

<u>Instructor Survey Spring 2021</u> Partial Results: Educational Technology

This document contains the partial results of a survey administered in mid-May 2021 to all WashU instructors who taught in the 2021-2021 academic year. Please refer to other documents for the results of most qualitative questions, including those on general pedagogy and more in-depth descriptions of EdTech use. For questions concerning this report or the survey more generally, please contact Rick Moore (rick.moore@wustl.edu).

Executive Summary: EdTech Preliminary Results	2
EdTech: Quantitative Results	3
Frequency of EdTech use	3
Satisfaction with EdTech	5
Expected EdTech use next semester teaching	7
Satisfaction with EdTech support and comfort with EdTech	9
Recording: Quantitative Results	10
Likelihood of future recording of in-person classes	10
Likelihood of recording asynchronous videos	11
Likelihood of using recording studio	12
Active Learning Classrooms: Quantitative Results	13
Likelihood of using active learning classrooms	13
Most important active learning classroom feature	14
EdTech: Partial Qualitative Results	15
Most valuable EdTech	15
Why EdTech valuable	16
Description of Respondents	17
School & response rates	17
University role	18
Gender	19
Race / Ethnicity	19





EXECUTIVE SUMMARY: EDTECH PRELIMINARY RESULTS

EdTech Use and Satisfaction

- Many different EdTech tools were used, but any particular tool was only used by a small subset of instructors (with the exception of Canvas, Zoom, and Kaltura).
- Most faculty were satisfied with most of the tools that they used.
- Most EdTech use and satisfaction changed little from Fall 2020.
- Next semester, instructors expect to continue using many of the EdTech tools they recently used, although Zoom use is expected to be much lower than in Spring 2021.

EdTech Support & Comfort Levels

- 66% of respondents said they know where to get EdTech support.
- 56% of respondents said they were satisfied with EdTech support.
- 60% of respondents said they were comfortable with using EdTech.

Recording

- 31% of respondents said they were likely to record at least some in-person classes in the future; 53% said they were unlikely to do so, with the remaining 13% neither likely nor unlikely to record.
- 52% said they were likely to record asynchronous videos for use in their courses next semester; 46% said they were likely to do so once the pandemic is over.
- 38% of respondents expressed interest in using a recording studio in Eads Hall, if one were available.

Active Learning Classrooms

• 54% of respondents indicated they would likely use an Active Learning Classroom, were an appropriately sized one available to them.

Most Valuable EdTech

- Respondents listed 163 different EdTech tools as being valuable to them.
- The most common uses for these tools were course organization, collaboration, assessment/feedback, and engagement/interaction.





EDTECH: QUANTITATIVE RESULTS

Frequency of EdTech use

(Respondents teaching in Spring 2021)

<u>So far this semester</u>, how often have you used the following educational technology in your teaching-related activities? [1] Never; [2] Rarely; [3] Occasionally; [4] A moderate amount; [5] A great deal.

	Used ever	Δ Fall	Used freq.	Δ Fall	Never	Rarely	Occ.	Mod.	Great deal
Canvas	98%	2%	93%	2%	2%	3%	3%	8%	85%
Zoom	98%	0%	93%	-2%	2%	2%	3%	4%	89%
Kaltura	39%	-8%	23%	-8%	61%	10%	7%	7%	16%
Poll Everywhere	23%	0%	4%	-1%	78%	10%	9%	2%	1%
Polling built into Zoom	37%	-3%	6%	-1%	63%	15%	16%	4%	2%
Microsoft Teams	19%	3%	6%	0%	81%	6%	7%	3%	3%
Respondus	4%	0%	1%	-1%	96%	1%	1%	1%	0%
Hypothesis	10%	2%	5%	1%	90%	3%	3%	2%	2%
Padlet	14%	3%	4%	1%	86%	5%	5%	3%	1%
Piazza	9%	-1%	7%	0%	91%	2%	1%	2%	5%
Gradescope	6%	-3%	5%	-3%	95%	0%	0%	0%	5%
Google	57%	N/A	28%	N/A	43%	7%	22%	13%	15%
Figma	3%	N/A	2%	N/A	97%	0%	1%	1%	1%
Miro	5%	N/A	3%	N/A	95%	1%	1%	1%	2%
Keystone	16%	N/A	16%	N/A	84%	0%	0%	0%	16%

