FALL 2020 TEACHING & LEARNING SURVEYS

CENTER FOR THE ADVANCEMENT OF TEACHING

WAKE FOREST UNIVERSITY

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EXECUTIVE SUMMARY

In mid-December, the Center for the Advancement of Teaching fielded two large surveys of all students and faculty on the Reynolda Campus. Although both groups were exhausted by that point in the semester, they were eager to share their experiences. We received responses from 1,832 students and 473 faculty, constituting response rates of 26.4% and 63.4% respectively. The report that follows combines results from all of our schools, but school-specific reports are available upon request. Graduate students were slightly over-represented in our sample, but their numbers were a small part of the overall sample (further details about the demographics of our sample can be found on page 44).

Taking all the results together, we can say that our faculty worked extremely hard to transform their courses, felt prepared at the beginning of the semester, and incorporated a wide-range of evidence-informed teaching strategies. Nevertheless, students had a strong preference for in-person learning and struggled with feelings of isolation due to COVID restrictions on campus. These struggles decreased their motivation and capacity to learn just as instructors were asking them to engage with many new tools and activities. Thus, many of our students were lonely and overwhelmed. When asked about things instructors could do to enhance their learning experience, students emphasized activities that facilitated personal connection. If there is one headline to take away from this report, it is that our students expressed an overwhelming appreciation for learning activities that allowed them to connect with their peers.

EXPERIENCE OF COURSE MODALITIES

- Between 50 and 60 percent of our faculty taught in-person class sessions this semester, suggesting that space is the biggest obstacle to increasing in-person course offerings.
- A sizeable majority of our students reported that they were engaged in their in-person, blended, and online courses (90%, 80.8%, and 63.5% respectively).
- Nevertheless, there was a 25-point engagement gap between fully online and fully in-person learning that was also evident in the open-ended feedback.
- And yet, more than 35% were so pleased with their blended courses that they reported they would like to continue taking them in the future.

TEACHING & LEARNING ENVIRONMENT

- Students were far more likely to study in their dorms than anywhere else, and many noted that this contributed to feelings of isolation and challenges with work-life balance.
- 60% of students indicated that access to study spaces was a challenge and the qualitative comments made clear that the primary concern was finding private spaces (away from roommates) where they could participate in interactive synchronous sessions.
- Almost 20% of our students did not agree that they felt "safe in terms of their health" in mask-to-mask classrooms.
- At least 25% of our faculty continued to report challenges with workspace, caregiving, computer equipment, and internet connectivity.

STUDENT WELL-BEING

- In open-ended feedback, many students surfaced concerns about exponentially increased workload in blended and online courses.
- Although this was a survey about their learning experiences, many students surfaced concerns about their mental health and general well-being.
- Many students expressed a strong desire for their experiences to be heard and understood.

LEARNING & ISOLATION IN QUARANTINE

- 53% of instructors used traditional strategies to accommodate students who missed class.
- 44% of instructors broadcasted in-person class sessions, but at least 70% of instructors and students reported challenges with this arrangement.
- 46% of instructors opted to record their in-person class sessions and students found this approach more helpful.

ACADEMIC TECHNOLOGY

- 94% of respondents reported using Canvas in their courses, with 84% reporting daily use.
- Almost 50% of our students indicated they would like instructors to continue recording their lectures. Recorded lectures were also the second-most referenced strategy in the open-ended question about assignments that helped students learn.

SUPPORT FOR TEACHING

- 98% of our instructors felt prepared and over 25% felt very prepared to teach this semester.
- The peer learning communities were positive sources of support for 77% of our respondents.
- Thanks to the work they did to prepare this semester, 44% of our faculty report talking more to their departmental colleagues about teaching than they have in the past.

BUILDING COMMUNITY

- Faculty were most likely to foster community by holding regular 1:1 meetings with students (86%) or creating opportunities for students to collaborate with one another (73%).
- Happily, students felt these were the two most effective strategies for building community.
- Students rated camera use in synchronous sessions as the least effective strategy for building community. Yet, it was a polarizing strategy. Some students have a strong desire for more camera use, while others consider such policies a violation of their privacy.

TEACHING & LEARNING ACTIVITIES

- Students in both blended and online modalities were more likely to be engaged with short, pre-recorded lectures than with long synchronous lectures.
- Although students appreciated long lectures during in-person class sessions, they were least engaged with long, recorded lectures.
- In alignment with this preference, faculty were least likely to lecture via long recordings.
- Whole-class discussions were the most common teaching strategy adopted by instructors teaching live sessions, whether in person or online.
- Online discussion boards were polarizing. Some students described them as useless "busy work," but many more singled them out as the activity that most helped them learn.
- Students seemed to have a slight preference for small-group discussions over whole-class discussions in online synchronous sessions.
- Breakout rooms were also polarizing for students. Some expressed dissatisfaction but many more indicated they helped them learn and build connections with their peers.
- 126 students--close to 30% of all open-ended respondents--expressed appreciation for activities that allowed them to engage with their peers, noting that they were the primary way they connected with others this semester.
- The top five strategies used by blended instructors and 5 of the top 6 strategies used by online instructors involve the peer-to-peer interaction students find so important.
- Instructors felt far more comfortable using small-group discussions and collaborative learning activities when they were online than in person.

REMOTE ASSESSMENT

- Open-book, open-note exams were the most widely adopted strategy for assessing students (89%) and 78% of those who adopted the strategy considered it effective.
- Oral examinations received the most "very effective" ratings (43%) but was only adopted by 18% of instructors.
- Conversely, emphasizing the Honor Code was adopted by 76% of respondents but only rated very effective by 18%.

EXPERIENCE OF COURSE MODALITIES

According to the Registrar's data, the slight majority of courses were taught in an online modality. Blended courses made up a significant portion as well, but fewer than one out of ten courses were fully in-person. That said, 59% of our instructors and a full 87% of our students were able to experience some in-person teaching and learning this fall (Figure 53).

Figure 1: **Distribution of Fall Course Modalities (Registrar Data)**

52%	39%	9%

0% 25% 50% 75% 100%

● Online ● Blended ● In Person
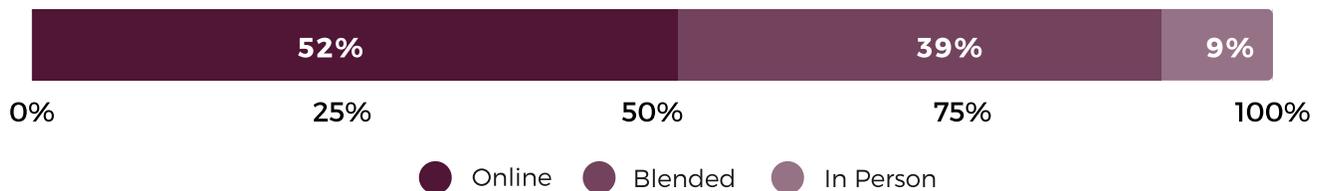
As Figure 2 makes clear, the majority of students were engaged in their courses regardless of modality. Nevertheless, there was a 25-point engagement gap between fully online and fully in-person learning that was reinforced by student's open-ended feedback. Of the 364 students who left open-ended feedback, 62 expressed a preference for in-person learning.

A wide majority of students were engaged in their blended courses and more than 35% reported they would like to continue taking blended courses after the pandemic (Figure 14). Nevertheless, open-ended comments suggest students had difficulty managing the multiple ways instructors structured their blended courses.

Figure 2: **% of Students Enrolled in ___ Courses Who Felt Engaged (N=1,407)**

Online	63.5%
Blended	80.8%
In-Person	90.0%

0% 25% 50% 75% 100%
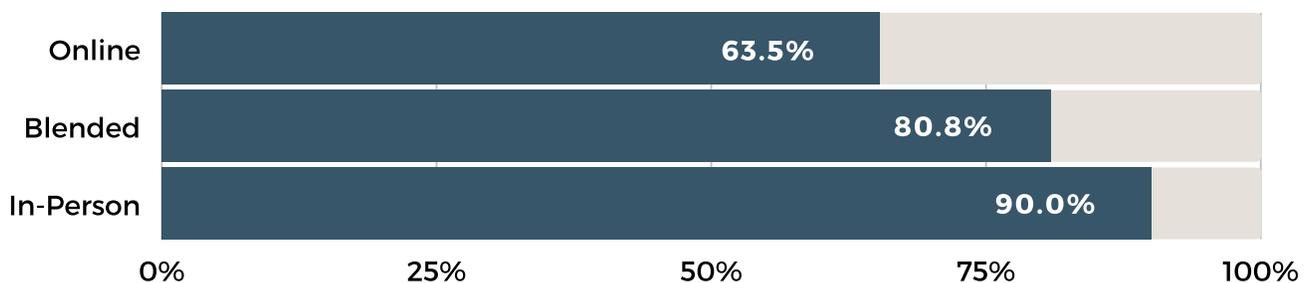
TEACHING & LEARNING ENVIRONMENT

Figure 3: Percentage of Student Respondents Studying From …

81.5%	10.8%	6%	

0% 25% 50% 75% 100%

- ● Winston-Salem
- ● Another U.S. Location (EST)
- ● Another Country
- ● Another U.S. Location (Non-EST)
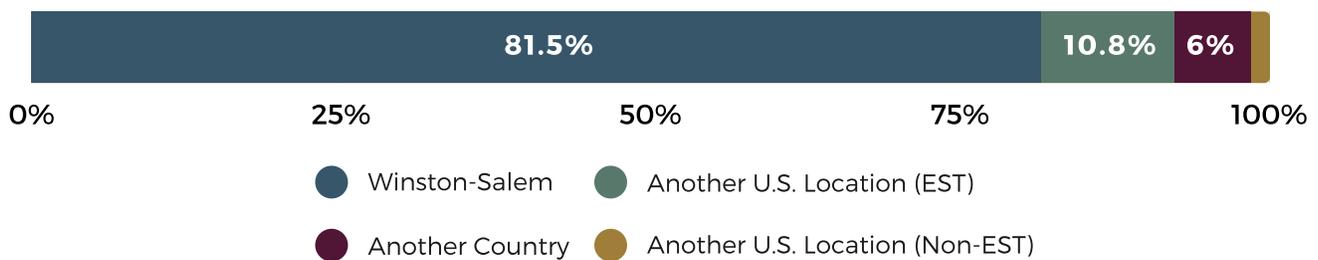
Figure 3 visualizes where our student respondents completed their coursework. The wide majority of them were in Winston-Salem or in the Eastern Standard time-zone. Another 7.5% were learning in another time-zone. Their experiences with synchronous online courses may have been more challenging, particularly for the 6% learning abroad.

On the following page, Figure 4 hones in on the experiences of students learning in Winston-Salem. Nearly all of these students studied in their living spaces. A theme in the qualitative comments was that this situation contributed to feelings of isolation and challenges with work-life balance. Students took advantage of alternative spaces, particularly the outside tables and the ZSR library. In qualitative comments, we also saw that Farrell Hall was a valuable space for undergraduates. A handful of students requested later hours for ZSR and noted that the wi-fi in the Davis Field tent was unreliable.

The most common challenge for local students was finding a sufficient available workspace for live online class sessions. They reported this challenge at twice the rate of any other learning environment challenge. Workspace challenges were the second and third most reported as well. While computer/hardware challenges and internet challenges were less frequent, our respondents this Fall did actually report slightly more challenges here than in our spring semester. Our best hypothesis is that this may be an artifact of more students living in off-campus apartment complexes with less-than-ideal internet connections.

Figure 4: Percentage of Student in Winston-Salem Who Studied in/at …

Location	Percentage
Dorm or Apartment	96.1%
Outside Tables & Tents	46.7%
ZSR Library	35.3%
Empty Classrooms	18.2%
Benson Center	12.7%
Gym	6.9%
Late Night Sutton	4.5%
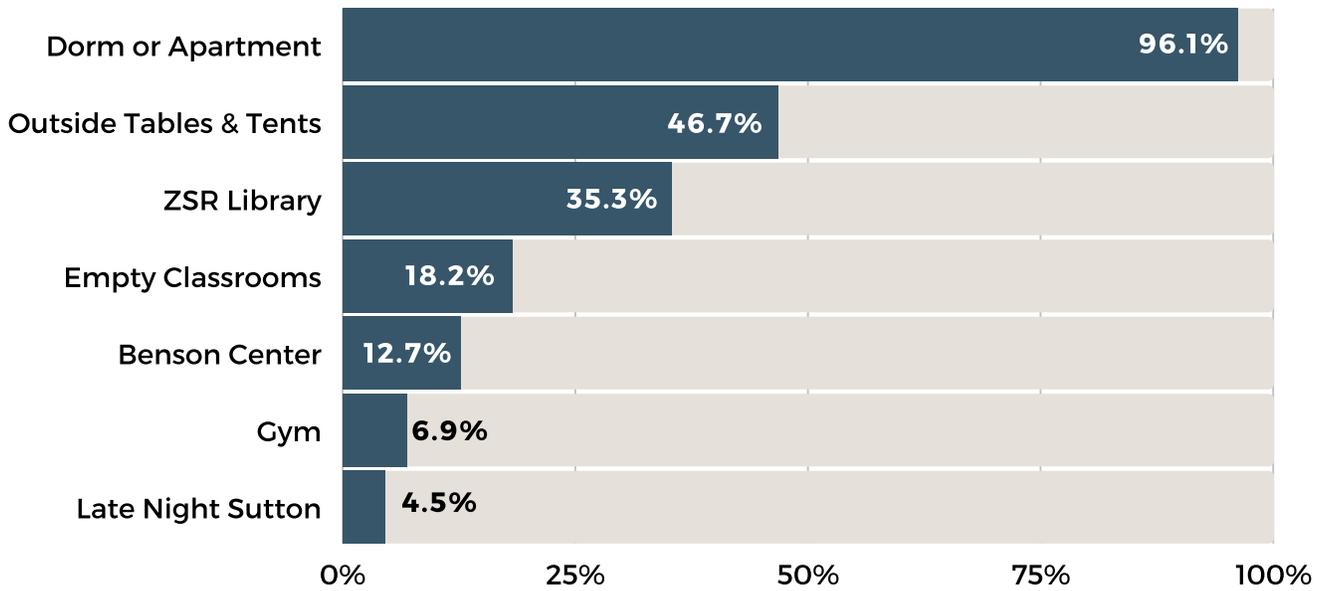
Figure 5: % of Students in Winston-Salem Who Reported Challenges With …

Challenge	Percentage
# of Spaces	60.2%
Noise/Privacy	30.8%
Size of Space	28.0%
Computer	15.2%
Internet	14.6%
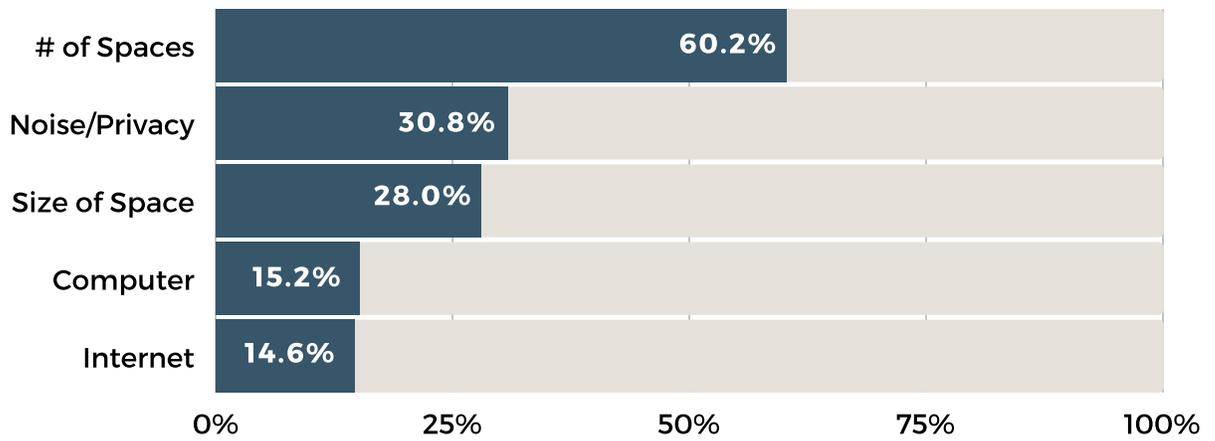
Figure 6: % of Student Respondents Who Reported Challenges With …

Challenge	Percentage
Moving Around	72.2%
Interacting with Peers	33.0%
Hearing Peers	29.3%
Hearing Professor	21.1%
Feeling Safe	19.4%
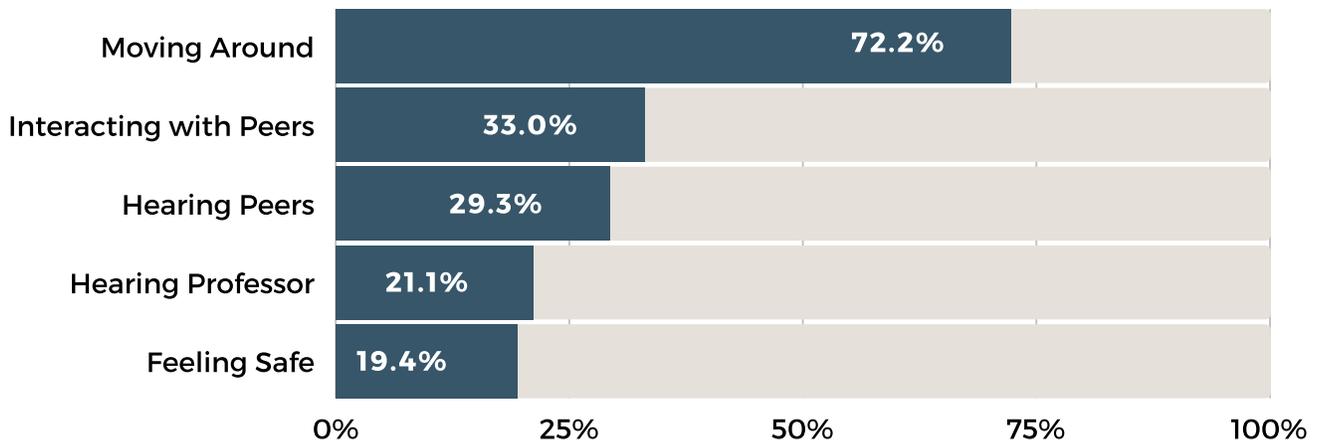
Figure 6 summarizes challenges in the mask-to-mask learning environment. As expected, students had some difficulty hearing one another, interacting with peers, and moving around. Although we do not know the baseline for in-class movement prior to the pandemic, we hope to encourage far more socially-distanced movement in the spring. Somewhat surprisingly, a full 19% of student respondents did not agree they "felt safe in terms of their health" during mask-to-mask classes.

