

# Utilizing Low-Stakes Formative Assessment to Invite Students Back into the Classroom



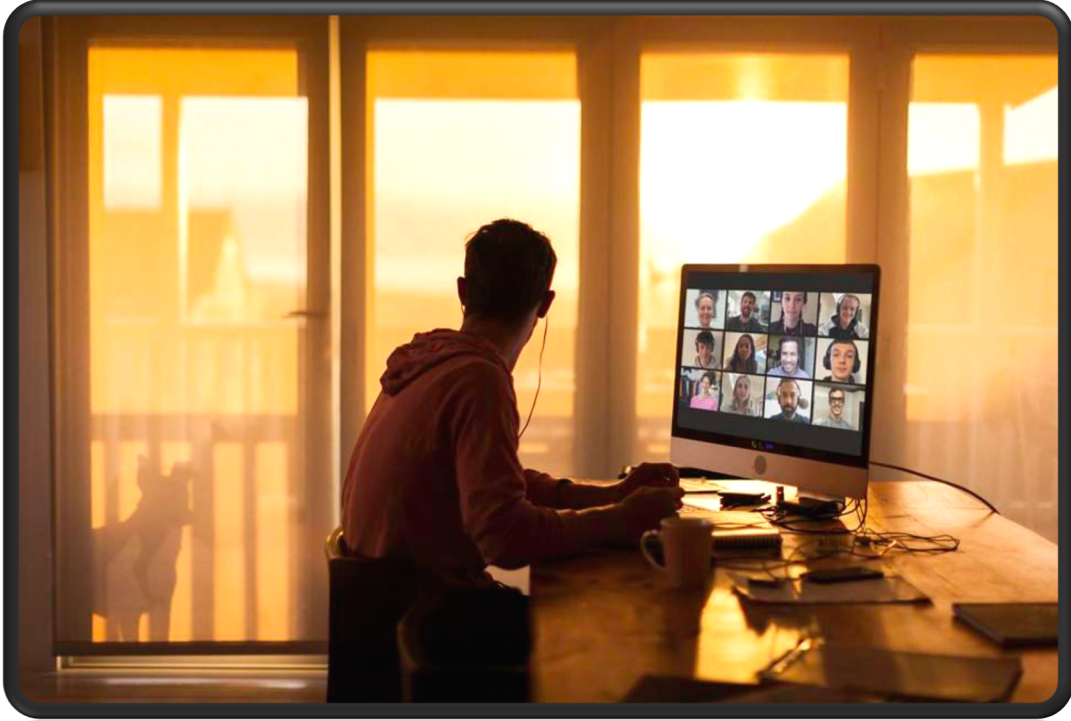
Presented by Debbie Fetter, PhD

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Summer Institute on Teaching and Technology 2022

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# Emergency Remote Education





**montana**  
@macho\_montana



My professor is 74 and he isn't confident using Zoom so he's prerecorded the rest of our classes. Today, I watched the first one. He has a Pinocchio doll in the front row because he isn't comfortable teaching to an empty room. I'm social distancing for this man and this man only.



3:38 PM · Mar 22, 2020 · [Twitter for iPhone](#)



# Emergency Remote Education



# Transition Back to In-Person Teaching

## More Pandemic Fallout: The Chronically Absent Student

At one middle school, more than 40 percent of the students have been chronically absent this year. Districts are exploring solutions — offering gift cards, night classes

## Should Professors Still Record Lectures? Maybe. Maybe Not.

The pandemic may be fading, but some students still need accommodations and flexibility, proponents say. Others argue that recorded lectures inhibit class discussion, compromise privacy and threaten faculty intellectual property rights.

By Susan D'Agostino · Published September 7, 2022

THE FUTURE OF WHAT'S HAPPENING NOW

## The Nation Faces School Attendance and Graduation Crises

Chronic absence soared during the pandemic, and graduation rates dropped for the first time in 15 years. The first step out is to get more about what

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CALIFORNIA DEPARTMENT OF EDUCATION  
**NEWS RELEASE**

Release: #22-03  
January 7, 2022

## CDE Releases Student Data for 2020–21 that Shows COVID-19 on Schools

Assessment scores, chronic absenteeism data, and graduation rates underscore the challenges of a year when most students accessed their education through remote learning

## Culinary school attendance declined during pandemic

As the restaurant industry tries to recover from the pandemic, it is facing a new crisis—a staff shortage in the kitchen.