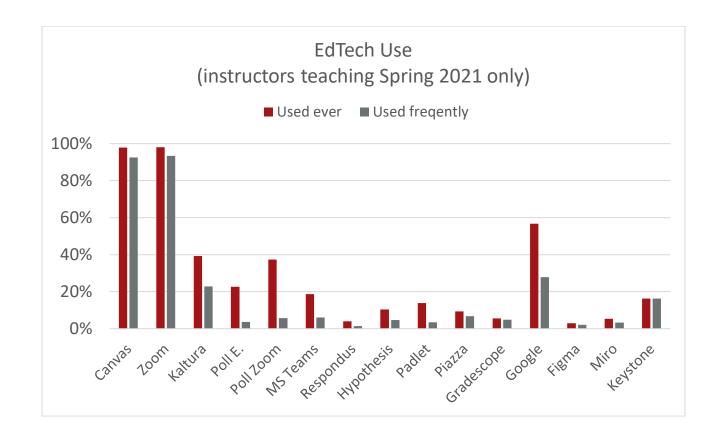
Note: n = 511. "Used freq." column reports the percent of respondents who indicated they used a software frequently (i.e., either "Moderately" or "A great deal"). " Δ Fall" column indicates change in reported use from Fall 2020. N/A indicates those items were not included in the Fall survey.

Mean number of items used: 4.2 (Std Dev 1.8)*

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^{*} Note: The mean number of items used is not directly comparable to the same measure in the FA 20 survey because that survey asked about fewer items than the SP 21 survey. The mean number of items used when using an identical list to the FA 20 survey is 3.6 (Std Dev 1.6). For comparison, in the FA 20 respondents teaching that semester also used an average of 3.6 items (Std Dev 1.7) but predicted they would use 4.1 items the next time that they taught (Std Dev 2.1).









Satisfaction with EdTech

(Respondents teaching in Spring 2021)

You said you used the educational software in the list below in the current semester. How satisfied were you with this educational technology?

[1] Very satisfied; [2] Satisfied; [3] Neither satisfied nor dissatisfied; [4] Dissatisfied; [5] Very dissatisfied.

Note: respondents were only given the opportunity to rate educational software that they indicated in the previous question that they used.

							Top 2	/ botto	m 2 catego	ories
	n	Very Sat.	Sat.	Neither S or D	Dis.	Very Dis.	VS or S	Δ Fall	D or VD	Δ Fall
Canvas	497	36%	47%	11%	4%	2%	83%	-1%	6%	0%
Zoom	497	44%	48%	6%	1%	1%	92%	1%	2%	-2%
Kaltura	198	19%	44%	22%	14%	1%	63%	0%	15%	1%
Poll Everywhere	112	22%	40%	30%	5%	3%	63%	-6%	7%	4%
Polling built into Zoom	184	14%	44%	29%	11%	2%	58%	1%	13%	3%
Microsoft Teams	94	15%	40%	30%	14%	1%	55%	-6%	15%	8%
Respondus	19	26%	37%	32%	5%	0%	63%	-4%	5%	-3%
Hypothesis	53	25%	49%	23%	4%	0%	74%	-5%	4%	4%
Padlet	70	24%	51%	23%	1%	0%	76%	1%	1%	-2%
Piazza	46	30%	48%	22%	0%	0%	78%	4%	0%	-3%
Gradescope	28	32%	54%	14%	0%	0%	86%	12%	0%	0%
Google Workspace	284	37%	49%	13%	1%	0%	86%	N/A	1%	N/A
Figma	15	27%	53%	13%	7%	0%	80%	N/A	7%	N/A
Miro	26	42%	35%	12%	8%	4%	77%	N/A	12%	N/A
Keystone	6	0%	83%	0%	17%	0%	83%	N/A	17%	N/A

Note: "Δ Fall" column indicates change in reported use from Fall 2020. "N/A" indicates tool was not included in the Fall survey.