TEACHING FROM HOME

Figure 7: **% of Faculty Respondents Who Reported Challenges With …**

Category	%
Workspace	28.5%
Caregiving	27.6%
Computer	26.5%
Internet	21.7%

0%   25%   50%   75%   100%
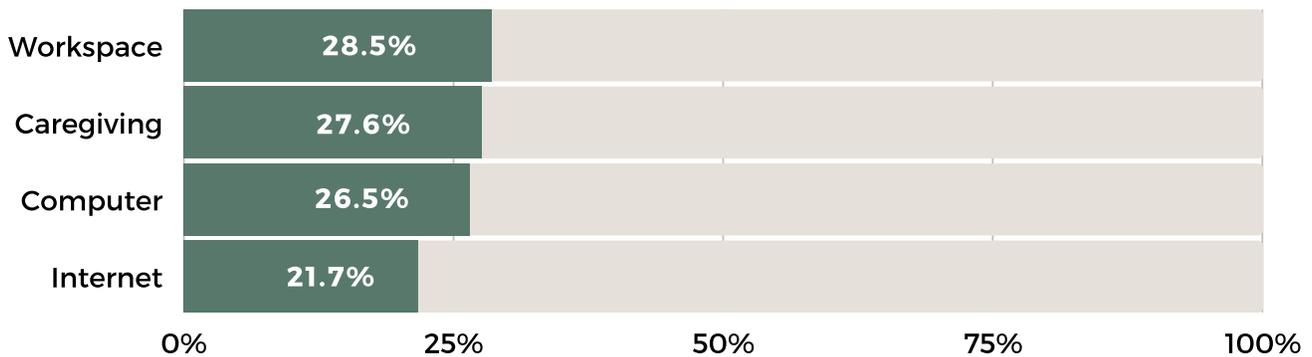
Faculty continue to face challenges with teaching from home. A quarter of faculty respondents provided qualitative feedback on the challenges they were facing. Most of the comments took the opportunity to further expand on their answer to the quantitative question. That is, they continued on the themes of space, caregiving, computer/hardware, and internet/bandwidth challenges. Respondents most frequently brought up the subject of having children at home. One respondent wrote "If I could put 10 checks on `Care-giving and…..' I would." Another discussed teaching class with a nine-month-old in their lap. Internet and bandwidth issues came up at the same frequency as children and care-giving. Some times these topics were related---faculty would discuss the challenge of four people in the home trying to use Zoom.

A few other themes arose in the qualitative comments. Some faculty discussed their frustration with spending their own money for hardware and upgrades to their internet. Others emphasized that they used their WFU offices or WFU spaces to teach rather than teaching from home. They stressed how important the option was for them to manage their teaching. Lastly, some faculty did want to express gratitude for the hardware provided by WFU to weather the pandemic, including hotspots, extra monitors, webcams, and microphones.

STUDENT WELL-BEING

While the student survey targeted formal learning experiences, the open-ended question ("Please consider sharing anything else that will help us understand your online and blended learning experience") surfaced a variety of issues related to how students were navigating these uncertain times. In analyzing the 364 student responses to this question, a number of themes pertaining to the student experience emerged which will be discussed in this section. These themes relate to workload, well-being, and empathy/understanding.

WORKLOAD

Of the 364 responses, 52 discussed some aspect of student workload. In general, students felt that in their effort to make up for lost in-person class time, faculty had added many more assignments and activities to classes than they had previously experienced. Likewise, many classes had activities due on several days of the week. Juggling these assignments and activities across multiple classes felt exhausting to students and created a sentiment that faculty had not thought about their well-being, but rather were more interested in justifying grades. The following are sample responses that capture these sentiments in students' words.

> There seemed to be an assumption that students had more time to do work, and I didn't even get weekends to myself because I had too much work. As a result, the days just ran together because there were no breaks or stress relief.

> For one class alone I was expected to watch an hour or more worth of asynchronous lectures (posted on Sunday), read 2 chapters (60 or more pages), read long news or informational articles before class on Tuesday. Then sit in class for 75 minutes and have a closed book/ closed note quiz every week on everything without getting the chance to clarify. Now imagine this but for 4 more classes.

In addition to the number of assessments and assignments, many students mentioned the strain that having no breaks during the Fall semester put on them.

> " I think this phenomenon is also in part due to the fact we had no breaks this entire semester. I don't understand in what world it is appropriate to not give students breaks from learning when there is a global pandemic, social unrest, and skyrocketing uncertainty on top of all of the normal obligations/stressors of being a college student. "

> " At least we had a few vacation days to catch a breath... wait no it was just a straight shot through without a single day off. Well at least I got to relax on the weekends... wait no I had so much extra homework to do that I had to do work on fridays, saturdays, AND sundays just to keep up. "

> " I am very concerned about the spring semester from a mental health standpoint because simply going from the end of January to May with only two days off is going to result in a decrease in academic performance overall and affect our learning experience as students. "

WELL-BEING

Students also discussed the impact of workload, isolation, and social dynamics on their well-being. Of the 364 responses, 29 articulated difficulties students faced throughout the semester.

> " Honestly, this sucked. It was awful. It's not Wake's fault. It's not the faculty's fault. But this was absolutely terrible. The amount of anxiety that I faced daily just being a student was overwhelming. I love Wake. I love my professors. I feel like I got robbed of everything I actually enjoy about being a student. Sitting in the same room all day every day staring at the same screen was unbearable. I'm upset that I have to do this all over again next semester. "

> " And to be completely honest, it's embarrassing to email my professors about wifi issues because I can't afford a better router/network or tell them I'm having issues with my mental health because I had a covid scare during an election where I have to also worry about my human rights and racism. "

> "I think that this mode of learning is working well, especially since this is the first run, but more emphasis must be put on mental health. Many people have had to deal with increased stress from the pandemic, whether it be family getting sick or financial struggles, and I do not feel like it is getting the attention and action it warrants."

EMPATHY AND UNDERSTANDING

Many of the open-ended responses on the student survey also indicated a desire for empathy and understanding from faculty and the university. Some comments simply expressed a desire for someone to hear how hard the semester had been.

> "I am very thankful that I was able to study this semester and very grateful for all of my professors this semester, but I wanted to express these concerns. I wanted to project a bit more of some realities of the challenges that were experienced, and perhaps others did as well."

> "Online is just harder than in person ... and I want the school to know that."

> "Obviously I never signed up for this, and no one wanted it to be like this. I just wanted someone to know how difficult this has truly been for us students. Thanks for reading this."

A good number of comments related to workload also expressed that students didn't feel faculty understood how challenging online and remote classes were for them.

> "Please consider giving students less work. It didn't seem as though most professors understood the capacity students had to work this year, given all the restrictions and impact of COVID such as spikes in anxiety and depression, access to social interaction and mental health resources, zoom fatigue, etc."

> "Many of these problems were uncontrollable due to the virus but I would state that a few of my professors were too 'old school' to acknowledge the issues students were facing during these times."

> **❝** This semester I didn't feel like I was learning because I was just surviving. It seems the university taught professors how to transition to online learning but didn't teach them to be compassionate or merciful. **❞**

Others were more disheartening, indicating that students didn't feel faculty or the university cared about them or their well-being.

> **❝** School was really, really hard this semester. I felt not only a profound lack of support from Wake Forest, but ever-diminishing and negligent support. Professors increased their works by at least 50%, you all are cutting the counselling [sic] center in like half. **❞**

> **❝** Please understand that students are going through a harder time than they have ever been through and that professor and the school need to realize the hardships we are going through. Has the school tried to gauge the mental health of the students? We are suffering and the only objective the school and professors seem to care about are grades. **❞**

LEARNING IN ISOLATION & QUARANTINE

WHEN STUDENTS COULDN'T ATTEND IN-PERSON CLASS

Figure 8: % of Faculty Respondents Who Adopted

Strategy	%
Traditional Strategies	52.6%
Class Session Recorded	45.5%
Class Session Streamed	43.7%
Asynchronous Alternatives	38.5%
Class Session Repeated Online	26%
Class Session Moved Online	16.4%
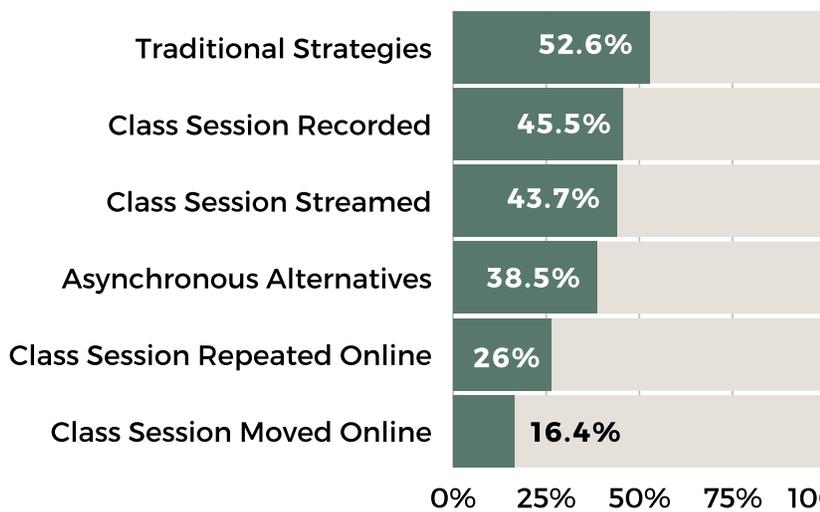
Figure 9: % of Student Respondents Who Experienced

Strategy	%
Traditional Strategies	47.0%
Class Session Recorded	56.7%
Class Session Streamed	45.0%
Asynchronous Alternatives	36.6%
Class Session Repeated Online	26%
Class Session Moved Online	15.7%
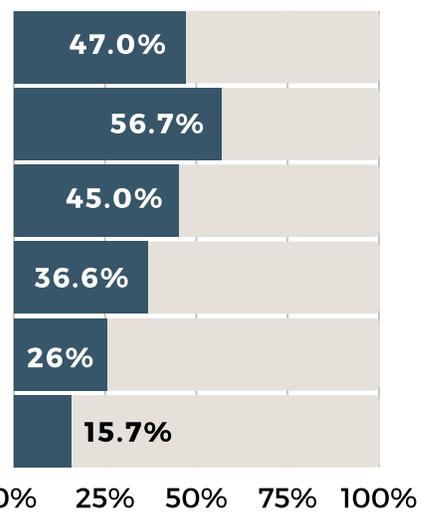
Faculty adopted a variety of strategies to accommodate students in isolation and quarantine. The most common approach was to work with students as we traditionally do when they experience extended absences (e.g., making notes available and meeting for 1:1 office hours.). Qualitative feedback suggests that this approach (simply letting students focus on rest and recovery) was one of the most successful. Likewise, those who had designed their courses with asynchronous alternatives built-in seemed to have few issues accommodating these students.

Instructors who chose to record or stream their in-person classes experienced more challenges. Given Wake's decision to pursue a blended curriculum that would avoid the challenges of "Hyflex" teaching, we did not expect to see 45% of our faculty opting into this approach. Yet qualitative feedback makes clear many faculty were worried the alternatives would either upset students (moving class online) or increase their workload (creating asynchronous alternatives or hosting additional class sessions).

> " Given our guidance not to simulcast, I didn't feel like I had a good solution prepared [for the number of quarantined or sick students]. While the suggestion for when students needed to miss was to hold the entire class session online, this was NOT preferred by the students (most of) whom could attend class. They strongly desired to be in person when at all possible. While simulcasting may not be optimal, it seems it's better than recording which was what I did. And while I appreciate the suggestion to hold extra sessions for those students, I found this to be a big ask considering the strain on faculty for teaching in a COVID context for months on end with their own children learning at home. While we all want to be fantastic teachers, we do have responsibilities outside of WFU and I felt that for me, those responsibilities have gone greatly neglected for a solid 9 months and such suggestions ... seem to ignore the intense realities of our challenging, multidimensional jobs ... and personal lives. Having technology that allows faculty to simulcast would be beneficial and/or other suggestions that, while they may not produce the optimal solution for students, also take into account the bandwidth of faculty, especially caregivers.. "

We were also surprised to discover that 25% of instructors utilized group-work that combined in-person and online students (Figure 32), and that 27% of instructors reported using technology to stream their courses all the time (Figure 13). Because only 15% report using this technology intermittently, it seems there are more faculty streaming their classes as a default approach than those adopting it as an occasional response to COVID-related absences.

As Figures 10-12 make clear, faculty and students experienced a number of challenges when in-person classes were streamed to remote students. 68% of faculty reported challenges attending to both groups of students and 59% reported challenges integrating remote students into the class session. Likewise, both remote and in-person students had challenges engaging with one another. 70% of remote students reported challenges working with their in-person peers and 78% of in-person students reported challenges working with their remote peers. Given how many faculty felt compelled to stream their in-person class sessions, these challenges were likely experienced by many of our students this semester.

> " I was not a fan of courses that made students attend class in person or online in groups. When I was in person, I couldn't hear my classmates attending via zoom, and when I used headphones, I was hearing the professor double. I would hear his voice in the room, but also hear it through zoom in a delay, and it made it very hard to focus. "

STREAMING IN-PERSON CLASS SESSIONS

Figure 10: % of Faculty Who Streamed Who Reported Challenges With ...

Category	Percentage
Attending to All Students	67.7%
Integrating Remote Students	59.1%
Seeing Remote Students	48.4%
Sharing Whiteboard	40.9%
Hearing Remote Students	34.4%
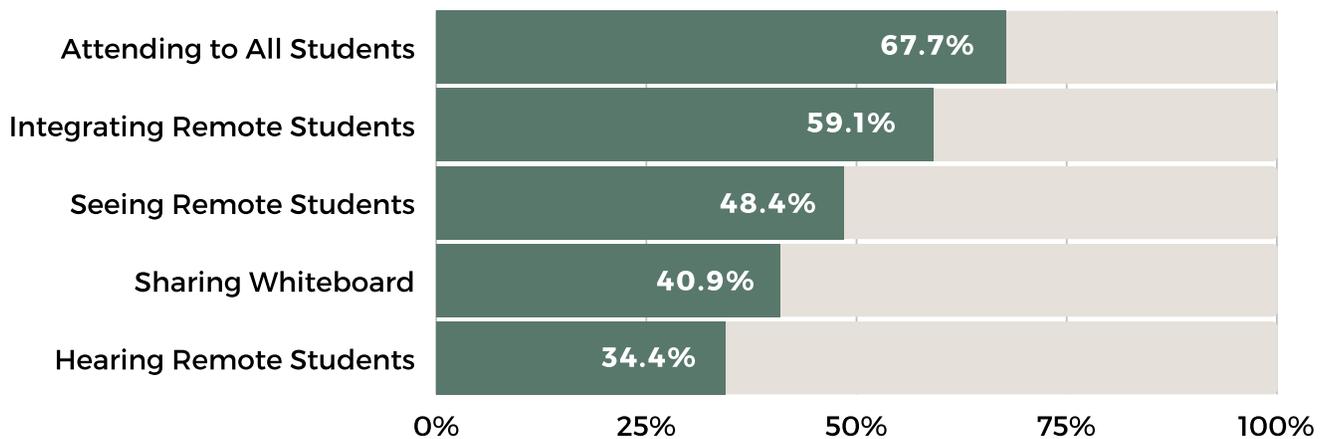
Figure 11: % of Remote Students Who Reported Challenges With ...