Sep 5, 2022 5:21 PM EDT by CNN

## U.S. Faces 'School Attendance and Graduation Crises'

# Think-Type-Share

*Did you notice any changes in your classroom this past year? If so, what changes did you see?*



# New Era of Learning

*“Disruption is coming for higher education”*

- Access to course content
  - Video lectures
  - Notes
- Flexibility
  - Attendance policies
  - Due dates



# **Think-Type-Share**

*What factors do you feel students want in their learning environment?*

*Have you adjusted your class to accommodate? If so, in what ways?*



# **Flexibility Adaptations**

- Lecture capture
- All assignments completed online
- Project-based and open-book assessments
- Combination of in-person and online office hours
- Late policies
- Drop lowest score on certain assignments (i.e. quizzes)

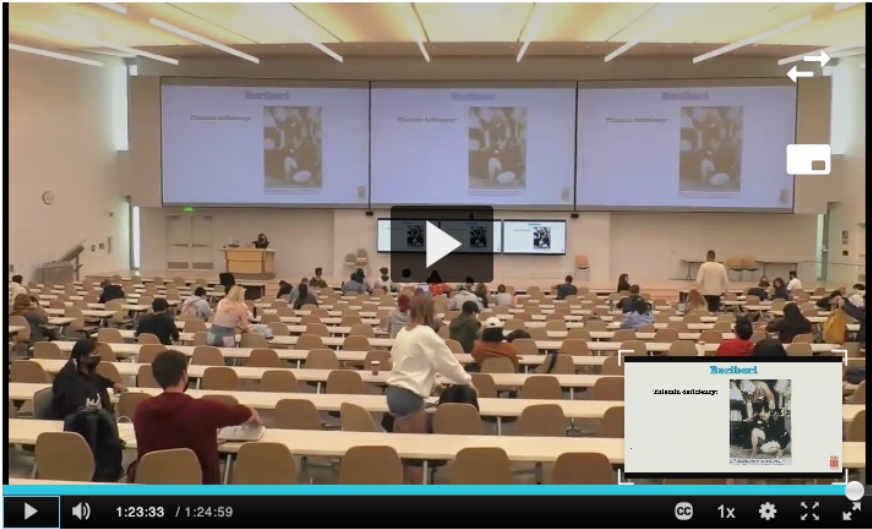
# Attendance & Participation



**SPRING 2019**  
Before the pandemic



**WINTER 2022**



**SPRING 2022**

# How Can We Improve Motivation to Learn In-Person?

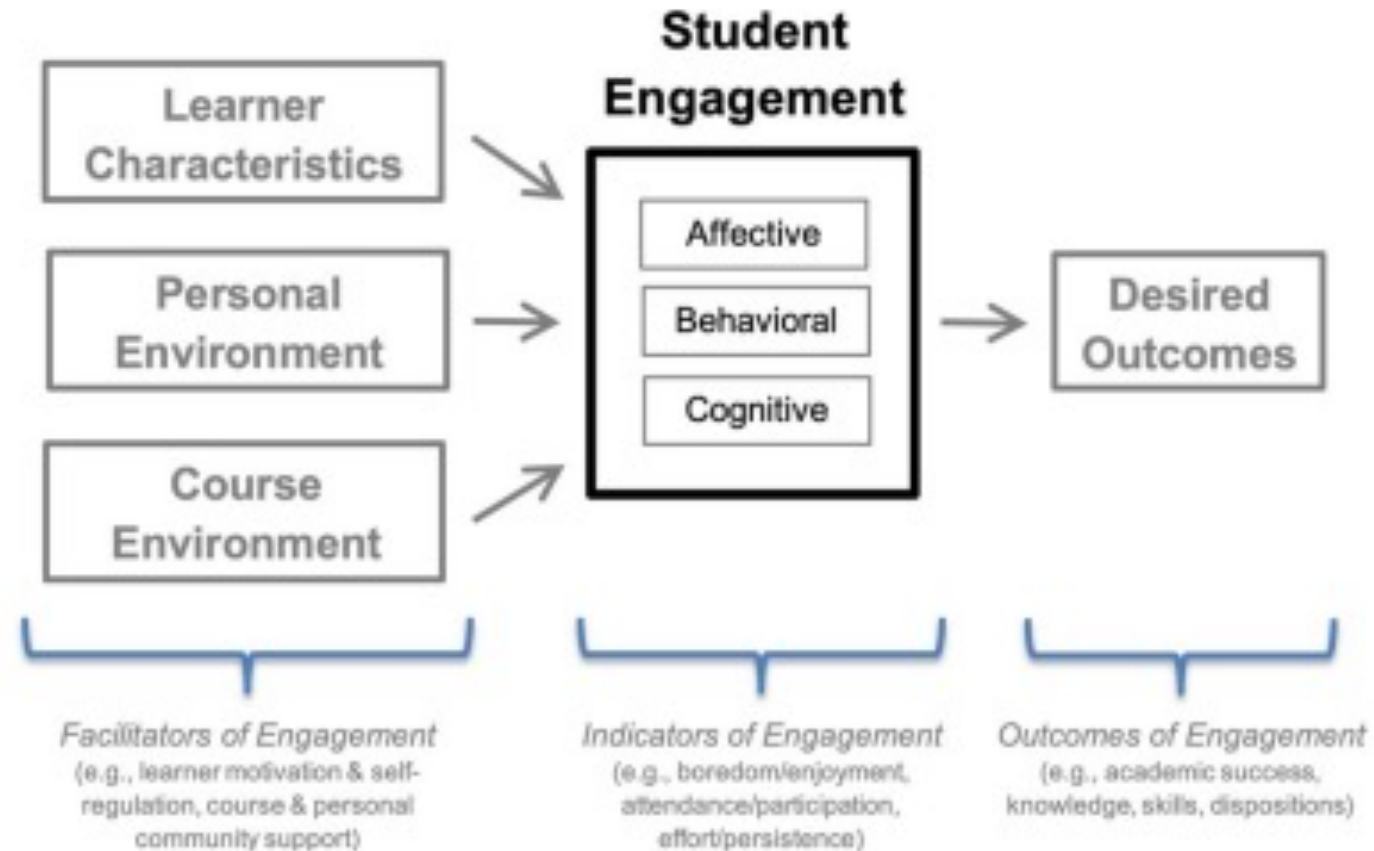


Fig. 2 General model of student engagement distinguishing facilitators, indicators, and outcomes Adapted from Halverson and Graham 2019, p. 147

# In-Class Activities

- 14 in-class activities, each worth 5 points.
- 11 of the 14 counts towards your grade (55 points total; 13.75% of course grade), so students can miss up to 3 activities
- Variety of designs
  - Fill-in-the-blank
  - Check-all-that-apply
  - Free response
  - Follow along with slides
  - Discuss with people in class
  - Questions like—what was the most interesting thing you learned? What questions do you have?
- Open till 5 PM (PST) [winter 2022] or 10 PM (PST) [spring 2022]
- Completed on Canvas

**In-Class Activities:** During class, we will have 14 in-class activities, each worth 5 points. 11 of the 14 counts towards your grade (55 points total), so you can miss up to 3 activities.

- Activities are completed on the Canvas site (Canvas assignment opens during class).