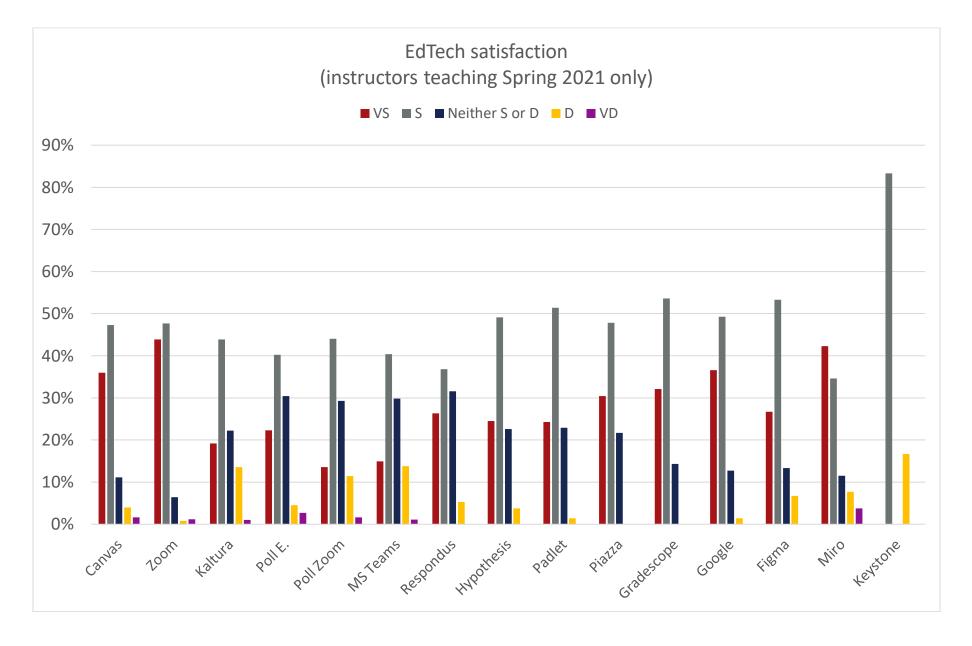
Mean satisfaction across items: 1.9 (Std Dev 0.6)*

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 $[^]st$ Mean satisfaction across items in the FA 20 survey for instructors teaching that semester was also 1.9 (Std Dev 0.7).











Expected EdTech use next semester teaching

(Respondents teaching in Spring 2021)

<u>Thinking ahead to next semester</u>, how often do you expect to use the following educational technology in your teaching-related activities? If you're not scheduled to teach next semester, think ahead to the next time you expect to teach.

[1] Never; [2] Rarely; [3] Occasionally; [4] A moderate amount; [5] A great deal.