Category	Percentage
Working with Peers	70.4%
Seeing & Hearing Peers	56.1%
Getting Real-Time Help	46.1%
Reading the Whiteboard	41.1%
Participating in Class	33.9%
Seeing & Hearing Professor	14.6%
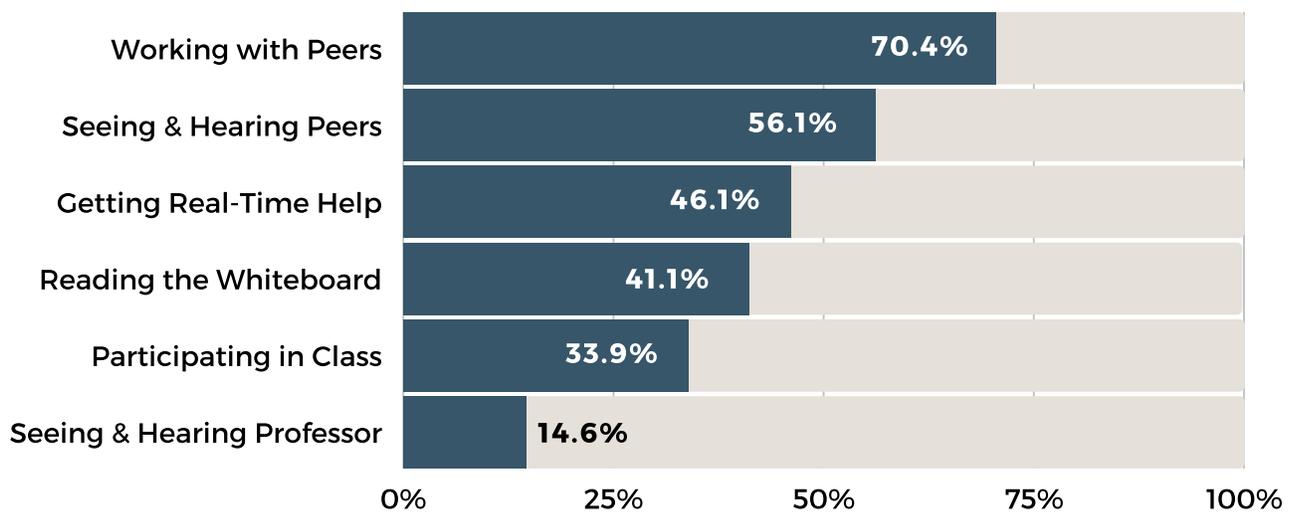
Figure 12: % of In-Person Students Who Reported Challenges With ...

Category	Percentage
Working with Remote Peers	78.1%
Whole-Class Discussions	69.7%
Seeing Remote Peers	57.7%
Hearing Remote Peers	39.7%
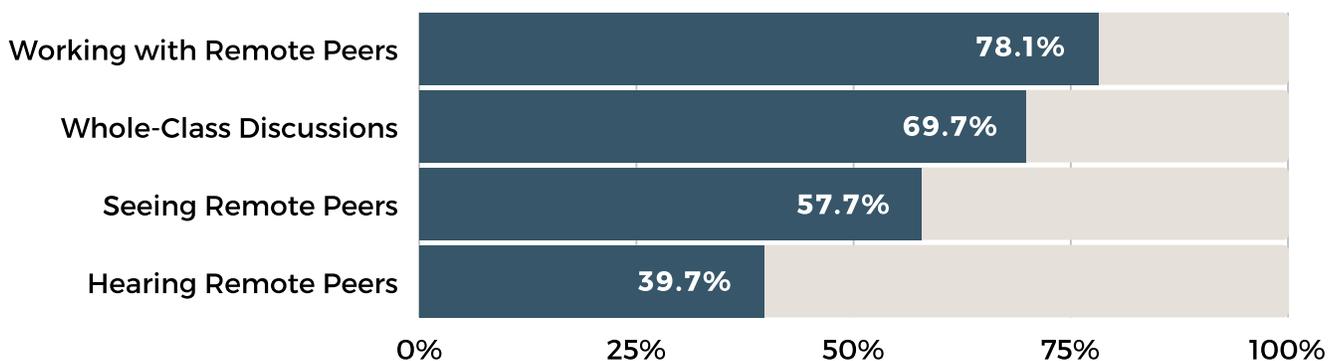
ACADEMIC TECHNOLOGY

Perhaps unsurprisingly, Canvas and Zoom were the most commonly used technology tools and a wide majority of our instructors indicated they "always" used them to teach their courses this fall. While this may not be notable at most institutions, it is worth remembering that Wake Forest had not formally introduced faculty to Canvas when we were forced into remote teaching last spring. That over 94% of our respondents reported using Canvas at least some of the time is a testament to the significant efforts of our instructors and the instructional technologists who supported them this summer. This work will also have lasting benefits for students, as it is unlikely this many faculty would have adopted Canvas otherwise.

Figure 13: **Extent to Which Instructors Used The Following Technologies**
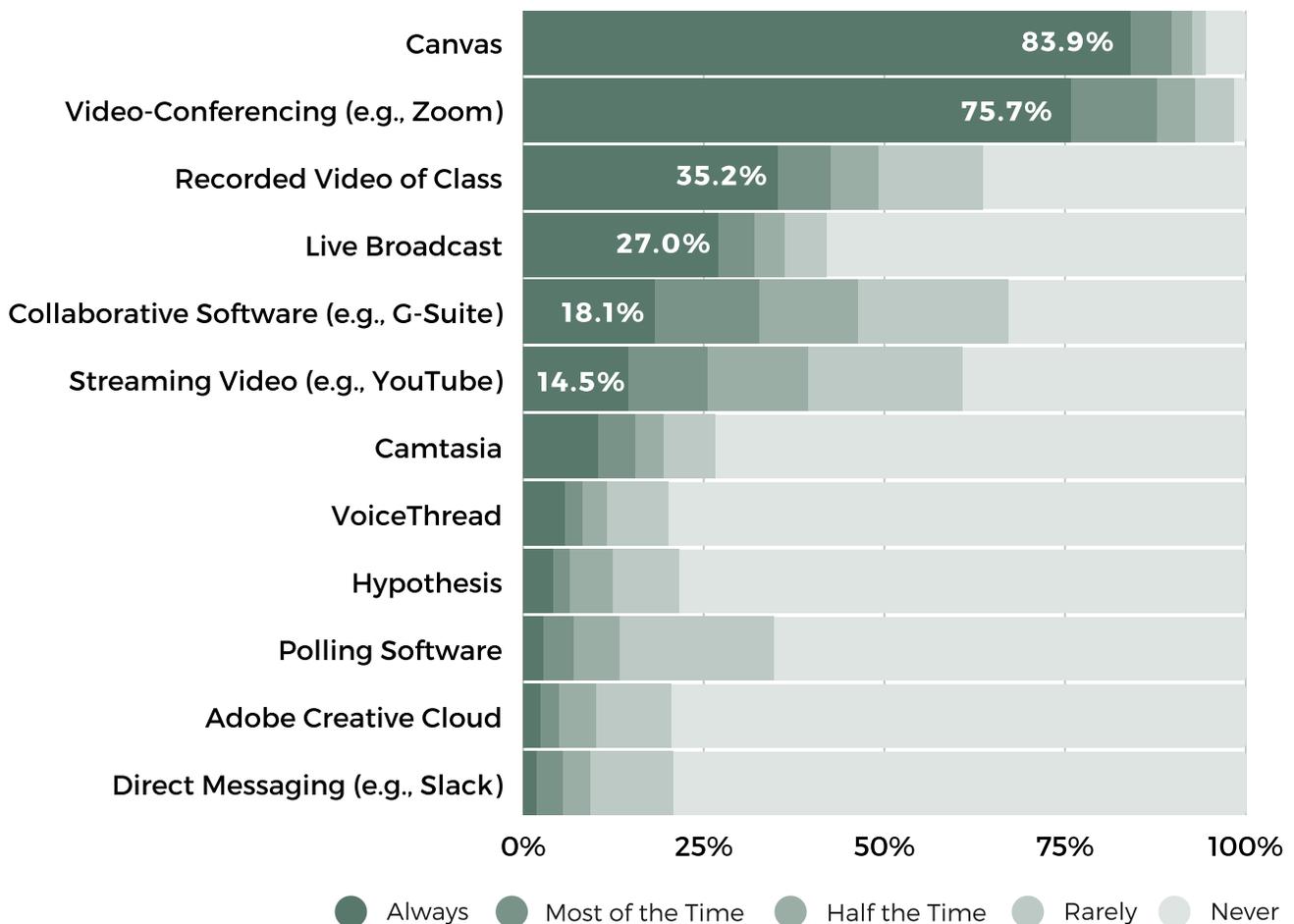
Beyond Canvas and Zoom, many instructors made use of Google applications, recording software, and video hosting/streaming services. Although Camtasia and YouTube were heavily used, a number of instructors indicated they were looking forward to learning more about the Kaltura platform being introduced this spring. As we noted above, the use of equipment for streaming in-person classes was polarizing. While 27% of our respondents indicated they always used this equipment, a full 58% indicated they never attempted to stream. Although other tools like VoiceThread and Hypothesis were used less often, qualitative comments make clear they were beloved by the instructors and students who used them.

As noted above, some students and instructors continue to have challenges with hardware and internet connectivity. It was also clear that a number of instructors were purchasing their own equipment, despite the university setting aside teach-from-home resources.

Figure 14: **% of All Student Respondents Who Would Like Instructors to Continue Using ___ When We Return to Traditional Instruction**

Category	Percentage
Recorded Lectures	48.4%
Zoom Office Hours	40.4%
Blended Coursework	35.2%
Interactive Videos	28.6%
Zoom Group Work	28.2%
Digital Collaboration Tools	26.0%
Digital Annotation	17.6%
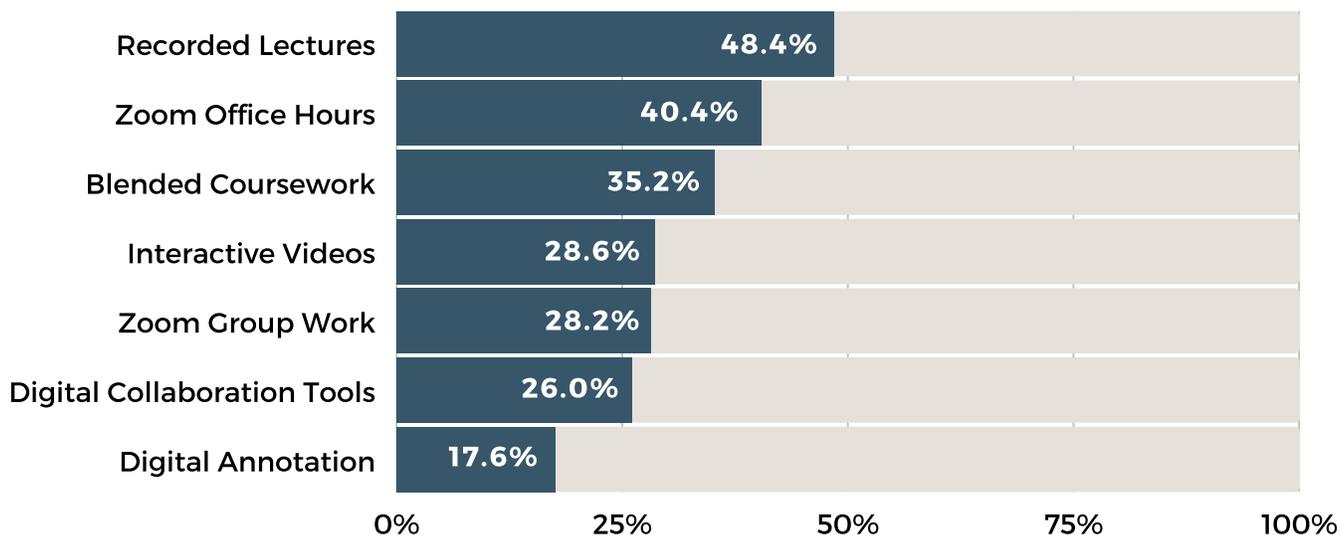
Figure 14 summarizes some of the most interesting data in this report. We asked students what features of their current learning experience they would like to continue when we revert to "traditional" in-person instruction. Almost 50% of our students indicated they would like instructors to continue recording their lectures, a finding that is consistent with their qualitative responses. When asked to describe an online activity or assignment that helped them learn, 85 of the 434 student respondents mentioned recorded lectures, second only to collaborative learning activities.

SUPPORT FOR TEACHING

Figure 15: **Extent to Which Instructors Felt Prepared to Teach in Fall 2020 (N = 445)**

27.4%	49.0%	21.2%	

0%   25%   50%   75%   100%

● Very Prepared   ● Prepared   ● Somewhat Prepared   ● Unprepared   ● Very Unprepared
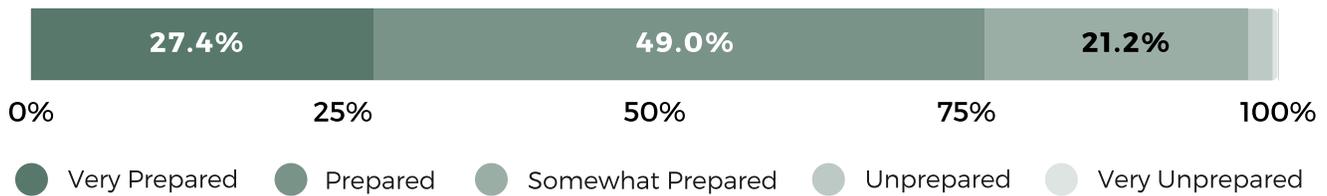
Given the resources devoted to their preparation this summer, we were pleased to see that just under 98% of our instructors felt prepared and over 25% felt very prepared to teach in an entirely new modality this fall. Our peer learning communities and conversations with departmental colleagues were the most commonly identified sources of support. We were also pleasantly surprised to see that over 20% of our respondents thought our informal Remote Teaching Facebook Group made a positive contribution to their preparation this semester.

Figure 16: **% of All Instructors Who Identified ___ As Positive Contribution**

Peer Learning Communities	77.1%
Conversations with Colleagues	69.9%
IS Technology Workshops	40.2%
Department-Based Initiatives	38.5%
Teaching Online @ Wake Course	35.0%
Remote Teaching Facebook Group	20.7%
Disciplinary Society Resources	10.9%
CAT Book Discussions	7.9%

0%   25%   50%   75%   100%
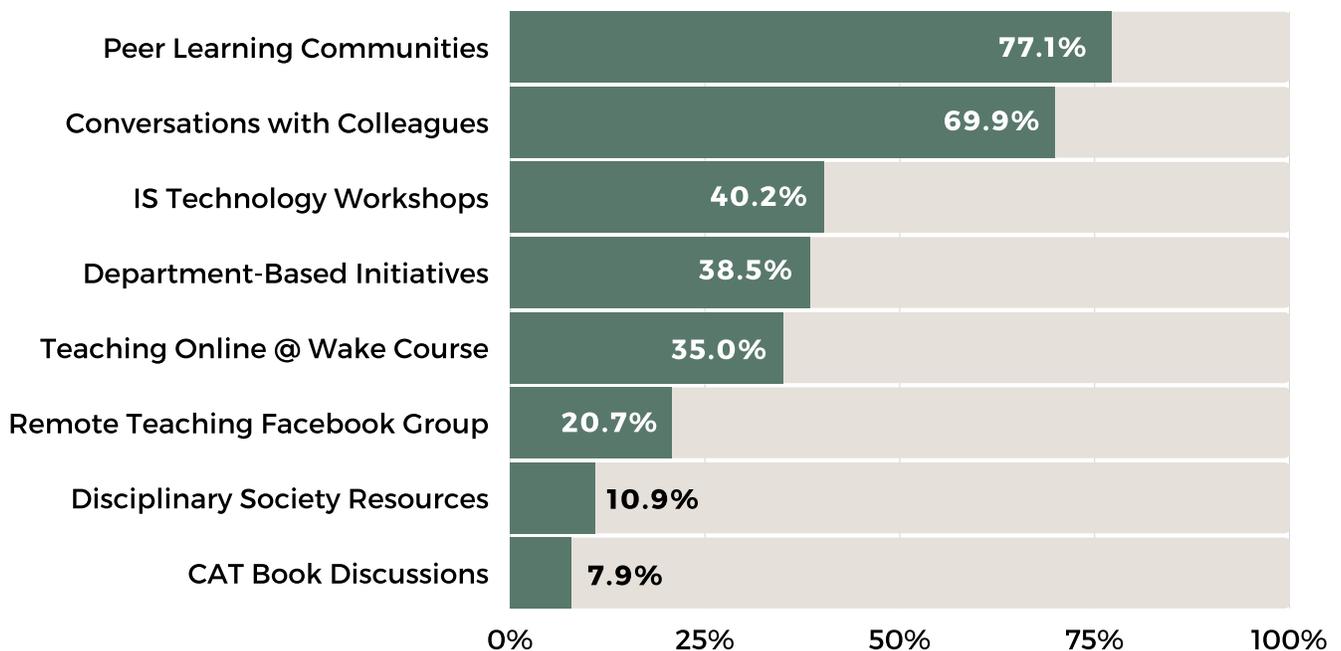
As a rule, faculty expressed appreciation for the support the university has provided and continues to provide. When we asked how we could better support them moving forward, the most common response was to praise the work we've already been doing (including positive references to the PLC, the Facebook Group, and our blog). Some provided helpful suggestions for specific programming, and a handful wanted to make sure those reading this report understood how hard it was to teach this semester, even with support. Finally, a few expressed a desire for more specific workshops on technology tools.