- **This activity will remain open until 10:00 PM (PST) and there is a 30 minute time limit.**
- If you're unable to attend lecture in-person, the recording is available right after class under the Media Gallery tab.
- You can complete the activity on your laptop, tablet, or smartphone.
- Bullet points and incomplete sentences are completely acceptable :)



### Question 1

(a) What are two specific things someone could do to reduce their risk for heart disease?

(b) Are you at risk for heart disease? Why or why not? Give at least two specific reasons.

Edit View Insert Format Tools Table

12pt ▾ Paragraph ▾ | **B** *I* U A ▾ ▾ T<sup>2</sup> ▾ | ⋮

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- Activities are completed on the Canvas site (Canvas assignment opens during class).
- **This activity will remain open until 10:00 PM (PST) and there is a 30 minute time limit.**
- Feel free to work on this activity with the person(s) next to you!

- If you're unable to attend lecture in-person, the recording is available right after class under the Media Gallery tab.
- **If you have a conflict with the 10 PM deadline, please email Dr. Fetter ([dsfetter@ucdavis.edu](mailto:dsfetter@ucdavis.edu)) your official class and/or work schedule for an extension.**
- You can complete the activity on your laptop, tablet, or smartphone.



### Question 1

0 pts

During exercise, fat can be used as fuel by muscles if the work is:

- \_\_\_\_\_
- \_\_\_\_\_
- Aerobic
  - Anaerobic



### Question 2

0 pts

During prolonged exercise, body stores of \_\_\_\_\_ are depleted. These stores can be increased through a high dietary intake of \_\_\_\_\_.

- \_\_\_\_\_
- \_\_\_\_\_
- Protein / protein
  - Glycogen / protein or carbohydrate

# Encouraged Attendance

“The in-class activities definitely encourage me to attend class. I like how it connected the concepts discussed in the lecture. Thus, I feel like the activities did reinforce the concepts of the lecture because I would have to actively recall...”

