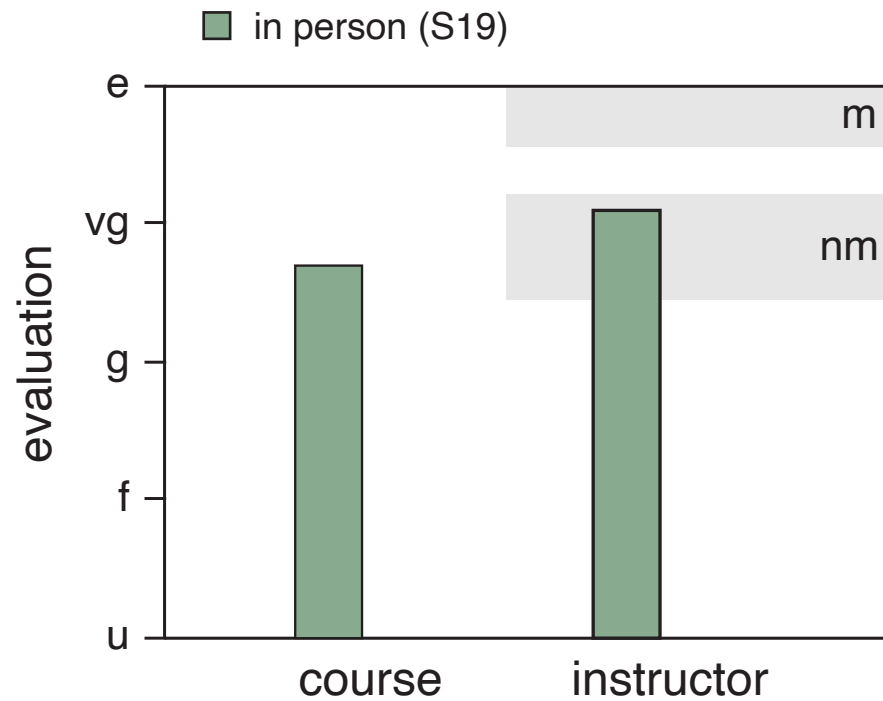
course evaluation



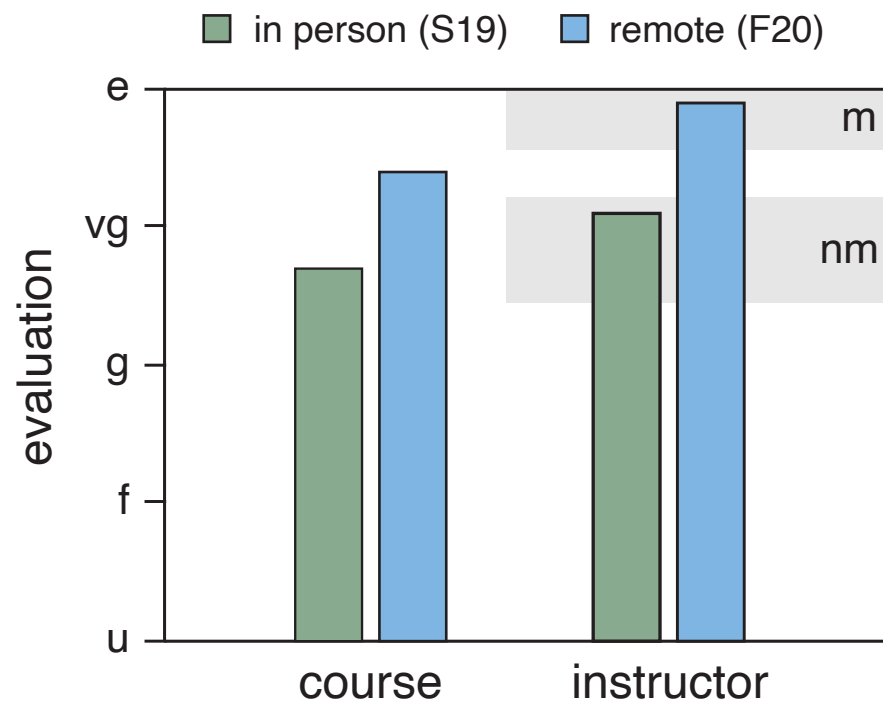
course evaluation



course evaluation



course evaluation



Improved

- sense of growth and autonomy
- sense of support and community
- course evaluation

Improved

- sense of growth and autonomy
- sense of support and community
- course evaluation

It worked for students too!



Remote/online can be *better!*

Research Shows Students Falling Months Behind During Virus Disruptions

The abrupt switch to remote learning wiped out academic gains for many students in America, and widened racial and economic gaps. Catching up in the fall won't be easy.

3 results

The background is a collage of various educational and news websites. At the top left, there's a 'kbeat' logo. Below it, 'EdSurge' is visible with its logo. To the right, 'THE WALL STREET JOURNAL.' is partially visible. Further right, 'Intelligence' is written in a large, bold, sans-serif font. Below 'Intelligence', 'The New York Times' is visible. At the bottom left, there's a red circle with the number '3' followed by the word 'results'. The main text 'I did my best teaching ever remotely!' is centered in a large, bold, black font. The collage also includes various navigation links like 'SUBSCRIBE', 'ABOUT', 'RSS', 'News', 'Research', 'Events', 'John', 'COLUMN', 'HIGHER', 'Latest Updates', 'Maps and Cases', 'State Reopening Tracker', 'Vaccine Rollout', and 'Second D'.

I did my best teaching ever remotely!

3 results

Research Shows Students Falling Months Behind During Virus Disruptions

The abrupt switch to remote learning wiped out academic gains for many students in America, and widened racial and economic gaps. Catching up in the fall won't be easy.



I did my best teaching ever remotely!

So, now what?

Building together





Project Fairs



Revert back?



Many short-term emergency measures will become a fixture of life. That is the nature of emergencies. They fast-forward historical processes. Decisions that in normal times could take years of deliberation are passed in a matter of hours. Immature and even dangerous technologies are

pres
tire

Remote teaching may well become a fixture of life

happens when everybody works from home and communicates only at a distance? What happens when entire schools and universities go online? In normal times, governments, businesses and educational boards would never agree to conduct such experiments. But these aren't normal times.



Yuval Noah Harari MARCH 20 2020

Humankind is now facing a global crisis. Perhaps the biggest crisis of our generation. The decisions people and governments take in the next few weeks will shape the world to come. They will shape not just our lives but the lives of our children. We must act

for a copy of this presentation:

mazur.harvard.edu

course Canvas page: bit.ly/erics_course

Follow me!



@eric_mazur