> **"**
> The faculty learning communities worked well; they were well-conceptualized and well-ordered, and I think it was a good use of my time. The Facebook page was a great resource: both entertaining and useful. When I compare my experience with friends teaching at other universities, mine seems better. **"**

> **"**
> I appreciated the flexibility of the Peer Learning Communities--we could tailor the "syllabus" to meet the needs of our department. I also appreciate CAT offering various tools and resources, but not requiring any of them, so that we could meet the needs of our individual classes and students by selecting and tailoring resources. Please continue trusting faculty to make sound decisions. **"**

> **"**
> [I hope] it is understood how much extra effort was required for adjusting to these new modalities … I was acutely aware of my limitations in this reality. And for all my preparation and understanding, my mental bandwidth for adjusting/improving/pivoting was SUPER LOW. In a lot of situations I found myself aware of a problem but just couldn't fix it due to external or other circumstances. I suppose I just want to say that I hope all this is recognized. **"**

As a first step toward assessing the long-term impact of our work, we also asked respondents whether their approach to teaching and teaching development had changed this semester. The results summarized in Figure 17 are especially encouraging. A full 44% of our faculty indicate that they now talk more with their departmental colleagues about teaching than they did in the past, indicating that a key outcome of our peer learning communities was achieved. Moreover, close to a third of all faculty report reading more about teaching and working more closely with instructional technologists and teaching support staff. It is also worth noting that a sizeable number of our respondents used the following open-ended question to explain that they did not check these boxes because they had always done such things, so these numbers are likely an undercount of those who have adopted these important habits.

Talk More About Teching With Department Colleagues	43.5%
Read More About Teaching	29.5%
Interact More With Teaching Support Staff	29.5%
Work More with Instructional Technologists	28.4%
Talk More About Teaching With Other Colleagues	19.0%

0%   25%   50%   75%   100%
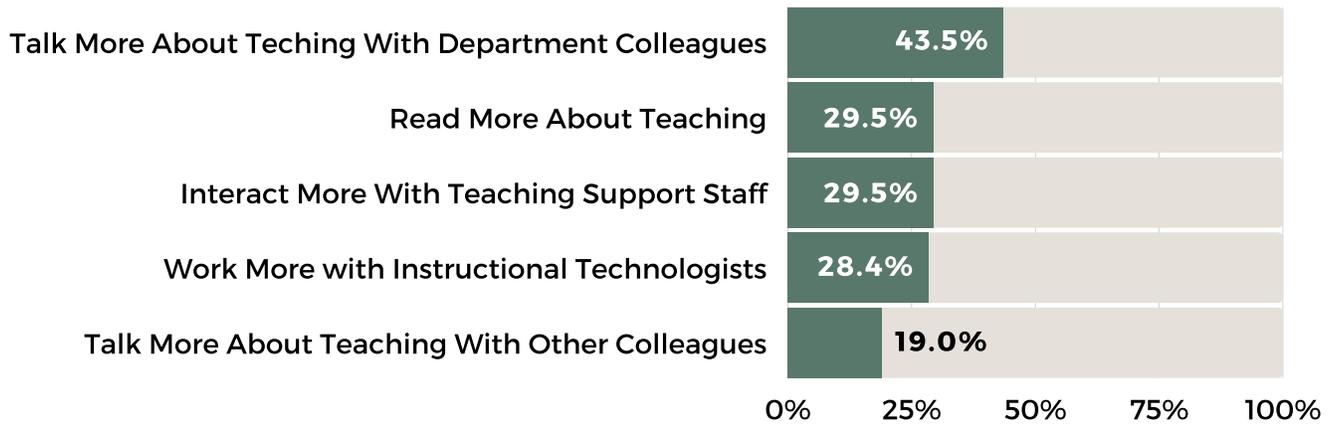
> " The PLC program was amazing! I wish we could do something like it when it's not a response to crisis: I feel FAR more connected to some of my colleagues than I ever have before thanks to these conversations. I think we also learned quite a bit from each other! "

> " I cannot express to you all how amazing you all were in all of this. From the bottom of my heart, I thank you ... going through [the PLC] made us all better teachers even (and maybe especially) f2f teachers. "

> " The Peer Learning Community was AMAZING. Such a fantastic experience that prepared us all as much as possible, I think. "

> " I love how active the CAT is being about addressing challenges from the Fall and staying present without asking too much of us. "

BUILDING COMMUNITY

As noted in Figure 44, over 85% of faculty utilized community-building efforts with students, with an emphasis on 1:1 meetings or office hours, collaborative learning activities, and having students turn their cameras on during synchronous learning sessions.

Figure 44: % of Faculty Respondents Who Built Community by Creating / Providing / Encouraging …

Category	Percentage
Regular 1:1 Meetings / Office Hours	85.7%
Collaborative Learning Activities	73.1%
Camera Use in Synch Sessions	60.3%
Instructor Presence in Asynch Work	57.5%
Conversations Before / After Class	47.2%
Short Personal Videos	34.6%
Optional Social Sessions	14.1%
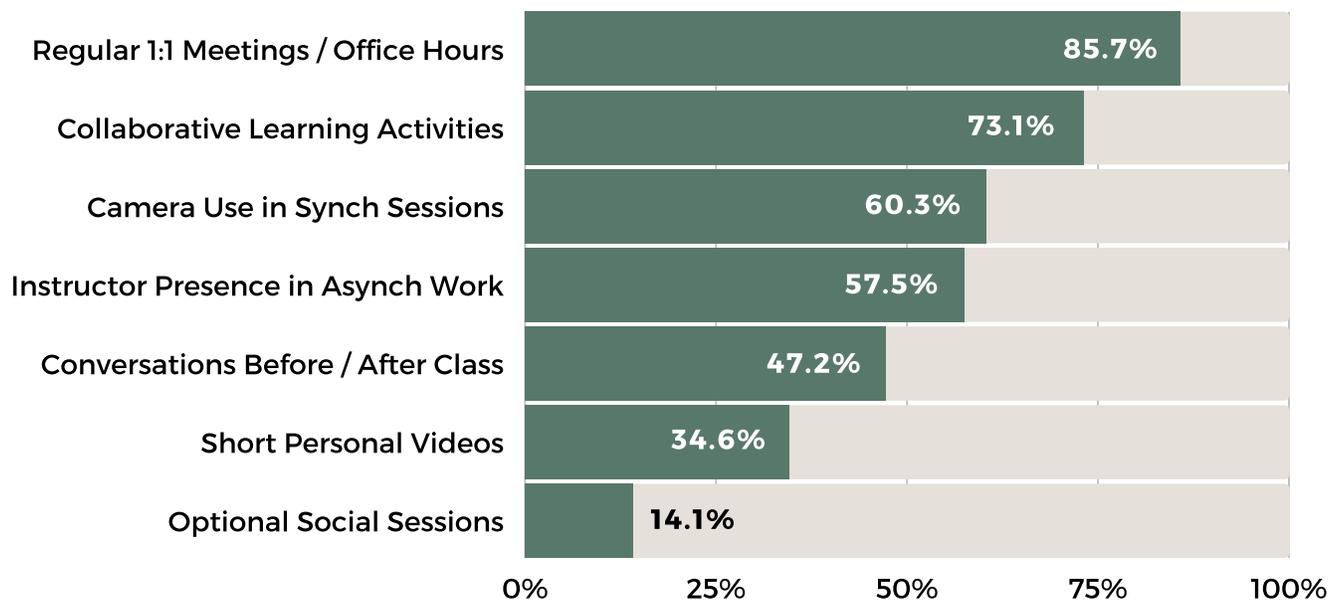
We also asked students whether these strategies helped them feel connected in their Blended and Online courses (Figures 45 and 46). Happily, the strategies students found most effective (1:1 meetings and collaborative learning activities) were also the ones instructors were most likely to use. Camera use was more complicated for students. Open-ended feedback suggests that some students have a strong desire for policies requiring camera use, while others consider such policies a violation of their privacy.

Connection and community surfaced as a major theme throughout the open-ended qualitative responses on the student survey. Students reported feeling less connected to their faculty and fellow students in their online classes and, as previously noted, expressed an overwhelming desire for more collaborative learning opportunities. Many also highlighted their desire for the more informal, social, and spontaneous interaction that happens in in-person classes.

Figure 45: Extent to which Students Felt Connected in their Blended Courses when Instructors Provided/Encouraged ...

	Strongly Agree
Regular 1:1 Meetings / Office Hours	35.7%
Collaborative Learning Activities	35.4%
Conversations Before / After Class	33.7%
Instructor Presence in Asynch Work	32.0%
Short Personal Videos	30.7%
Optional Social Sessions	27.4%
Camera Use in Synch Sessions	25.3%

0% 25% 50% 75% 100%

● Strongly Agree ● Agree ● Neutral ● Disagree ● Strongly Disagree
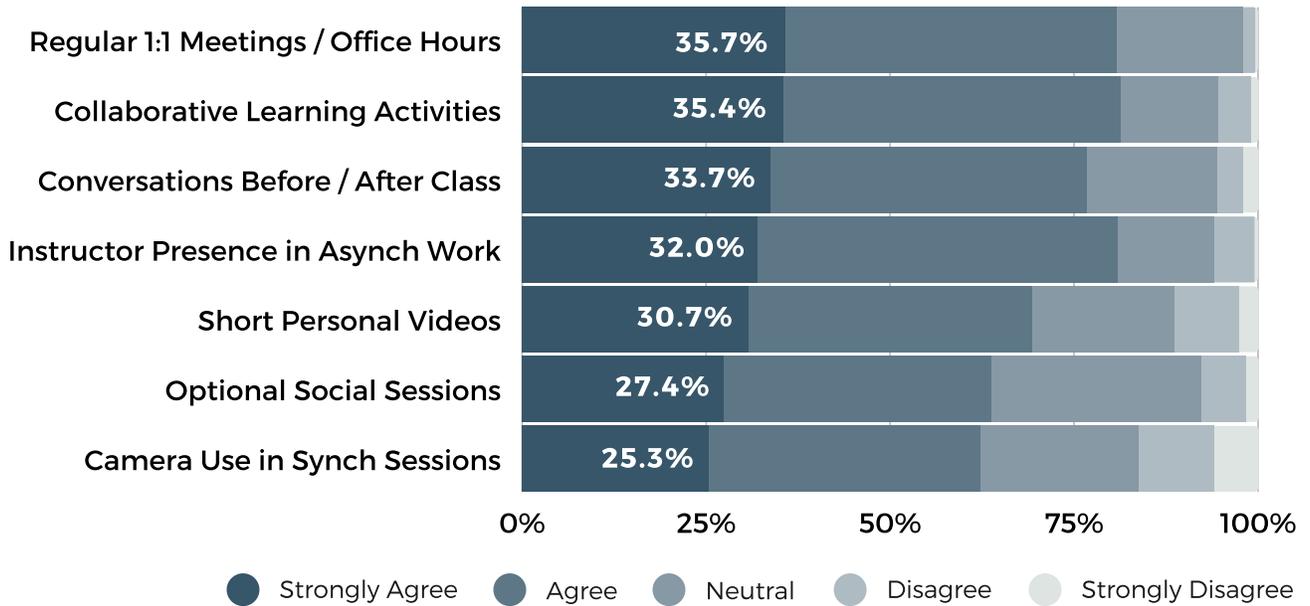
Figure 46: Extent to which Students Felt Connected in their Online Courses when Instructors Provided/Encouraged ...

	Strongly Agree
Regular 1:1 Meetings / Office Hours	41.8%
Instructor Presence in Asynch Work	35.8%
Collaborative Learning Activities	35.1%
Conversations Before / After Class	32.2%
Short Personal Videos	30.1%
Optional Social Sessions	26.6%
Camera Use in Synch Sessions	22.3%

0 25 50 75 100

● Strongly Agree ● Agree ● Neutral ● Disagree ● Strongly Disagree
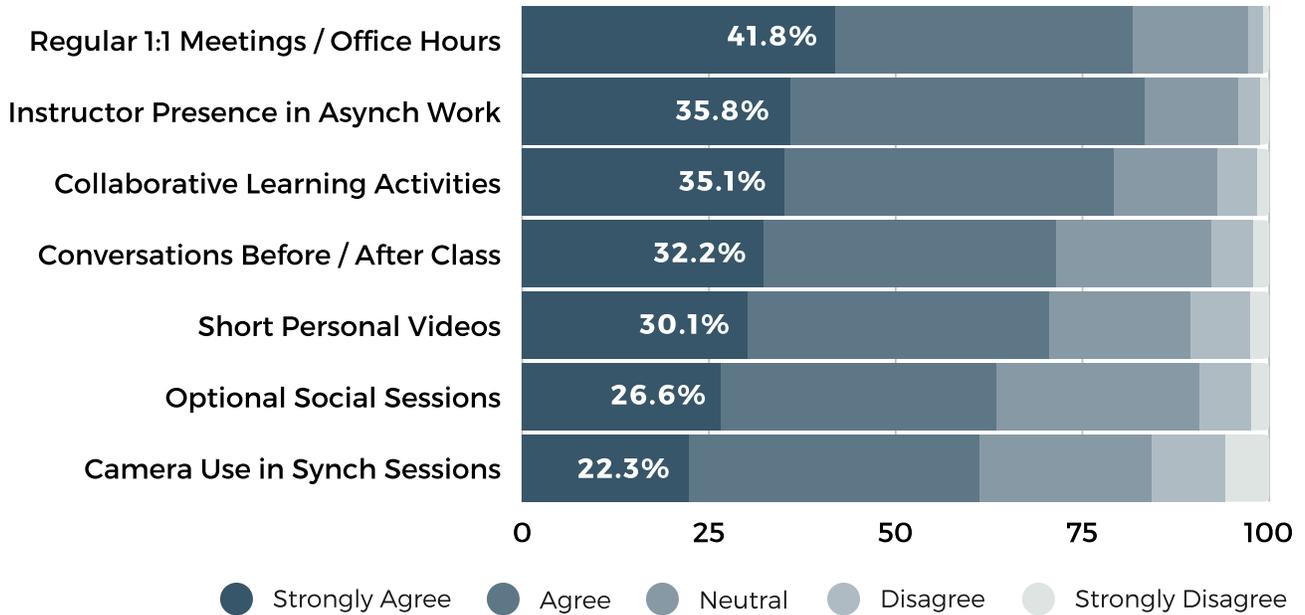
TEACHING & LEARNING ACTIVITIES

As these surveys were designed and delivered by the Center for the Advancement of Teaching, a majority of the questions were about specific teaching and learning activities. The data we collected in our faculty survey has given us insight into how our instructors were teaching and our student survey has helped us understand when our students were most engaged. We asked both groups about a series of evidence-informed pedagogical strategies as well as specific methods for implementing those strategies in online and blended courses.

In this section, we walk you through the results--both quantitative and qualitative--for each pedagogical strategy. We begin with lectures, move through whole-class and small-group discussions, spend a good amount of time on group work, and end with a brief discussion of other activities that don't fit within one of those broad umbrellas. In each case, you will be able to compare how often the strategy is used in online, in-person, and blended courses; the frequency of specific methods for implementing those strategies; and the degree to which students were engaged when those methods were employed.

We know this is a lot of data. To help make sense of it, we end this section with four particularly important summary figures (40-43). Figures 40 and 42 rank each method according to faculty use (in blended and online courses, respectively). Figures 41 and 43 then rank those same methods according to levels of student engagement. While we were pleased to see there was some alignment in these rankings, any misalignment will be instructive for those hoping to make their courses more engaging this semester.

At the end of the student survey, we asked all respondents to tell us about an online activity or assignment that helped them learn this semester. Although responding was optional, 434 students had experiences they wanted to share. Some commonly cited activities (office hours, practice problems, etc.) were mentioned by 10-20 students. But the two most commonly cited experiences were mentioned again and again. 85 students expressed appreciation for recorded lectures and 126 students--close to 30% of all open-ended respondents--expressed appreciation for activities that allowed them to engage with their peers.