“The in-class activities did encourage me to attend class, especially since it impacted my grade, as well as gaining more knowledge/recap of the class.”

“The in-class activities were great to reflect on what I understood from the main takeaways of the lecture that day and what concepts or part of the lecture I need to make sure to review. They definitely encouraged me to attend lecture”

# Encouraged Attendance??

“I enjoyed the in-class activities because they were a good check on my own knowledge and understanding of what I had just learned in that class. While I don't think they really encouraged me to attend class because I already wanted to learn in person.”

“I'm not sure if the activities encouraged me to go to class because the recording was available on Canvas so I could just watch the lecture and do the activity at home. I did like the activities and I feel like they reflected the topics of that lecture.”

“I believe the in class activities were great as a mini review but I wouldn't say it was the main reason why I was encouraged to attend class.”

“The activities did not encourage me to attend class, but they did encourage me to watch the recordings! I liked how they reinforced my knowledge of the material covered in that specific lecture.”

# Engage with Peers

“I liked the in-class activities as I got to engage with other classmates sometimes.”

“I did like the in class activities. I usually double checked my answers with the person I sat next to so that was good reassurance. The activities gave me an idea of key concepts to take away from the lecture and how to prepare for the exams.”

“I found them very interactive and they did encourage me to go to class. I do think the in class activities reinforces the concepts from the lecture.”



# Reinforce Concepts

“The activities did a great job breaking up the lectures and keeping everyone active.”

“The in class activities helped recap everything we learned that day and give us an idea of what types of questions would be asked about the material.”

“I like in-class activities. Without these tests, I may delay and lost some courses. The in-class activities make sure I watch the records on time. In addition, the question on in-class activities helps me know how much I really learn.”

“I liked the in-class activities I would say they were helpful and engaging for me.”

“I liked the in-class activities, they reinforced concepts but were not too time consuming.”

# Helpful for Me!!

- Formative feedback
- Identify misconceptions before assessments
- Interact with students individually
- Answer questions

Question 5 5 / 5 pts

What was the most interesting thing you learned from lecture today? What was the most difficult concept? Do you have any questions?

Your Answer:

The most interesting thing I learned from the lecture today was about nitrogen and how crucial it is in our diet. I also didn't know that we are only able to get nitrogen from protein, which is interesting! The most difficult concept was the chemical structure of protein. Can you elaborate on what the R-group is and what role it plays in amino acids?

Additional Comments:

Definitely! The R-group can be 20 different variations

Question 5 5 / 5 pts

What was the most interesting thing you learned from lecture today? What was the most difficult concept? Do you have any questions?

Your Answer:

I enjoyed learning about the Daily Diet Values on the back of foods because I genuinely never knew what those percentages meant, but I can now utilize those values for my everyday food intake.

Additional Comments:

Awesome! Just keep in mind that the Daily Value is based on if

# I felt motivated to attend lecture.

Strongly agree	181 respondents	41 %	✓
Agree	218 respondents	50 %	
Disagree	26 respondents	6 %	
Strongly disagree	5 respondents	1 %	
No Answer	10 respondents	2 %	

Fall 2019  
Before the pandemic

Strongly agree	154 respondents	39 %	✓
Agree	204 respondents	51 %	
Disagree	34 respondents	9 %	
Strongly disagree	3 respondents	1 %	
No Answer	2 respondents	1 %	

Fall 2021  
Before in-class activities






Strongly agree	152 respondents	38 %	✓
Agree	204 respondents	50 %	
Disagree	38 respondents	9 %	
Strongly disagree	5 respondents	1 %	
No Answer	5 respondents	1 %	

Winter 2022

Strongly agree	118 respondents	42 %	✓
Agree	123 respondents	44 %	
Disagree	32 respondents	11 %	
Strongly disagree	2 respondents	1 %	
No Answer	6 respondents	2 %	






Spring 2022

# I felt motivated to attend lecture.






Strongly agree	140 respondents	30 %	
Agree	249 respondents	53 %	
Disagree	69 respondents	15 %	
Strongly disagree	13 respondents	3 %	
No Answer	3 respondents	1 %	