	Expect to use at all	Forecast Δ use	Last forecast match	Expect to use freq.	Forecast ∆ use	Last forecast match	Never	Rarely	Occ.	Mod.	Great deal
Canvas	98%	0%	1%	90%	-2%	-1%	2%	3%	4%	14%	76%
Zoom	96%	-2%	0%	55%	-39%	-1%	4%	12%	29%	20%	35%
Kaltura	48%	9%	-18%	20%	-3%	-10%	52%	13%	15%	9%	11%
Poll Everywhere	41%	19%	-24%	9%	5%	-8%	59%	15%	18%	6%	3%
Polling built into Zoom	48%	11%	-14%	7%	1%	-10%	52%	21%	20%	5%	3%
Microsoft Teams	24%	6%	0%	7%	1%	-1%	76%	8%	9%	4%	3%
Respondus	6%	2%	-2%	1%	-1%	-1%	94%	3%	2%	1%	0%
Hypothesis	16%	6%	-2%	7%	2%	0%	84%	4%	6%	5%	2%
Padlet	22%	8%	-2%	4%	0%	-1%	78%	7%	11%	3%	1%
Piazza	13%	4%	-6%	8%	1%	-1%	87%	4%	2%	4%	5%
Gradescope	10%	4%	-7%	5%	0%	-3%	90%	3%	2%	1%	4%
Google Workspace	62%	6%	N/A	26%	-2%	N/A	38%	11%	26%	14%	12%
Figma	7%	4%	N/A	2%	0%	N/A	93%	3%	2%	1%	0%
Miro	5%	0%	N/A	3%	0%	N/A	95%	1%	1%	1%	2%
Keystone	25%	9%	N/A	16%	-1%	N/A	75%	3%	6%	0%	16%

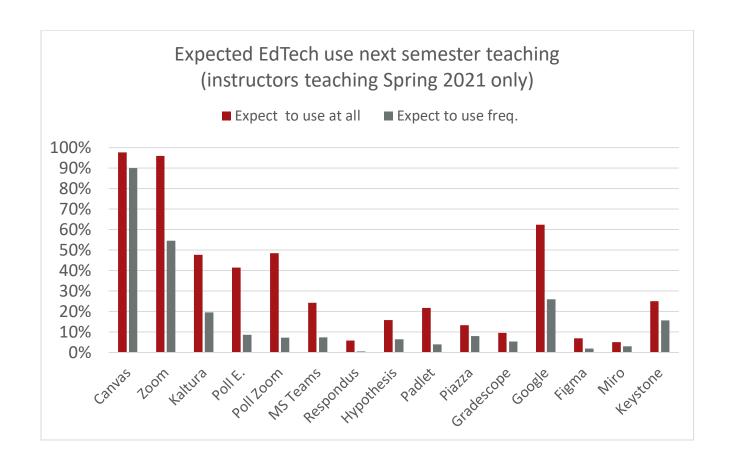
Note: n \sim 490 (exact n depends on the item). "Expect to use freq." column reports the percent of respondents who indicated they expect to use a software frequently (i.e. either "Moderately" or "A great deal"). "Forecast Δ use" columns report "expected future use" minus "current use" for using item at all and frequent use, respectively. "Last forecast match" reports percentage difference between what respondents said they expected to use in SP 21 (based on Fall 20 survey) and respondents reported use in SP 21.

Mean number of items expected to be used: 4.5 (Std Dev 2.5) *

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^{*} Note: The mean number of items expected to be used is not directly comparable to the same measure in the FA 20 survey because that survey asked about fewer items than the SP21 survey. The mean number of items expected to be used when using an identical list to the FA 20 survey is 4.2 (Std Dev 2.08).









Satisfaction with EdTech support and comfort with EdTech

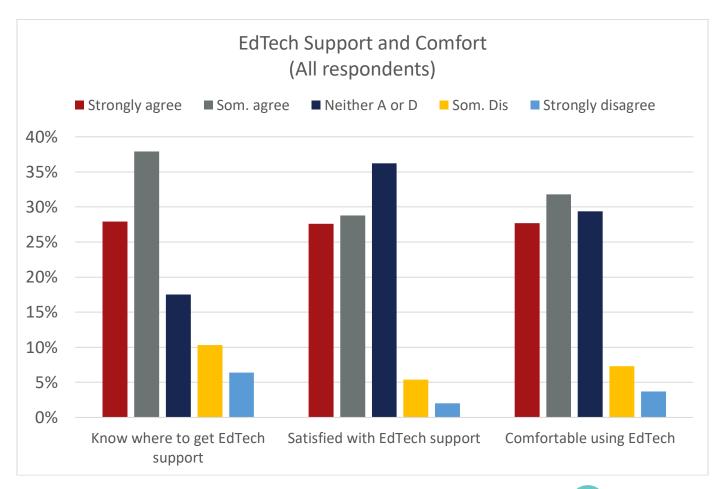
(All respondents)

How much do you agree or disagree with the following statements?