LECTURES & DEMONSTRATIONS

**Figure 18:** Degree to Which Instructors Employed Lectures in ___ Class Sessions

	Almost Always	Often	Sometimes	Rarely	Never
In-Person	42.6%	29.2%			
Synchronous	41.4%	23.1%			
Asynchronous	47.4%	18.5%			

0%   25%   50%   75%   100%

● Almost Always   ● Often   ● Sometimes   ● Rarely   ● Never
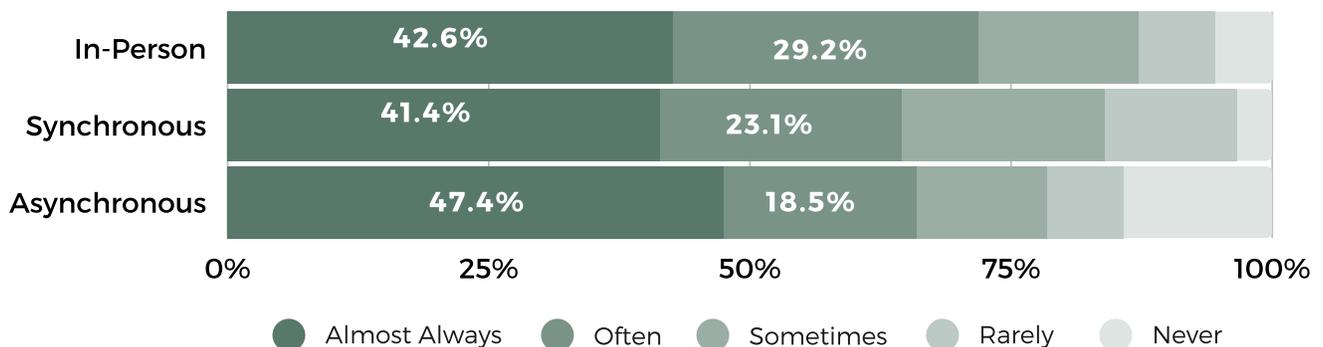
Figure 19: % of Students Who Experienced Lectures in ___ Class Sessions

In-Person	96.2%	
Synchronous	96.8%	
Asynchronous	90.6%	

0%   25%   50%   75%   100%
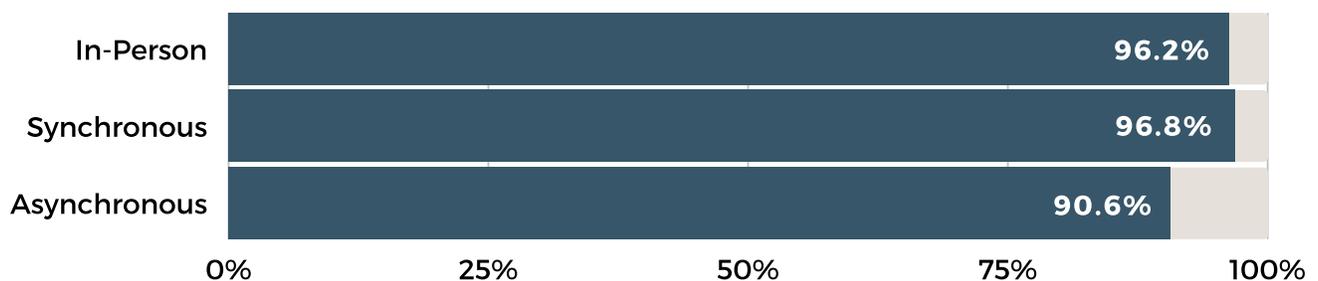
Apart from whole-class discussions, lecturing was the most common teaching strategy used across modalities. Yet no approach to lecturing dominated, suggesting instructors employed a variety of lecturing strategies. Figure 18 suggests the modality was not correlated with an instructor's ability to lecture and Figure 20 suggests our instructors had a slight preference for long lectures, whether in-person (in blended courses) or via Zoom (in online courses).

Figure 21 suggests that students appreciate long lectures when they are in person, but less so when they are online (whether recorded or live). Qualitative feedback confirms that they felt less engaged with long synchronous lectures, and even less so with long recorded lectures. On the other hand, a significant proportion of students report engagement with short lectures of all varieties (in-person, synchronous, and pre-recorded). In fact, students in both modalities were more likely to be engaged with short, recorded lectures than with long synchronous lectures.

> " Listening to several hours of [live] lectures done remotely can really tire me out and make me less attentive to the information. "

**Figure 20: % of Instructors Who Delivered Lectures That Were …**

… in Blended Courses

Long, Live, & Via Zoom	32.8%
Long, Live, & In Person	43.6%
Long & Recorded	20.4%
Short & Recorded	29%
Short, Live, & Via Zoom	24.2%
Short, Live, & In Person	31.2%

0% 25% 50% 75% 100%

… in Online Courses

Long, Live, & Via Zoom	41.5%
Long & Recorded	19%
Short & Recorded	32.8%
Short, Live, & Via Zoom	34.5%

25% 50% 75% 100%
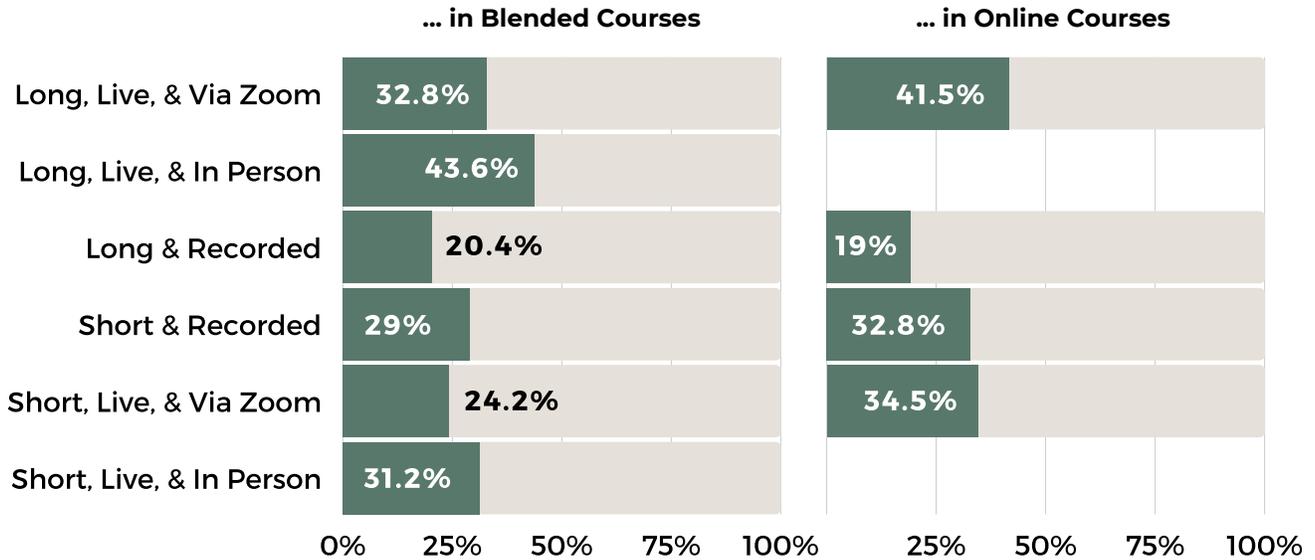
Figure 21: % of Students Who Felt Engaged When Lectures Were …

… in Blended Courses

Long, Live, & Via Zoom	64.0%
Long, Live, & In Person	85.6%
Long & Recorded	45.3%
Short & Recorded	72.9%
Short, Live, & Via Zoom	74.8%
Short, Live, & In Person	76.8%

0% 25% 50% 75% 100%

… in Online Courses

Long, Live, & Via Zoom	72.7%
Long & Recorded	49.3%
Short & Recorded	82.4%
Short, Live, & Via Zoom	77.1%

25% 50% 75% 100%
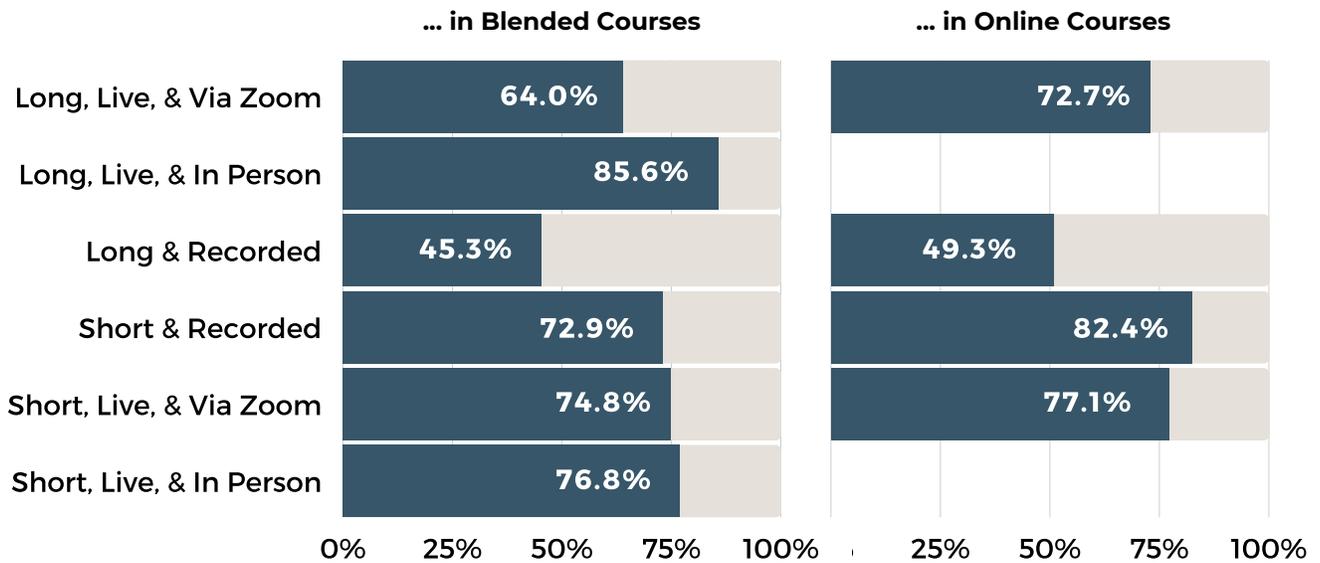
As noted above, 85 students singled out recorded lectures as the one experience that helped them learn, and 48.4% of students indicated they would like to continue learning via recorded lectures in the future (Figure 14). While there were some minority voices who reported they had difficulty learning from recorded lectures of any length, it seems safe to conclude that our online students prefer short recorded lectures over synchronous lectures, and that they prefer synchronous lectures over long recorded lectures. Happily, Figure 20 reveals that our faculty were least likely to lecture via long recordings.

> " [I learned from] pre recorded lectures, I was able to go back if there was something I didn't quite grasp the first time. I could also pause and take notes as I went along. For material I felt I knew well I could play it back at a faster speed but could still pause it if I needed to. "

> " I really enjoyed the short VoiceThread lecture videos that had short questions throughout. These kept me engaged in the material. In contrast, I did not enjoy long 20-50 minute lecture videos. I could not stay engaged and did not enjoy them at all. "

WHOLE-CLASS DISCUSSIONS

Figure 22: Degree to Which Instructors Employed Whole-Class Discussions in ___ Class Sessions
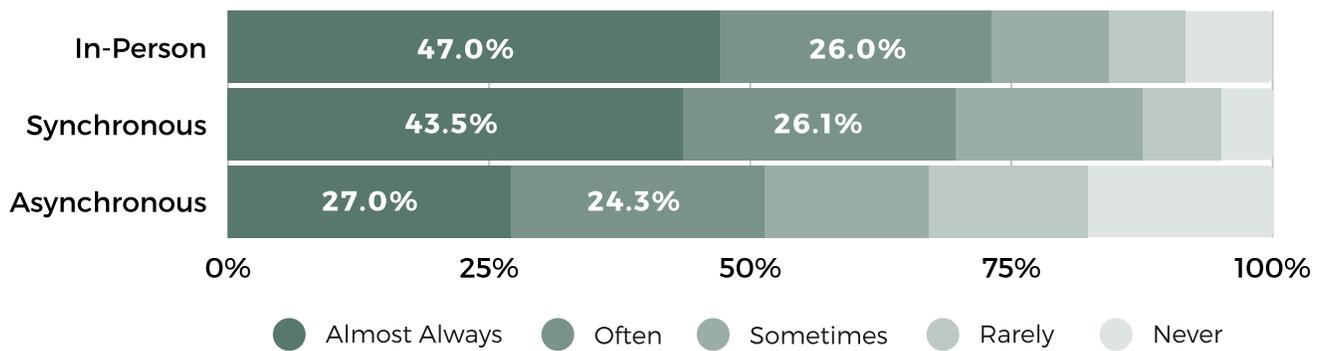
Figure 23: % of Students Who Experienced Whole-Class Discussions in ___ Class Sessions
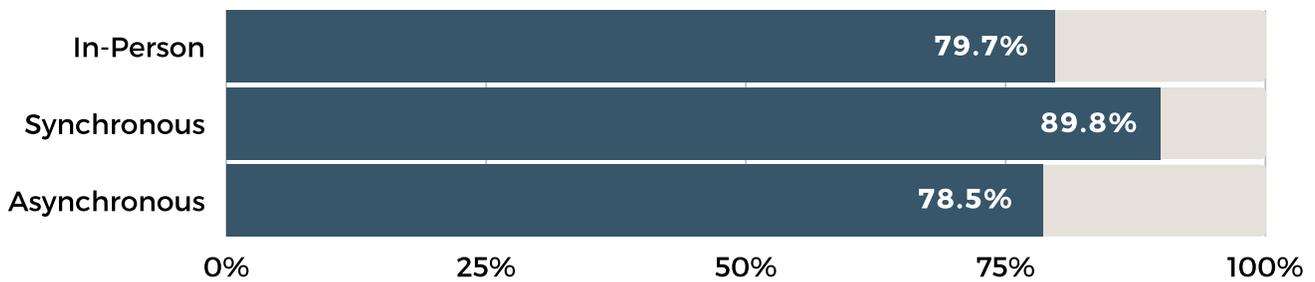
Whole-class discussion was the most common teaching strategy adopted by instructors teaching live sessions, whether in person or online. Although Figure 23 makes it seem as if discussions were more common in synchronous class sessions, that is likely an artifact of students having many more opportunities to experience synchronous discussion. Figure 24 reveals that instructors teaching blended courses were just as likely to use whole-class discussion in their in-person classes as they were on Zoom. At the same time, they were almost as likely to use digital discussion boards as those teaching fully-online courses.

Figure 24: **% of Instructors Who Used Whole-Class Discussions That Were ...**

... in Blended Courses

Live and In Person	59.7%
Live and Online	63.4%
Via Text Forums	45.7%
Via Audio/Video Forums	21.5%
Via Digital Chats	9.7%

0% 25% 50% 75% 100%

... in Online Courses

|	
Live and Online	79.3%
Via Text Forums	48.5%
Via Audio/Video Forums	26.8%
Via Digital Chats	10.0%

25% 50% 75% 100%
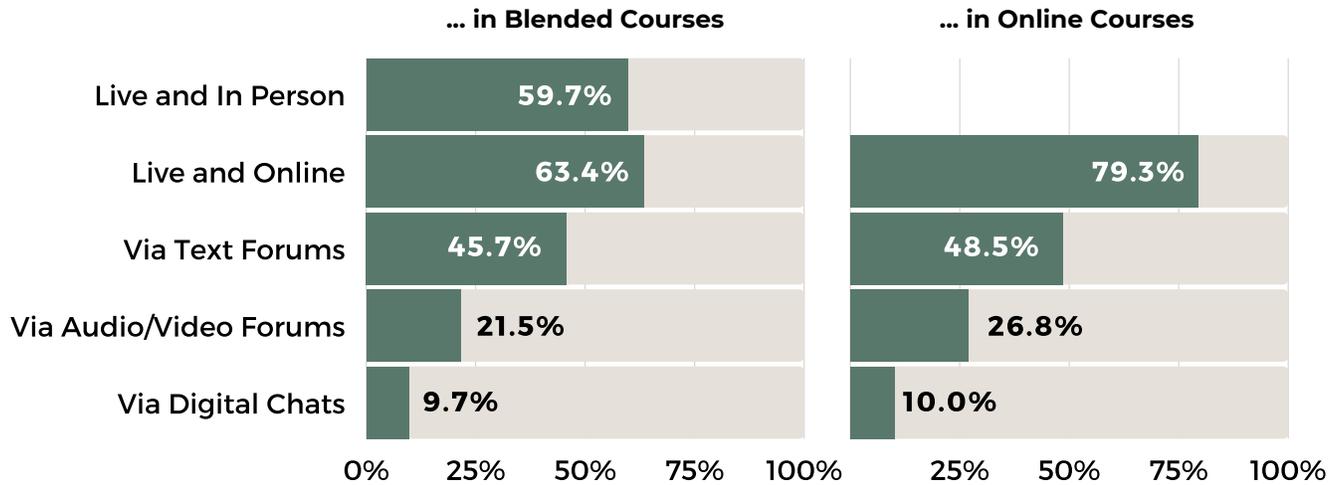
Figure 25: **% of Students Who Felt Engaged When Whole-Class Discussions Were ...**

... in Blended Courses

Live and In Person	91.4%
Live and Online	68.4%
Via Text Forums	54.5%
Via Audio/Video Forums	48.9%
Via Digital Chats	53.8%

0% 25% 50% 75% 100%

... in Online Courses

Live and Online	77.0%
Via Text Forums	62.7%
Via Audio/Video Forums	52.9%
Via Digital Chats	54.1%

25% 50% 75% 100%
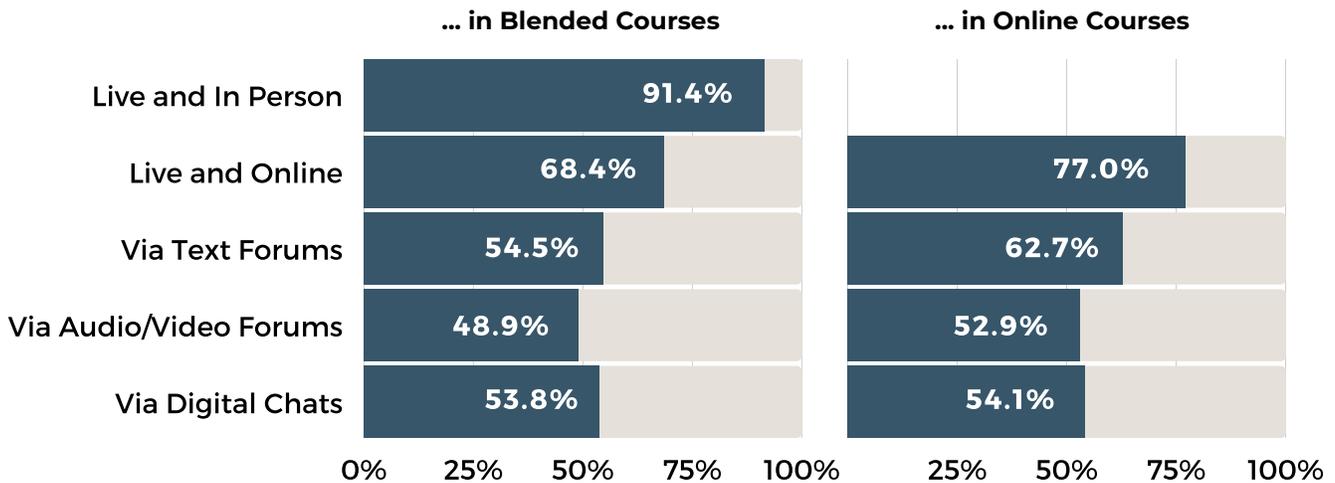
Unsurprisingly, students were most engaged with whole-class discussions when they were in-person (Figure 25). While the quantitative data suggests that students were less enthusiastic about synchronous discussions and digital discussion boards, a closer look at the qualitative feedback reveals that these strategies were polarizing for students. Some students described discussion boards as useless "busy work," but many more singled them out as the activity that most helped them learn. One student (quoted below) experienced discussion boards in both ways. While a number of students expressed a preference for whole-class, synchronous discussions over synchronous lectures, others indicated it was awkward to participate in large groups on Zoom, especially when most students have their cameras turned off. They preferred live, small-group discussions, instead.