**SPRING 2019**

Before the pandemic






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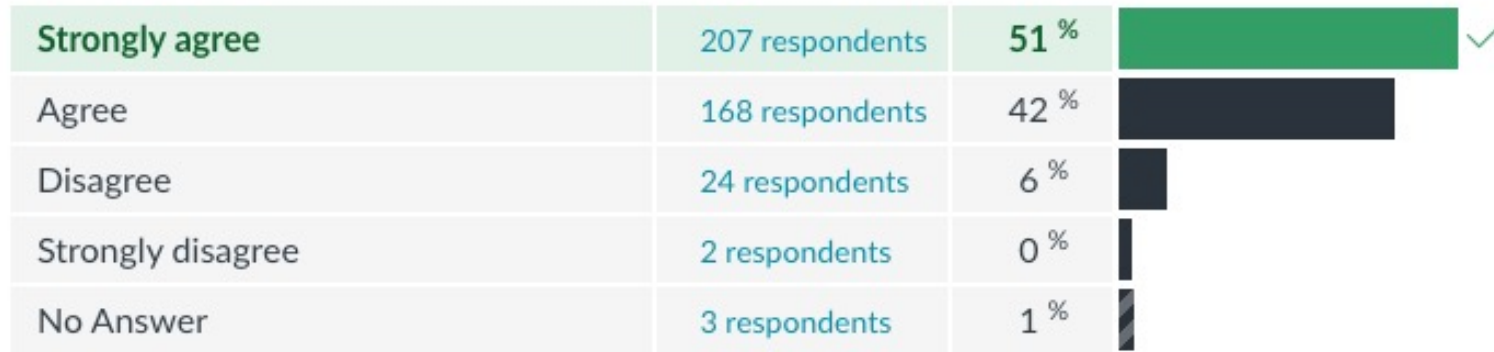
Fall 2021

Before in-class activities

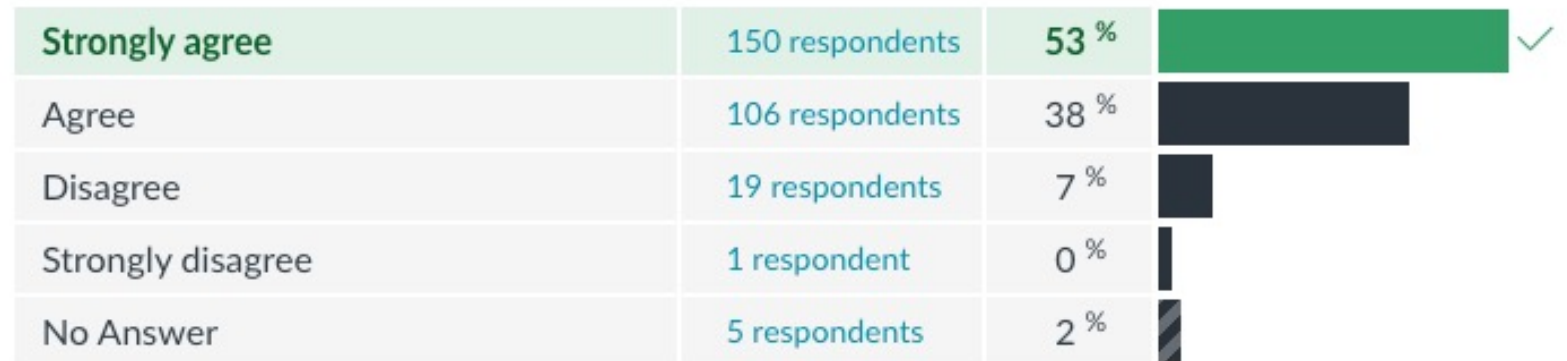
Strongly agree	118 respondents	42 %	
Agree	123 respondents	44 %	
Disagree	32 respondents	11 %	
Strongly disagree	2 respondents	1 %	
No Answer	6 respondents	2 %	