- I know where get EdTech support at WashU.
- I am satisfied with the EdTech support I receive from WashU.
- I feel comfortable using EdTech.

[1] Strongly agree; [2] Somewhat agree; [3] Neither agree nor disagree; [4] Somewhat disagree; [5] Strongly disagree.

							Top botto categ	om 2
	n	Strongly agree	Som. agree	Neither A nor D	Som. disagree	Strongly disagree	Agree	Dis.
Know where to get EdTech support	544	28%	38%	18%	10%	6%	66%	17%
Satisfied with EdTech support	539	28%	29%	36%	5%	2%	56%	7%
Comfortable using EdTech	537	28%	32%	29%	7%	4%	60%	11%







RECORDING: QUANTITATIVE RESULTS

<u>Likelihood of future recording of in-person classes</u>

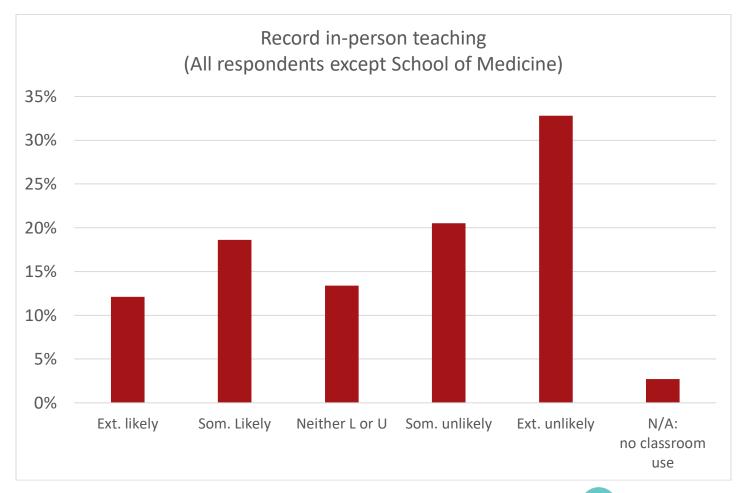
(All respondents)

When you next teach in a physical classroom, how likely are you to use the room's camera and microphone to record any class sessions, even if all of your students are usually able to attend the course in person?

[1] Extremely likely; [2] Somewhat likely; [3] Neither likely nor unlikely; [4] Somewhat unlikely; [5] Extremely unlikely; [6] NA, I never teach in a physical classroom.

Note: This question was not asked of respondents from the School of Medicine.

								-	bottom 2 gories
	n	Ext. likely	Som. likely	Neither L nor U	Som. unlikely	Ext. unlikely	N/A: no classroom use	Likely	Unlikely
Record in-person teaching	479	12%	19%	13%	21%	33%	3%	31%	53%







Likelihood of recording asynchronous videos

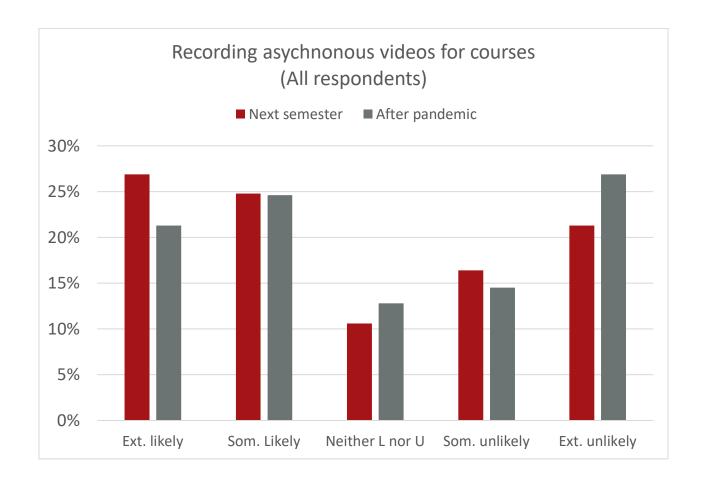
(All respondents)

How likely are you to record asynchronous videos for use in your courses?