> " I liked my online classes during which my professors encouraged engagement through active discussion and encouraged us to keep our cameras on. I was unengaged in my classes during which my camera was off and the teacher simply lectured. "

> " Discussion posts and replies for fully online classes helped me to know my classmates a little better. I know the classmates for a class where did this significantly better than my classmates in another class where we don't do this. "

> " I had online discussion board requirements in all three courses but I felt it was only effective for one course where the professor truly fostered discussion (rather than provide strict instructions and require us to touch on so many points from the articles). "

SMALL GROUP DISCUSSIONS

Figure 26: **Degree to Which Instructors Employed Small-Group Discussions in ___ Class Sessions**

In-Person: 12.2% | 17.8%
Synchronous: 23.8% | 25.9%

0% 25% 50% 75% 100%

● Almost Always ● Often ● Sometimes ● Rarely ● Never
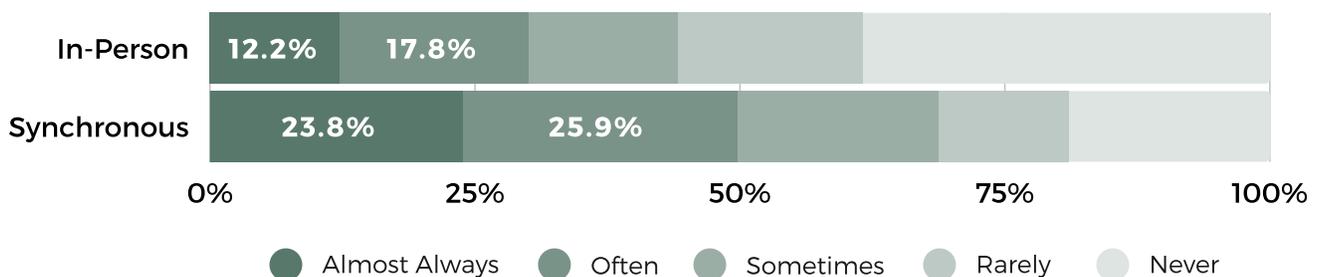
**Figure 27:** **% of Students Who Experienced Small-Group Discussions in ___ Class Sessions**

In-Person: 46.1%
Synchronous: 93.1%

0% 25% 50% 75% 100%
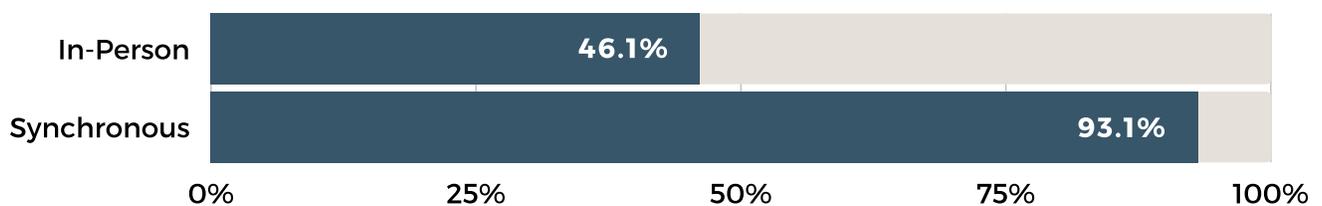
> " Breakout rooms were nice because it was a small group-not as intimidating as the whole class, and I participated more than I would have in person. "

Small-group discussion is the first strategy correlated with the modality of instruction. More specifically, Figure 26 suggests that instructors felt more comfortable using small-group discussions when students were in synchronous sessions than when they were in-person. This could be because they were worried about the spread of COVID-19 in mask-to-mask conversations or they simply found it easier to manage groups in Zoom breakout rooms.

Figure 28: % of Instructors Who Used Small-Group Discussions That Were …

… in Blended Courses | … in Online Courses

Live and In Person: 37.6%
Live and Online: 41.4%

Live and Online: 55.5%
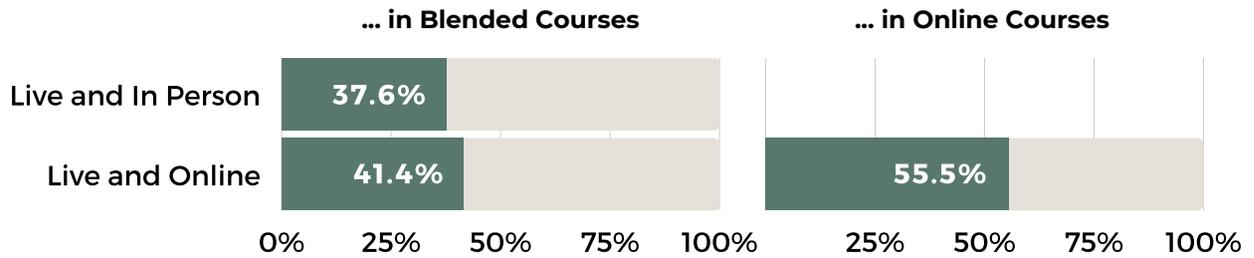
Figure 29: % of Students Who Felt Engaged When Small-Group Discussions Were …

… in Blended Courses | … in Online Courses

Live and In Person: 87.3%
Live and Online: 76.9%

Live and Online: 77.0%
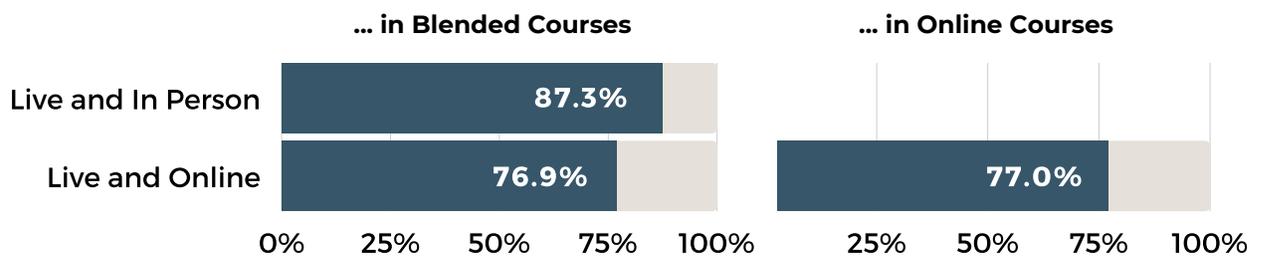
Although faculty report using whole-class discussions far more than they use small-group discussions in synchronous sessions, students may be more engaged in the latter. Consistent with our analysis of the qualitative data, a comparison of Figures 25 and 29 suggests that blended students are more likely to be engaged in small-group synchronous discussions than whole-class synchronous discussions. Interestingly, online students report equal engagement.

Like discussion boards, breakout rooms were polarizing for students. A handful of students expressed dissatisfaction with this strategy and group work more generally. Yet many more indicated that breakout rooms helped them learn and, just as importantly, build connections with their peers. One student (quoted below) found it easier to maintain these relationships if group membership remained constant throughout the semester.

> One engaging activity was being broken up into the same small groups each time for discussions. We got to know each other and it became more fluent. Opposed to courses where it was random groups and not a guarantee much would be accomplished.

GROUP WORK

**Figure 30:** Degree to Which Instructors Employed Group Work in ___ Class Sessions

	Almost Always	Often		
In-Person	9%	20.6%		
Synchronous	19.0%	24.9%		
Asynchronous	32.0%	36.8%		

0%   25%   50%   75%   100%

● Almost Always   ● Often   ● Sometimes   ● Rarely   ● Never
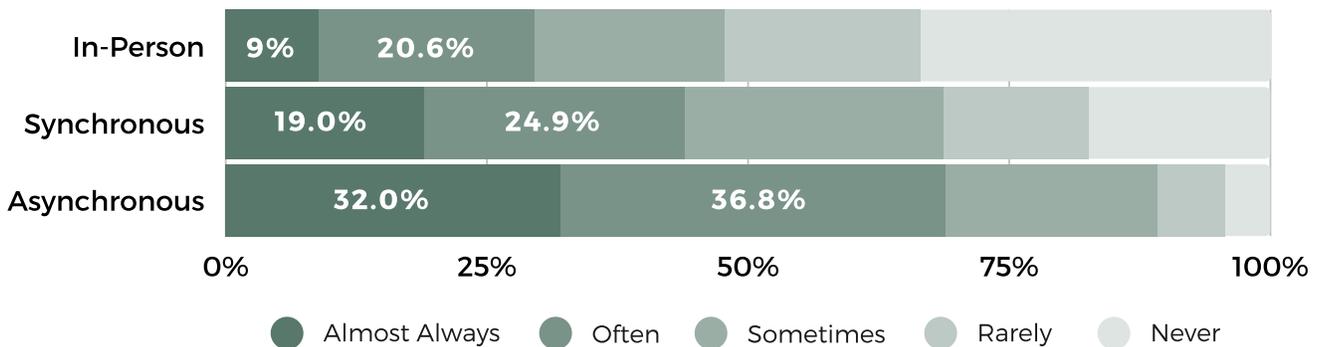
Figure 31: % of Students Who Experienced Group Work in ___ Class Sessions

In-Person	48.8%	
Synchronous	83.7%	
Asynchronous	52.9%	

0%   25%   50%   75%   100%
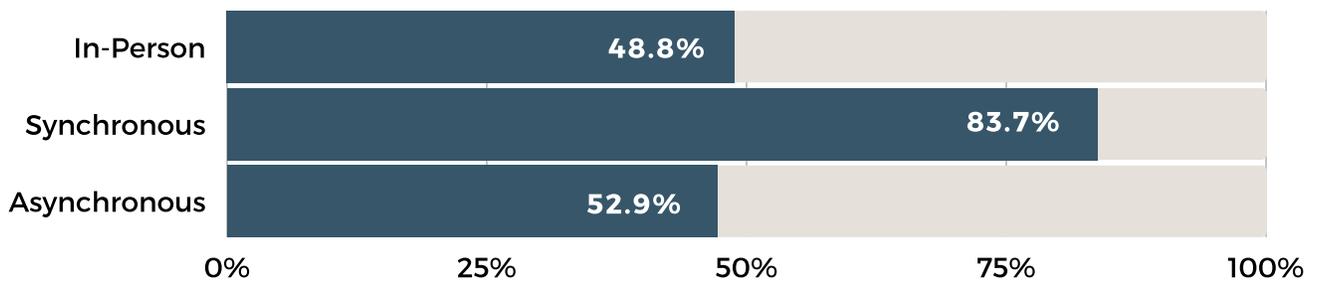
Like small-group discussions, group activities and assignments were more common among faculty teaching synchronously. While students were more likely to experience group work in one of their many synchronous sessions (Figure 31), faculty who incorporated asynchronous work into their courses were even more likely to assign group projects or activities (Figure 30). In the qualitative feedback, faculty were pleasantly surprised by how much students were able to learn when lectures were replaced by group activities.

> " Students broke up into groups of 5 (in a Zoom breakout room) and each chose an assigned role (recorder, questioner, explainer, etc.) ... I honestly think my students learned more this semester than in previous semesters because of the amount of work they were doing themselves (rather than listening to me). "

Consistent with Figure 30, Figure 32 suggests that faculty were most likely to assign group work in synchronous sessions or asynchronously, on students' own time. Figure 33 suggests that students were engaged with almost all group work, regardless of how it was implemented. As expected, there was a preference for in-person group-work. That so many students were engaged with asynchronous group work was more surprising.

**Figure 32: % of Instructors Who Employed Group Work That Was …**

	… in Blended Courses	… in Online Courses
On Their Own Time	64.5%	62.5%
In-Person, with In-Person Students	42.5%	
Virtual, with Remote & In-Person Students	24.7%	
Virtual, with Remote Students	57.5%	70.9%
In-Person, with Digital Tools	21.0%	
Virtual, with Digital Tools	27.4%	41.5%

0% 25% 50% 75% 100%   25% 50% 75% 100%
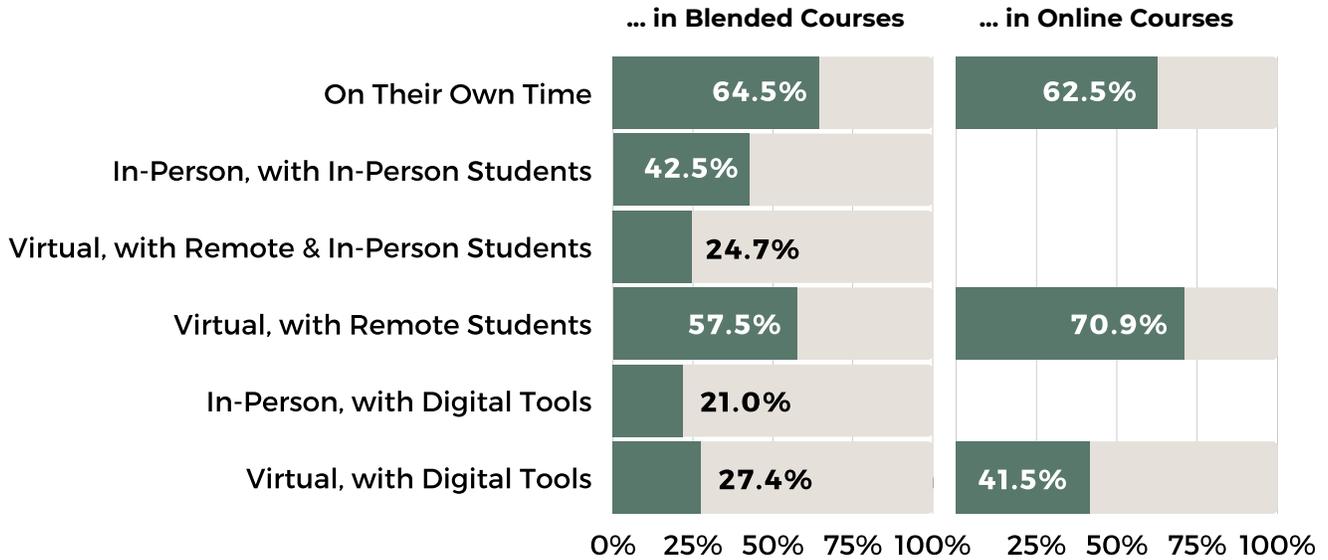
Figure 33: % of Students Who Felt Engaged When Group Work Was …

	… in Blended Courses	… in Online Courses
On Their Own Time	81.8%	81.3%
In Person, with In-Person Students	85.7%	
Virtual, with Remote & In-Person Students	65.1%	
Virtual, with Remote Students	75.7%	80.2%
In-Person, with Digital Tools	62.5%	
Virtual, with Digital Tools	68.2%	75.9%

0% 25% 50% 75% 100%   25% 50% 75% 100%
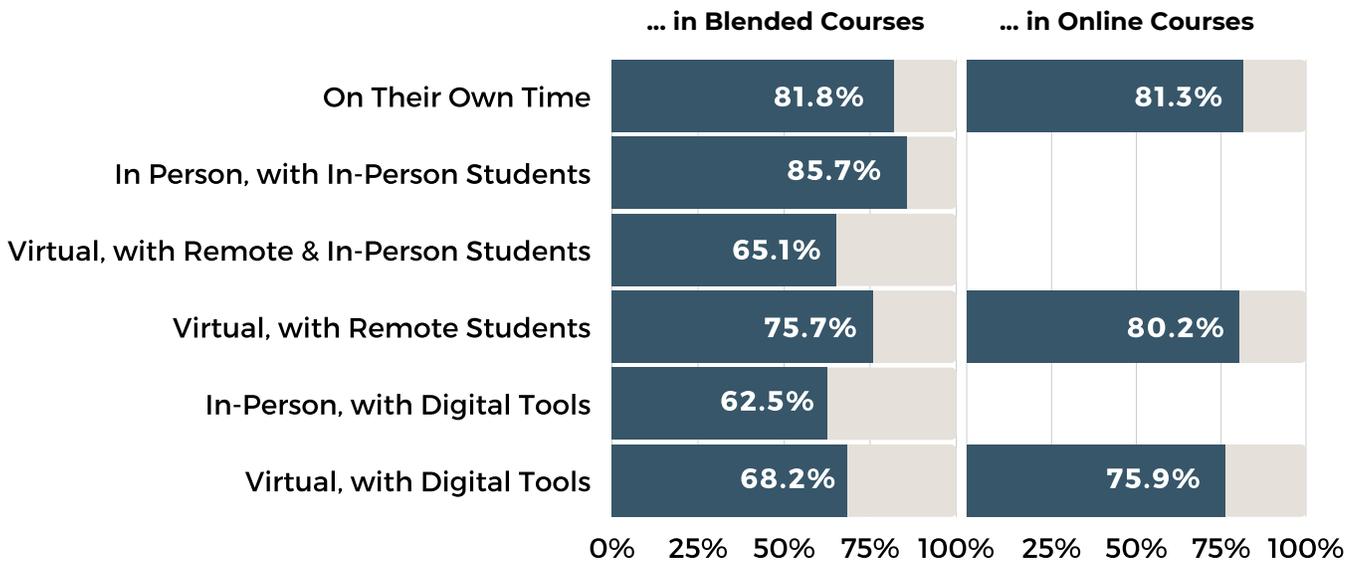
As previously noted, collaborative learning opportunities were the most commonly cited activities in an open-ended question about successful online assignments. While it is often difficult to draw strong conclusions from qualitative feedback, this is one case where the data is clear: students were deeply appreciative of opportunities to collaborate with one another.