Spring 2022

# The in-class activities motivated me to attend class.

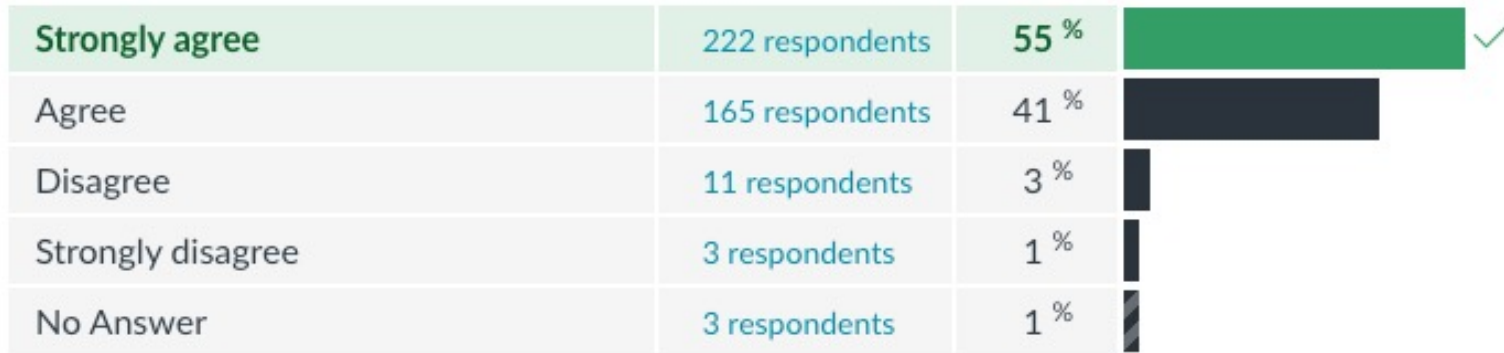


Winter 2022

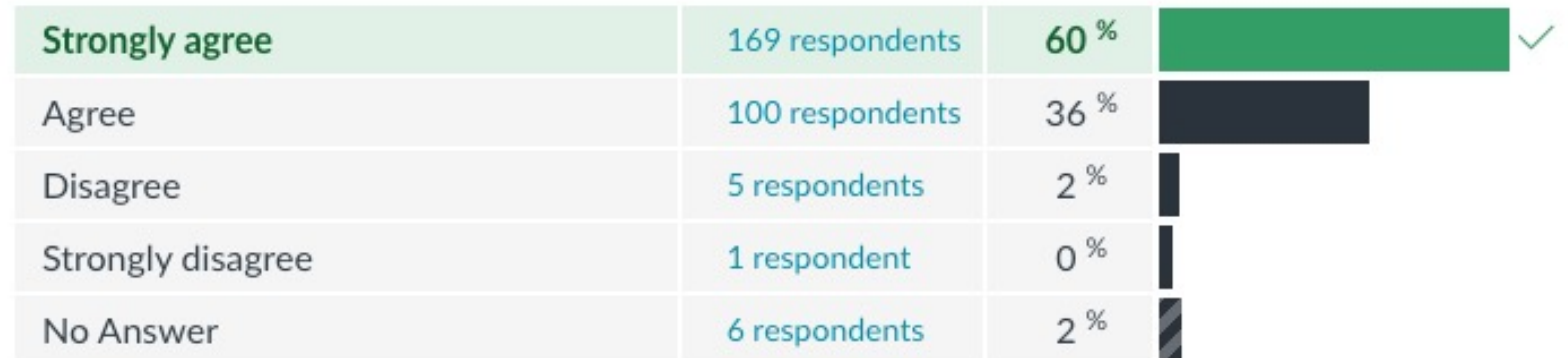


Spring 2022

# The in-class activities helped reinforce concepts from lecture.

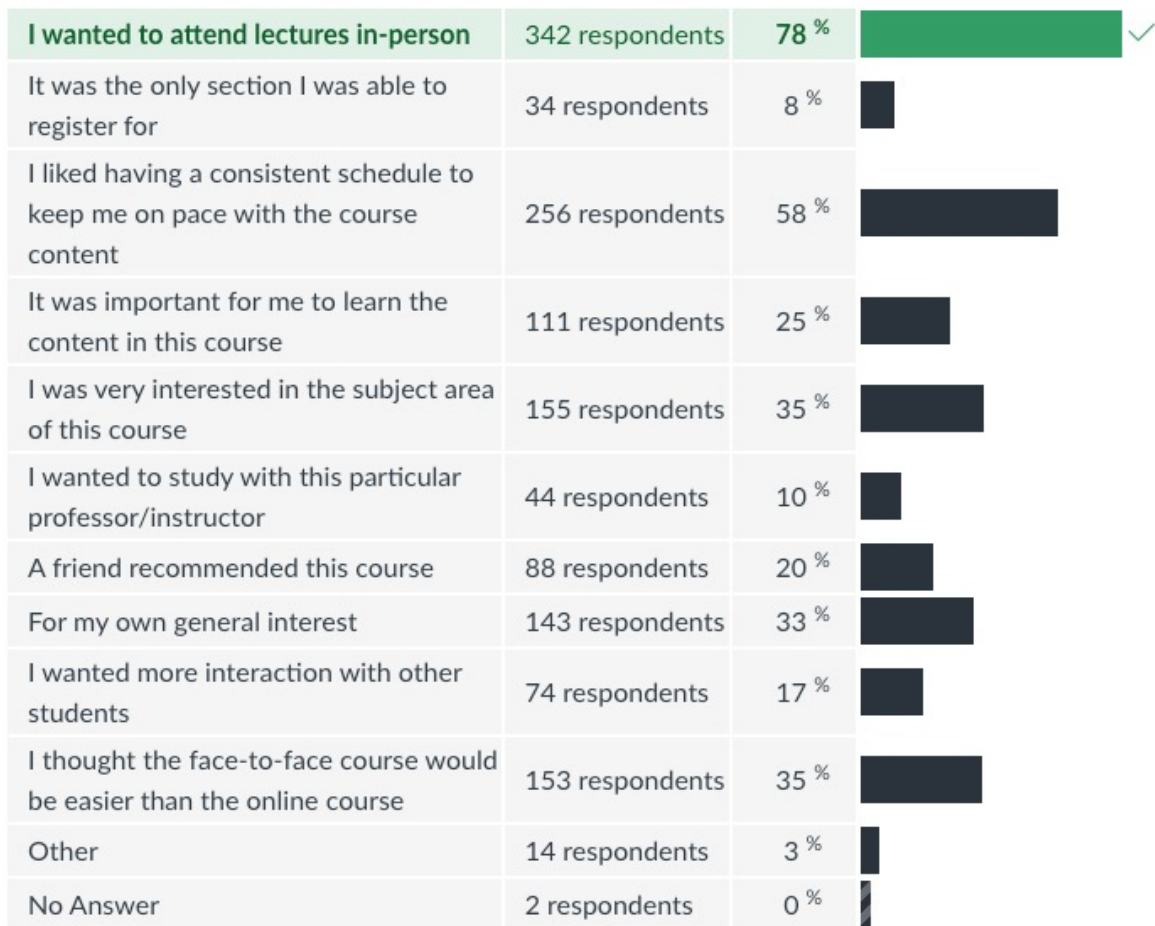


Winter 2022

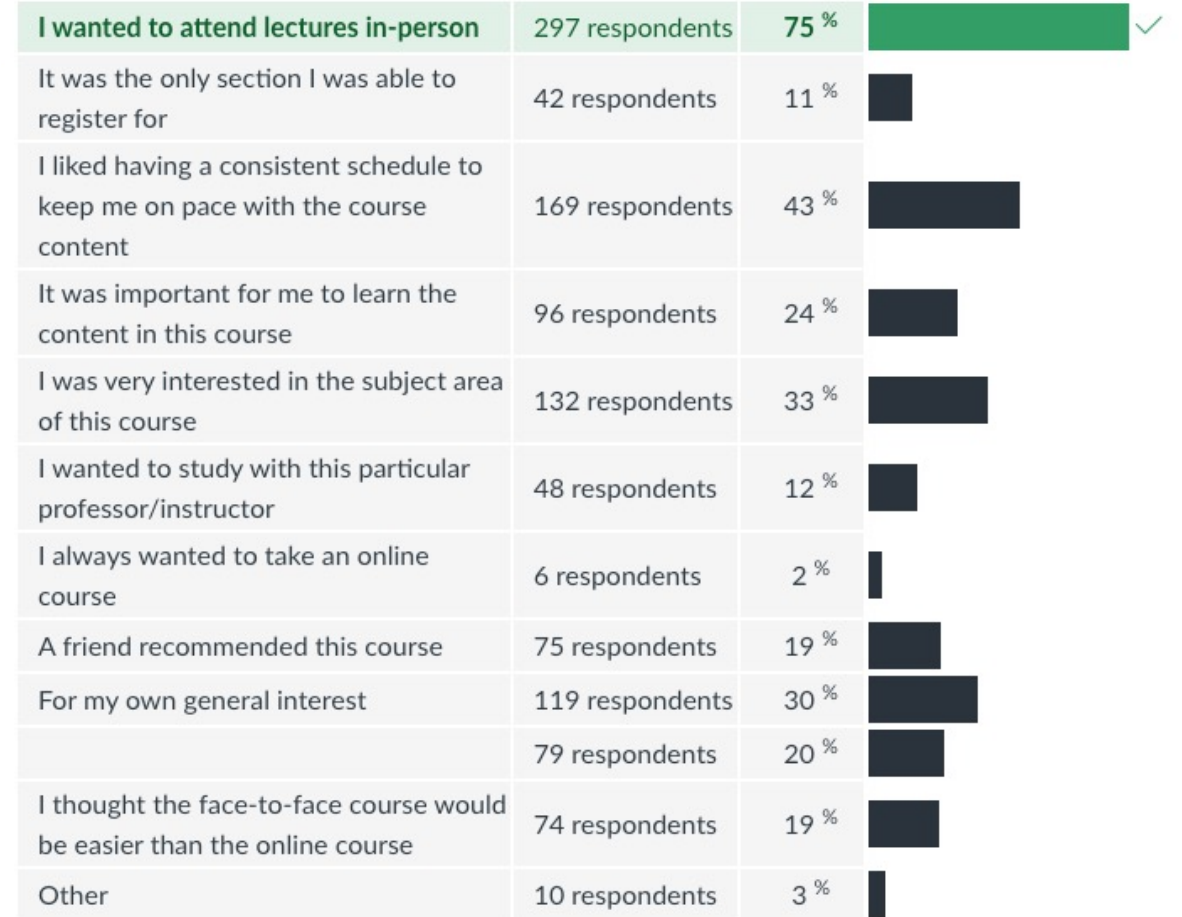


Spring 2022

# Why did you choose to take this face-to-face course? (select all that apply)









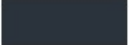



















Fall 2019  
Before the pandemic



Fall 2021  
Before in-class activities

# Why did you choose to take this face-to-face course? (select all that apply)

I wanted to attend lectures in-person	293 respondents	73 %	
It was the only section I was able to register for	51 respondents	13 %	
I liked having a consistent schedule to keep me on pace with the course content	184 respondents	46 %	
It was important for me to learn the content in this course	78 respondents	19 %	
I was very interested in the subject area of this course	111 respondents	28 %	
I wanted to study with this particular professor/instructor	36 respondents	9 %	
I always wanted to take an online course	5 respondents	1 %	
A friend recommended this course	114 respondents	28 %	
For my own general interest	139 respondents	34 %	
I wanted more interaction with other students	90 respondents	22 %	