- During the next semester you teach
- After the pandemic is over

[1] Extremely likely; [2] Somewhat likely; [3] Neither likely nor unlikely; [4] Somewhat unlikely; [5] Extremely unlikely.

							-	bottom 2 egories
	n	Ext. likely	Som. likely	Neither L or U	Som. unlikely	Ext. unlikely	Likely	Unlikely
Next semester	517	27%	25%	11%	16%	21%	52%	38%
After pandemic	517	21%	25%	13%	15%	27%	46%	41%







Likelihood of using recording studio

(All respondents)

[Asked of respondents who indicated they may record asynchronous videos:]

If it were available, how likely would you be to record at least some of your asynchronous videos in a high-quality studio located in Eads Hall on the Danforth Campus?

[Asked of respondents who indicated they may record asynchronous videos:]

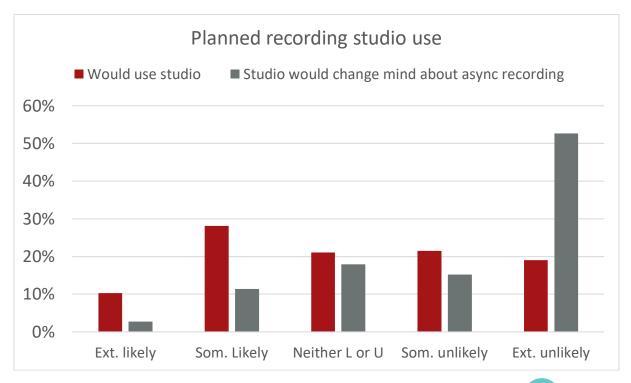
If it were available, how likely would it be that access to a high-quality studio located in Eads Hall on the Danforth Campus would change your mind about recording asynchronous videos?

[Description given to both groups:]

The studio would include high-quality cameras and microphones, as well as access to a blackboard, whiteboard and smart board. Instructors would record videos on their own, but the studio would be designed so that no specialized technical knowledge would be required for its use.

[1] Extremely likely; [2] Somewhat likely; [3] Neither likely nor unlikely; [4] Somewhat unlikely; [5] Extremely unlikely.

							_	/ bottom egories
	n	Ext. likely	Som. likely	Neither L or U	Som. unlikely	Ext. unlikely	Likely	Unlikely
Respondents who indicated they may record videos	331	10%	28%	21%	22%	19%	38%	41%
Respondents who did not plan to record	232	3%	11%	18%	15%	53%	14%	68%







ACTIVE LEARNING CLASSROOMS: QUANTITATIVE RESULTS

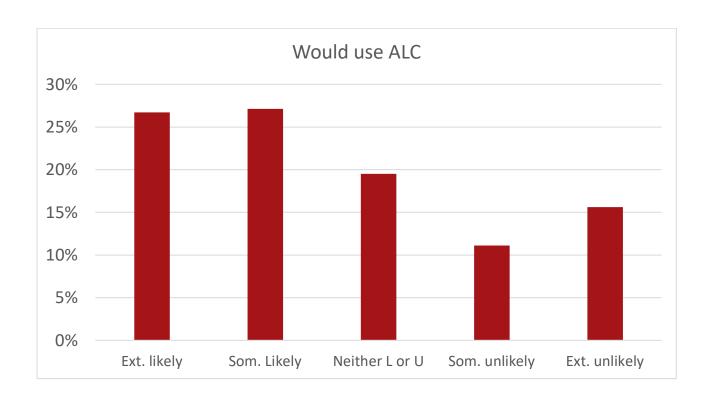
<u>Likelihood of using active learning classrooms</u> (All respondents)

How likely would you be to use an Active Learning Classroom (ALC) for your course, were an appropriately sized one be available to you?