> " I enjoyed sharing my writing responses with my classmates. **I felt most connected to them** when suggesting revisions and receiving feedback on my own writing [emphasis added]. "

Many explained that these peer-to-peer activities were valuable because they were the primary way students were able to make connections with peers this semester. While some assumed students would be satisfied with remote courses if they could be together with their peers on campus, this feedback suggests that students may not draw a sharp line between academic and social experiences. While many mentioned the social benefit of group work, others recognized its benefits when learning challenging material.

> **"**
> Having a consistent group of people to help you with challenges and to learn from was greatly beneficial. I found that I bonded with my group and have new friendships because of it … Many other professors regularly engaged in one on one meetings to connect with students, but it is also important that the students are connecting to one another.
> **"**

> **"**
> My professor assigned our class into homework groups … It was really helpful to be able to see and share in the work of my peers … We all improved and learned more about the texts we were studying by seeing it through perspectives other than our own.
> **"**

Taken together, these results paint a complex picture. At a high level of abstraction, students seem to prefer in-person learning to online learning and synchronous learning to asynchronous learning. Yet the collaborative activities they most appreciated were more likely to be a part of courses with asynchronous elements and least likely to be part of in-person, mask-to-mask class sessions.

INDEPENDENT PRACTICE

**Figure 34:** **Degree to Which Instructors Assigned Independent Practice in ___ Class Sessions**

	Almost Always	Often	Sometimes	Rarely	Never
In-Person	15.8%	18.1%			
Synchronous	11%	14.8%			
Asynchronous	32.0%	36.8%			
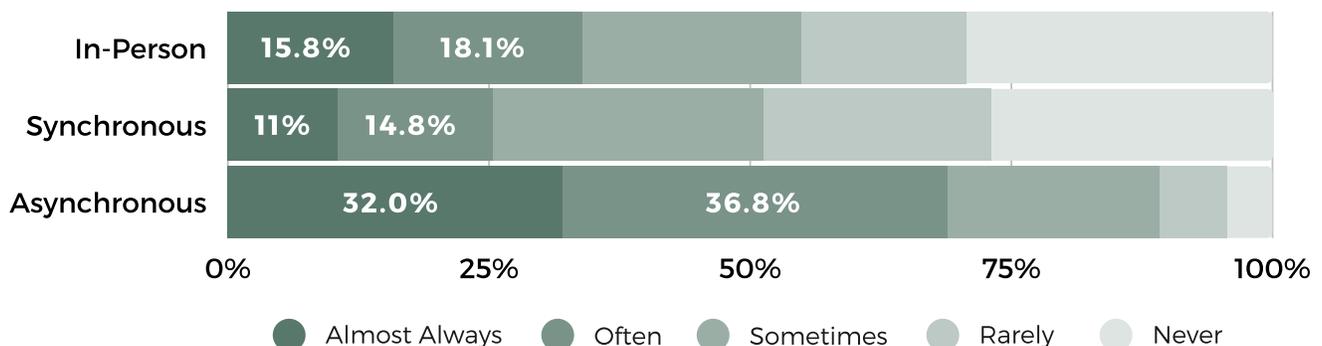
Figure 35: % of Students Who Were Assigned Independent Practice in ___ Class Sessions

In-Person	52.6%
Synchronous	70.0%
Asynchronous	86.6%

0%   25%   50%   75%   100%
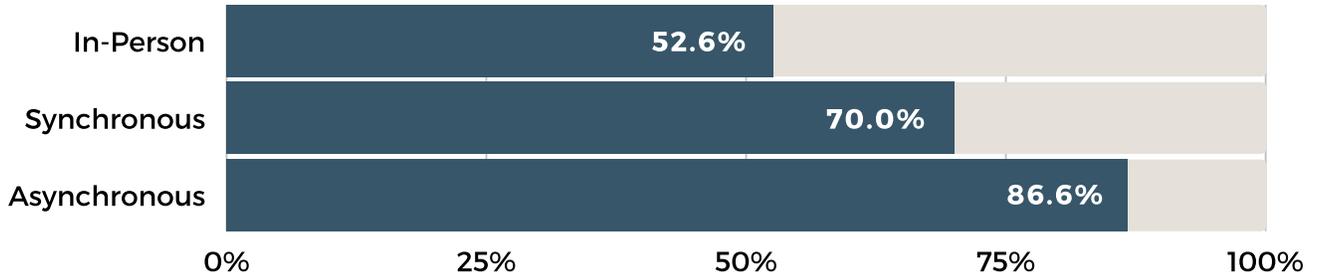
As to be expected, activities that ask students to engage in independent practice were most likely to be assigned asynchronously. Many believe that asynchronous courses are inferior because they involve so much independent practice, asking students to "teach themselves." We note two difficulties with this conclusion. The first is that, as our previous results make clear, it is entirely possible to engage in collaborative activities asynchronously. And some activities, like group projects or study groups, are easier to do outside of the live class time. But more importantly, the fact that so many of our instructors asked their students to engage in independent practice during live sessions (whether online or in-person) suggests that independent practice is an essential tool in the toolbox of all skilled teachers. While it is certainly more work to "teach oneself," we also know that students are more likely to learn when they (rather than the instructor) are doing most of the work.

DIGITAL COLLABORATION

Figure 36: Degree to Which Instructors Employed Digital Collaboration in ___ Class Sessions

In-Person	3%
Synchronous	9% 17%

0%   25%   50%   75%   100%

● Almost Always ● Often ● Sometimes ● Rarely ● Never
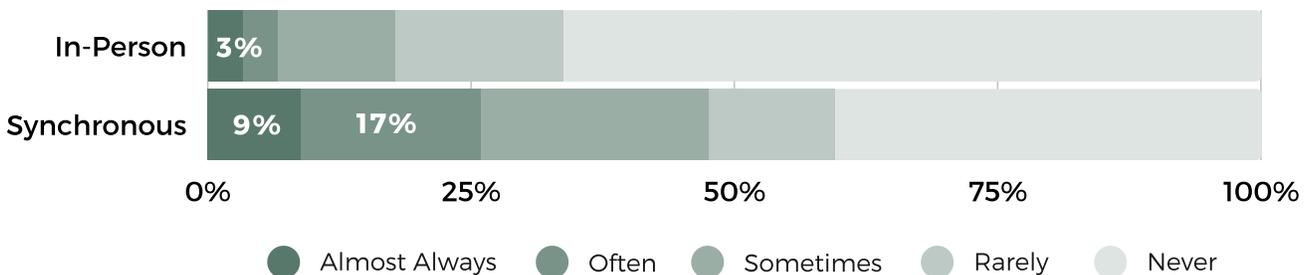
Figure 37: % of Students Who Experienced Digital Collaboration in ___ Class Sessions

In-Person	23.1%
Synchronous	43.8%

0%   25%   50%   75%   100%
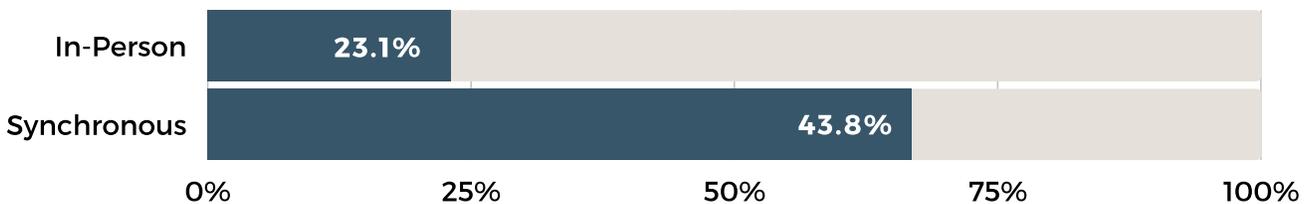
ADDITIONAL ASYNCHRONOUS ACTIVITIES

Figure 38: Degree to Which Instructors Who Taught Asynchronously Used ...

External Videos	17.3%	22.5%
Interactive Videos	13%	11.7%
Annotation Tools	9%	8%

0%   25%   50%   75%   100%

● Almost Always   ● Often   ● Sometimes   ● Rarely   ● Never
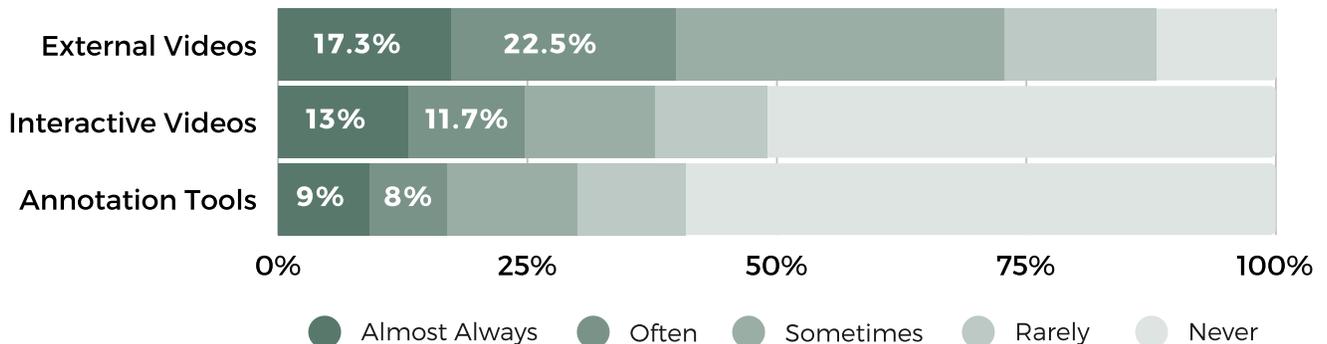
Figure 39: % of Students Who Experienced ___ in Asynchronous Class Sessions

Interactive Videos	63.4%
Annotation Tools	43.8%

0%   25%   50%   75%   100%
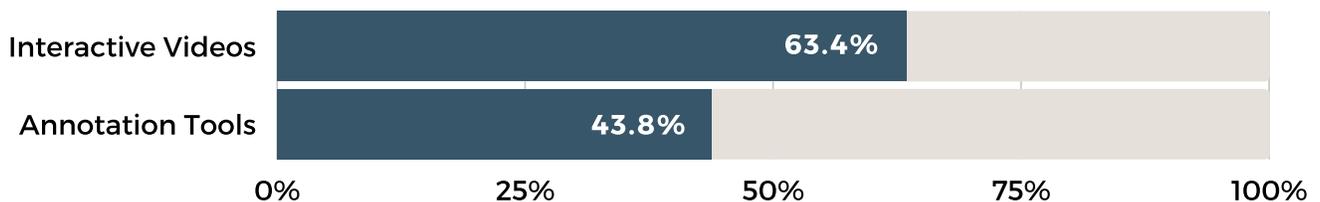
We also asked respondents about the use of digital collaboration tools (like G-suite) and a number of evidence-informed practices for engaging students asynchronously. We were pleased to see that over half of our asynchronous instructors used "interactive videos" and that almost as many used the collaborative text annotation tool, Hypothesis. As the selected comments below make clear, those who used these tools found them quite engaging.

> " I put 1 or 2 "check in" problems throughout my pre-recorded lectures, and students submitted pictures of their work in Canvas ... I was really happy with how this worked out. I think it helped motivate students to watch the lecture, and they were very prepared for our in-person discussion. I've never had so much participation during in-person classes! "

> " Annotating assigned readings was useful because if afforded students the opportunity to share their perspectives electronically. This medium was safe, readily available at all times and broadened the learning experience. I came to Wake Forest to experience the interactive dynamic. This feature gave me some semblance of that. "

STRATEGY USE IN BLENDED COURSES

Figure 40: % of All Blended Instructors Who Used ___ in Their Blended Courses

Strategy	%
Out of Class Group Work	64.5%
Whole-Class, Zoom Discussions	63.4%
Whole-Class, In-Person Discussions	59.7%
Groups with Remote Students	57.5%
Text-Based Discussion Board	45.7%
Long, In-Person Lectures	43.6%
Groups with In-Person Students	42.5%
Small-Group, Zoom Discussions	41.4%
Small-Group, In-Person Discussions	37.6%
Long Zoom Lectures	32.8%
Short In-Person Lectures	31.2%
Short Recorded Lectures	29.0%
Virtual Group Work with Digital Tools	27.4%
Groups with In-Person & Remote Students	24.7%
Short Zoom Lectures	24.2%
Audio-Video Discussion Board	21.5%
In-Person Group Work with Digital Tools	21.0%
Long Recorded Lectures	20.4%
Digital Chats	9.68%

REPORTED ENGAGEMENT IN BLENDED COURSES

Figure 41: % of Student Respondents Who Felt Engaged When Learning Via ___ in Blended Courses

| Method	Percentage
Whole-Class, In-Person Discussions	91.4%
Small-Group, In-Person Discussions	87.3%
Groups with In-Person Students	85.7%
Long, In-Person Lectures	85.6%
Out of Class Group Work	81.8%
Small-Group, Zoom Discussions	76.9%
Short In-Person Lectures	76.8%
Groups with Remote Students	75.7%
Short Zoom Lectures	74.8%
Short Recorded Lectures	72.9%
Whole-Class, Zoom Discussions	68.4%
Virtual Group Work with Digital Tools	68.2%
Groups with In-Person & Remote Students	65.1%
Long Zoom Lectures	64.0%
In-Person Group Work with Digital Tools	62.5%
Text-Based Discussion Board	54.5%
Digital Chats	53.8%
Audio/Video Discussion Board	48.9%
Long Recorded Lectures	45.3%

While we hope readers will spend time thinking through all we might learn from a comparison of Figures 40 and 42 with figures 41 and 43, we note a few insights.

First, the good news. The top five strategies used by blended instructors and 5 of the top 6 strategies used by online instructors involve the peer-to-peer interaction students find so important. The strategy students find least engaging (long recorded lectures) is one of the least likely to be used by instructors, as well. As previously noted, online courses, and particularly asynchronous activities, seem to provide more opportunities for learning new digital tools. And overall, instructors seem to be employing a variety of best-practices, with direct messaging being the only strategy used by fewer than 2 out of 5 instructors.