I thought the face-to-face course would be easier than the online course	94 respondents	23 %	
Other	4 respondents	1 %	
No Answer	1 respondent	0 %	

I wanted to attend lectures in-person	181 respondents	65 %	
It was the only section I was able to register for	51 respondents	18 %	
I liked having a consistent schedule to keep me on pace with the course content	127 respondents	46 %	
It was important for me to learn the content in this course	58 respondents	21 %	
I was very interested in the subject area of this course	87 respondents	31 %	
I wanted to study with this particular professor/instructor	37 respondents	13 %	
I always wanted to take an online course	8 respondents	3 %	
A friend recommended this course	66 respondents	24 %	
For my own general interest	81 respondents	29 %	
I wanted more interaction with other students	41 respondents	15 %	
I thought the face-to-face course would be easier than the online course	55 respondents	20 %	
Other	3 respondents	1 %	
No Answer	3 respondents	1 %	

Winter 2022

Spring 2022



# What features were the MOST helpful for your learning? Please select the TWO most helpful features.

Fall 2021  
Before in-class activities

Think-pair-share questions during lecture	70 respondents	18 %	
Feedback provided from the instructor after the questions	83 respondents	21 %	
Learning objectives for each lecture	106 respondents	27 %	
"Study Questions" for each lecture	134 respondents	34 %	