An ALC includes movable tables and chairs, and/or advanced built-in technologies for group work.

[1] Extremely likely; [2] Somewhat likely; [3] Neither likely nor unlikely; [4] Somewhat unlikely; [5] Extremely unlikely.

							-	oottom 2 gories
	n	Ext. likely	Som. likely	Neither L or U	Som. unlikely	Ext. unlikely	Likely	Unlikely
Would use ALC	513	27%	27%	20%	11%	16%	54%	27%







Most important active learning classroom feature

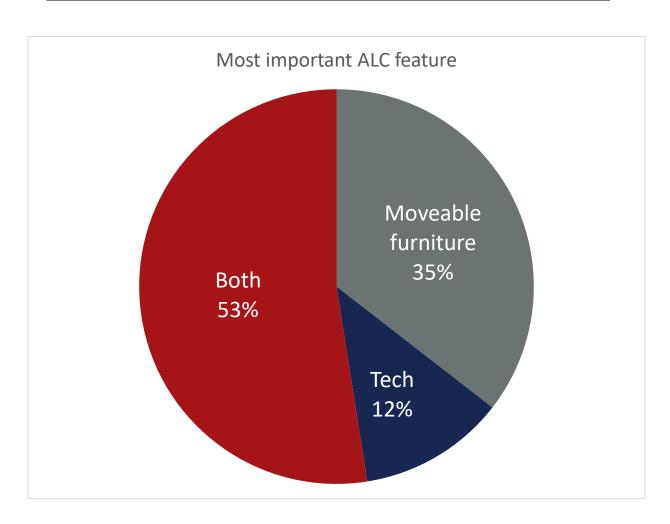
(All respondents)

[Asked of respondents who indicated they were "extremely likely" or "somewhat likely" to use an ALC:]

Which feature of an Active Learning Classroom is most important to you?

[1] Moveable tables and chairs; [2] Advanced built-in technologies for group work; [3] Both options are equally important

	n	Moveable tables/chairs	Advanced tech	Both
Most important ALC feature	276	36%	12%	53%







EDTECH: PARTIAL QUALITATIVE RESULTS

Most valuable EdTech

We are interested in learning more details about your use of educational technology tools beyond Canvas, Zoom, and Kaltura.

What three educational technology tools (other than Canvas, Zoom, and Kaltura) do you find most valuable to your teaching?

Feel free to name any educational technology tools you find valuable, even if they were not listed in any of the previous questions. If you do not use three other tools, you may just leave those spaces blank.

Open response.

A total of 267 respondents listed at least one tool, with a total of 163 different tools being mentioned. All tools mentioned at least 5 times are included in the table below.

Rank	Tool	Frequency
1	Google Docs	39
2	PowerPoint	26
3	Hypothesis	20
4	Padlet	16
5	Box	15
6	Poll Everywhere	12
7	Slack	12
8	Qualtrics	12
9	Google Jamboard	12
10	Miro	11
11	YouTube	10
12	Tablet	9
13	Email	8
14	Piazza	7
15	Teams	7
16	Google Slides	7
17	Gradescope	7
18	Perusall	7
19	Kahoot	7
20	Crowdmark	6
21	Google general	6
22	OneNote	6
23	Office	6
24	Flipgrid	6
25	ARES	5
26	Word	5





Why EdTech valuable

Respondents who answered the question asking them to list up to three educational technology tools that were valuable to them were asked a follow-up question asking why they listed each tool (*You said that the EdTech tools listed below were the most valuable to you. Why did you list each one?*). The general categories that respondents' answers fell into is indicated in the table below. Note that although example tools are listed, each category contained many more tools that were deemed valuable for that reason.

Rank	Category	Description of why valuable	Example tools	n	%
1	Organization	Allows/improves sharing docs, scheduling, submitting assignments, etc.	Box, MS Office, pdf tools	77	30%
2	Collaboration	Facilitates/encourages students working together	Google Workspace, Padlet, Hypothesis	73	29%
3	Assessment & Feedback	Grading, formative feedback, feedback to instructor on class, etc.	Gradescope, Qualtrics	60	24%
4	Engagement & Interaction	Encourages participation, polling, discussion, etc.	Poll Everywhere, Google Workspace	54	21%
5	Video and Audio	Aids video or audio creation, editing	iMovie, Adobe Premire	42	16%
6	Other	Items not falling into other categories	Various tools	42	16%
7	Lecturing	Facilitates lecture-style content delivery from instructor to students	PowerPoint, virtual whiteboards	36	14%
8	Practical	Used b/c works well, free, others use	Google Workspace, email	32	13%
9	Writing Real Time	Aided writing on virtual or physical whiteboards, blackboards, etc.	Goodnotes, tablets	21	8%
10	Specialized	Used for discipline specific needs (e.g. language learning, engineering, etc.)	VoiceThread, Matlab	16	6%
11	Content	Provides course content to students (e.g. books, videos, etc.)	YouTube, ARES	16	6%
12	Assignments	Used for out-of-class assignments	Crowdmark, various	16	6%
13	Communication	Facilitates communication between parties	Email, Slack	15	6%
14	Student questions	Allows students to ask questions	Padlet, Piazza	12	5%
15	Student prep & study	Facilitates/encourages student studying and class prep	Perusall, Quizlet	8	3%

All in for

success.

academic



DESCRIPTION OF RESPONDENTS

School & response rates

	Respondents	Estimated response rate*
Arts & Sciences	270	30%
Brown School	34	28%
McKelvey School of Engineering	63	26%
Sam Fox School of Design & Visual Arts	35	34%
School of Law	16	12%
School of Medicine	43	26%
Olin Business School	36	20%
Other	1	4%
University College	65	40%
TOTAL	563	29%

^{*} School response rates estimated based on the number of faculty teaching courses in each school during AY 2020-2021. A small number of faculty teach in multiple schools, but the survey only recorded respondents' primary school affiliation. This introduces a small amount error into the calculation. However, the estimated response rates reported here should be relatively close to the actual response rates and accurate enough to serve as a rough approximation.





University role

	Respondents	Percent of Total
Adjunct Instructor	91	16%
Administrator (e.g. Dean, Vice Provost, etc.)	9	2%
Graduate Student	13	2%
Lecturer (Principal Lecturer; Senior Lecturer; Instructor)	100	18%
Other	5	1%
Postdoc	12	2%
Professor of Practice / Teaching Professor	24	4%
Staff	34	6%
Tenure Track (total)	216	38%
Assistant Professor	49	9%
Associate Professor	55	10%
Professor (Full)	112	20%
Visiting Professor	3	1%
Missing	56	10%
TOTAL	563	100%



Gender

	Respondents	Percent of Total*
Man	216	42%
Woman	258	50%
Non-binary	2	< 1%
Prefer to self-describe	2	< 1%
Prefer not to say	35	7%
TOTAL	513	100%

^{*} Percentage is out of the number of respondents who answered the question. Some respondents did not answer the question, either because they did not make it that far in the survey or intentionally left the question blank.

Race / Ethnicity

Respondents were able to choose more than one category.

	Respondents	Percent of Total*
White	386	75%
Hispanic	17	3%
Black	24	5%
Asian	35	7%
All other	10	2%
Refused	45	9%
TOTAL	517	100%

^{*} Percentage is out of the number of respondents who answered the question. Some respondents did not answer the question, either because they did not make it that far in the survey or intentionally left the question blank.