Office hours	26 respondents	7 %	
Review Sessions	254 respondents	64 %	
Lecture capture recordings	212 respondents	54 %	
No Answer	3 respondents	1 %	

Winter 2022

Think-pair-share questions during lecture	76 respondents	19 %	
Feedback provided from the instructor after the questions	83 respondents	21 %	
Learning objectives for each lecture	105 respondents	26 %	
"Study Questions" for each lecture	144 respondents	36 %	
Office hours	29 respondents	7 %	
Review Sessions	196 respondents	49 %	
Lecture capture recordings	197 respondents	49 %	
In-class activities	157 respondents	39 %	
No Answer	2 respondents	0 %	

Spring 2022

Think-pair-share questions during lecture	45 respondents	16 %	
Feedback provided from the instructor after the questions	68 respondents	25 %	
Learning objectives for each lecture	83 respondents	30 %	
"Study Questions" for each lecture	118 respondents	43 %	
Office hours	14 respondents	5 %	
Review Sessions	97 respondents	35 %	
Lecture capture recordings	123 respondents	45 %	
In-class activities	117 respondents	42 %	
No Answer	5 respondents	2 %	

# Conclusions & Next Steps

- Zero cost way of encouraging attendance in high-enrollment course
- Feasible grading
- Helped encourage attendance and interaction
- Next steps: Transforming some activities into groupwork during class and getting TAs involved

# Questions?



# Thank You!

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