STRATEGY USE IN ONLINE COURSES

Figure 42: % of All Online Instructors Who Used ___ in Their Online Courses

Strategy	%
Whole-Class, Zoom Discussions	79.3%
Groups with Remote Students	70.9%
Out of Class Group Work	65.2%
Small-Group, Zoom Discussions	55.5%
Text-Based Discussion Board	48.5%
Virtual Group Work with Digital Tools	41.5%
Long Zoom Lectures	41.5%
Short Zoom Lectures	34.5%
Short Recorded Lectures	32.8%
Audio-Video Discussion Board	26.8%
Long Recorded Lectures	19.1%
Digital Chats	10.0%
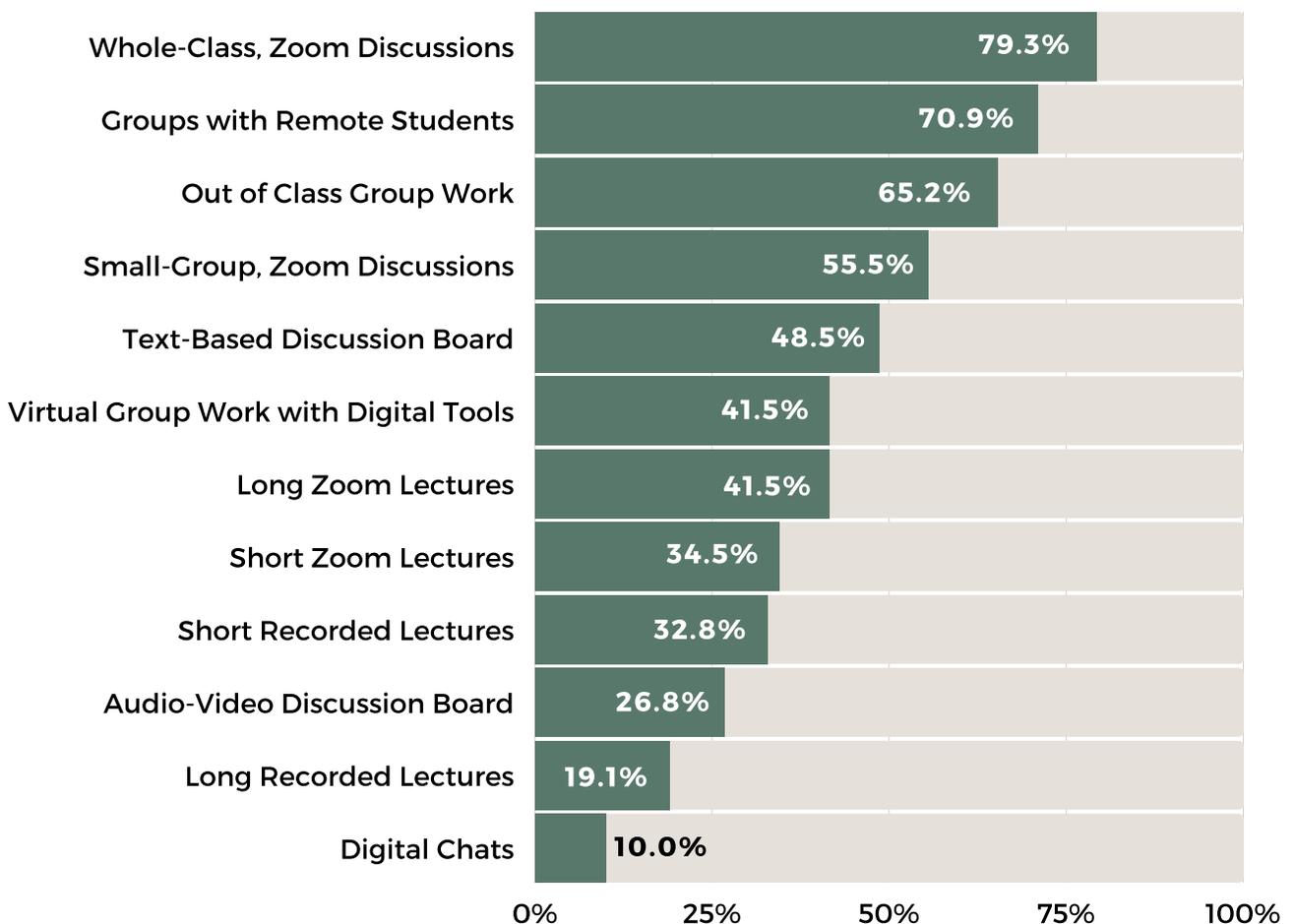
REPORTED ENGAGEMENT IN ONLINE COURSES

Figure 43: % of Students Respondents Who Felt Engaged When Learning Via ___ in Online Courses

Learning Method	Percentage
Short Recorded Lectures	82.4%
Out of Class Group Work	81.3%
Groups with Remote Students	80.2%
Short Zoom Lectures	77.1%
Small-Group, Zoom Discussions	77.0%
Whole-Class, Zoom Discussions	77.0%
Virtual Group Work with Digital Tools	75.9%
Long Zoom Lectures	72.7%
Text-Based Discussion Board	62.7%
Digital Chats	54.1%
Audio/Video Discussion Board	52.9%
Long Recorded Lectures	50.7%

Despite this good news, these comparisons also suggest opportunities to further engage our students. While social-distancing requirements limit our ability to meet student demand for in-person learning activities, we might be able to incorporate more collaborative learning into the in-person teaching we are already doing. Likewise, the student engagement data suggests we might want to rethink how we use whole-class synchronous discussions, discussion boards, and short recorded lectures.

In sum, our students seem to appreciate an online course structure that is consistent with evidence-informed practices: content delivered via short, interactive videos; synchronous sessions devoted to small-group discussions in breakout rooms; semester-long projects with a dedicated group of peers; and easy access to 1:1 conversations with professors.

REMOTE ASSESSMENT

Our faculty survey provided a great deal of information about the strategies used to assess learning this fall, as well as their perceived effectiveness. Quantitative questions focused on course design, exam design, and implementation strategies to promote academic integrity. In addition, 104 respondents provided open-ended feedback about specific successes or challenges they experienced as they experimented with new assessment strategies.

As Figure 47 makes clear, open-book, open-note exams were the most widely adopted strategy (89%). Figure 48 reveals that 78% of those who adopted this strategy considered it either effective or very effective. Assessing students' ability to interpret and/or analyze material, as well as their ability to understand processes, were also common (72%, 65%). In each case, respondents found the strategy effective (78%, 77%).

Strategies rated highly for effectiveness were not always the most frequently adopted. Written assignments, projects, and presentations were rated highly for effectiveness. However, they were adopted by < 50% of respondents (47%, 43%, and 34% respectively). Oral examination received the most "very effective" ratings (43%) but was only adopted by 18% of respondents. Conversely, emphasizing the Honor Code was adopted by 76% of respondents but only rated very effective by 18%.

Many respondents report making changes in the design and implementation of exams and quizzes. These changes included access to resources during testing, more higher-order thinking questions, more frequent assessments, more low-stakes assessments, and requiring evidence demonstrating work. Importantly though, the most common qualitative response was related to choosing not to use examinations to assess learning.

Qualitatively, positive assessment experiences were most often associated with written assignments, projects, or presentations either in addition to, or instead of, exams. Many also emphasized transparency, iteration, peer review, collaboration, and scaffolding in the design of assignments. Most negative responses were associated with proof or suspicion of cheating on exams. Concern about grade inflation, due to course design or cheating, was noted.

## Figure 47: % of Instructors Who Adopted Remote Assessment Strategy

Strategy	%
Open-Note, Open-Book Exams	88.8%
Emphasized Honor Code	75.6%
Assessed Interpretation/Analysis	72.0%
Low-Stakes Assessments	66.7%
Assessed Process	64.7%
Make-Up Opportunities	55.5%
Reduced Weight of Exams	51.7%
Required Students to Show Work	49.9%
Writing Assignments	46.8%
Projects	43.0%
Presentations	33.6%
Required Explanation of Answers	29.8%
Random Question Banks	28.9%
Increased # of Exams	26.4%
Remote Proctoring	17.9%
Oral Exams	17.9%
Checked Cheating Sites	15.9%
Collaborative Exams	15.2%

> " I used entirely papers, projects, presentations, and synchronous and asynchronous discussions and small-stakes group activities, with no exams or quizzes. Structured peer review and revision process was built into most papers and projects. I also used daily and periodic structured self-assessment. This worked quite well -- I had no complaints despite many crises, [and] student work was high quality. "

Figure 48: Extent to Which Instructors Who Adopted Strategy Found it Effective

Strategy	Very Effective
Oral Exams	43.1%
Projects	43.0%
Writing Assignments	40.1%
Presentations	38%
Open-Note, Open-Book Exams	37.3%
Assessed Interpretation/Analysis	32.8%
Assessed Process	28.0%
Remote Proctoring	27.8%
Reduced Weight of Exams	26.2%
Low-Stakes Assessments	25.7%
Required Explanation of Answers	25.7%
Required Students to Show Work	25.6%
More Make-Up Opportunities	24.7%
Random Question Banks	22.1%
Collaborative Exams	21.7%
Emphasized Honor Code	18.1%
Increased # of Exams	17.3%
Checked Cheating Sites	14%

Legend: Very Effective · Effective · Somewhat Effective · Ineffective · Very Ineffective

> " I built a cumulative semester-long project with peer review and instructor conferencing as formative assessments. The final project was not only less stressful for students, but their work was some of the strongest work I've ever seen in this course. "

> I replaced traditional exams with Formative Writing Exercises. Students could revise after grading. I wish I had done this years ago.

> I incorporated more peer review opportunities in my classes (a goal pre-COVID). I explicitly broke up large assignments and had students work on smaller pieces, and then combined the pieces to form the larger product. That worked well.

> I made frequent use of open-note open-book open-resource assessments, and repeatedly told students they couldn't work with others. I couldn't shake the feeling that working with others was still happening.

> I had emphasized process analysis for many questions and I emphasized the honor code, but I had multiple cases of cheating and the students took the exam together. They admitted they had done this because they felt 'everyone was doing it'.

66% of respondents report using more low-stakes assessments. Frequent assessments was a common response. While these strategies are considered best-practices, their simultaneous adoption by many faculty may have contributed to the heavy workload reported by students. Faculty commented on the amount of time required to grade and give feedback, as well.

> ... I heard from three of my student researchers on the same day that they were feeling tremendously overwhelmed with the amount they were expected to write.

> With everyone in our department moving to frequent quizzes, students sometimes were overwhelmed with number of quizzes from different classes in a week.

> Eliminating exams ...and using weekly low stakes assignments and a substantial final project led to such a much higher workload for everyone ... don't think I can survive another semester with that much intensive grading and feedback every week!

SURVEY SAMPLE

DEMOGRAPHIC	POPULATION	SAMPLE
Fall Instructors	**745**	**473 (63.4%)**
College Instructors	563	372 (66%)
Business Instructors	72	48 (66.6%)
Law Instructors	63	30 (47.6%)
Divinity Instructors	20	10 (50%)
Grad School Instructors	19	12 (63.2%)
ZSR Instructors	8	7 (87.5%)
Tenured Instructors	313	209 (66.8%)
Tenure-Track Instructors	400	268 (67%)
Teaching Professors	133	94 (70.7%)
Part-Time Instructors	74	34 (45.9%)

DEMOGRAPHIC	POPULATION	SAMPLE
Fall Students	**6,940**	**1,832 (26.4%)**
Undergraduates	5429	1309 (24.1%)
Business Grad Students	651	238 (36.6%)
Law Students	450	147 (32.7%)
Divinity Students	65	19 (29.2%)
A&S Grad Students	335	125 (37.3%)
First-Year Students	1469	498 (33.9%)

In terms of response rate and overall sample size, the surveys were a success. The Office of Institutional Research reports that faculty survey response rates typically range from 20-60%, while student response rates range from 15-30%. And to achieve a 99% confidence level with a 5 point margin of error, we'd only need 351 respondents in the faculty survey and 606 respondents in the student survey.

In addition to demographic comparisons, we wondered whether those responding to our survey had more or less experience online. The figures below compare the self-reported answers of our respondents to Registrar data. As you can see, it appears that exclusively online instructors and students were over-represented in our sample. While this is possible, it is also possible that the differences reflect the fact that some instructors shifted from blended to online modalities throughout the semester. We also know that some officially "blended" courses met in person only a few times, so students might have considered those courses fully online.

REGISTRAR DATA

Figure 49: Percentage of Instructors Teaching At Least One Course ...

Online	59%
Blended	50%
In Person	14%
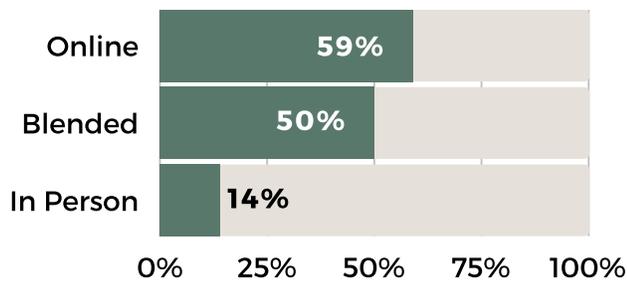
Figure 51: Percentage of Students Taking At Least One Course ...

Online	94%
Blended	83%
In Person	23%
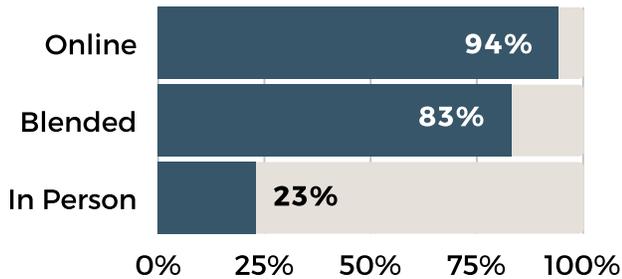
Figure 53: Percentage of Instructors and Students Exclusively Online

Instructors	41%
Students	13%
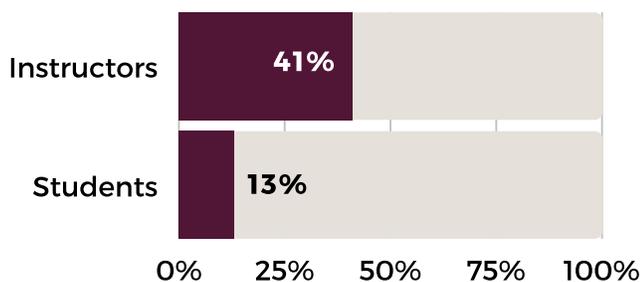
SURVEY SAMPLE

Figure 50: Percentage of Instructors Teaching At Least One Course ...

Online	63.9%
Blended	39.7%
In Person	14.5%
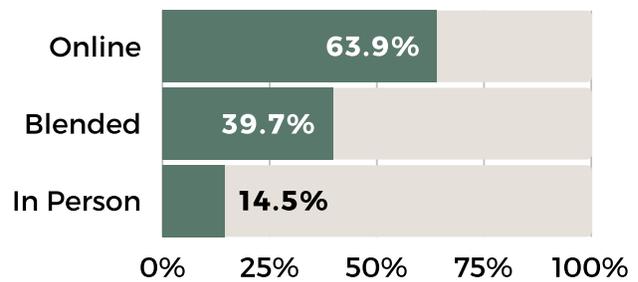
Figure 52: Percentage of Students Taking At Least One Course ...

Online	89.4%
Blended	67.4%
In Person	31.8%
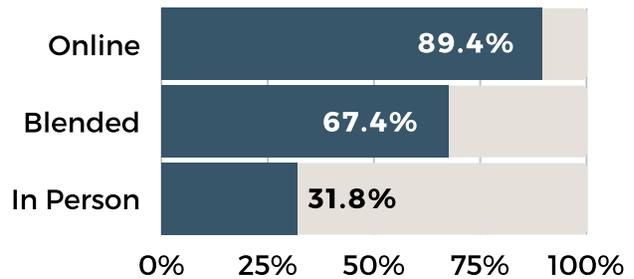
Figure 54: Percentage of Instructors and Students Exclusively Online

Instructors	50.3%
Students	26.7%
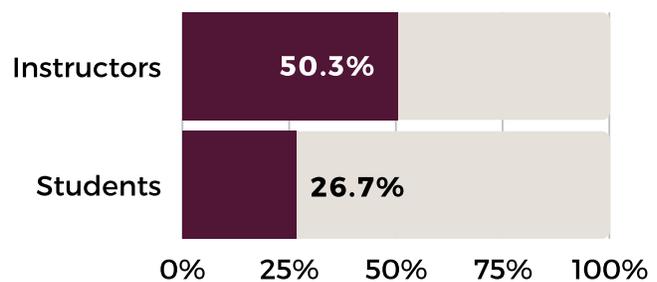
APPENDIX A: FACULTY SURVEY QUESTIONS

Synchronous online class sessions are live, video-conference-based sessions in which everyone attends remotely. Did you teach any synchronous online class sessions during Fall 2020?
- Yes
- No

To what extent did you utilize the following learning activities in your teaching during synchronous online class sessions.
- lectures and/or demonstrations
- students working individually, for instance on problem sets, writing prompts, or projects
- students working in small groups, for instance on problem sets, writing prompts, or projects
- whole-class discussions
- small-group discussions (i.e. using breakout rooms)
- students working in collaborative digital spaces, such as Google docs or a virtual whiteboard

Socially-Distanced, In-Person class sessions are live sessions that take place in physical classrooms with students sitting apart from each other, everyone is wearing a mask, and instructors usually remain near the front of the room. Did you teach any socially-distanced, in-person class session sessions during Fall 2020?
- Yes
- No

To what extent did you utilize the following learning activities in your teaching during socially-distanced, in-person class sessions.
- lectures and/or demonstrations
- students working individually, for instance on problem sets, writing prompts, or projects
- students working in small groups, for instance on problem sets, writing prompts, or projects
- small-group discussions
- whole-class discussions
- students working in a collaborative digital space, such as Google docs or a virtual whiteboard

Asynchronous learning experiences are times when students access and complete content, discussions, or assignments online and on their own time. Did you teach any asynchronous class sessions during Fall 2020?
- Yes
- No

To what extent did you utilize the following learning activities in your teaching during asynchronous class sessions.

- recording lectures and/or demonstrations for students to watch on their own time
- assigning external videos for students to watch on their own time
- integrating polls, quiz questions and prompts into assigned videos
- students working individually, for instance on problem sets, writing prompts, or projects
- students working in small-groups, for instance on problem-sets, writing prompts, or projects
- students contributing to a discussion using a discussion forum (i.e. within Canvas or Slack)
- students contributing to a discussion of a text or video using collaborative annotation tools (i.e. Hypothes.is or VoiceThread)

Please consider sharing any other learning activities that you utilized and found beneficial while teaching your synchronous, socially-distanced in-person, or asynchronous class sessions. (Optional)

Which types of course modalities did you teaching during Fall 2020? (select all that are true)
- Fully Online
- Blended
- Fully In Person

The following questions are designed to get a better understanding of the types of teaching and learning experiences you utilized in ONLY your blended courses. Blended courses include a mix of fully in-person class sessions AND either live online class sessions or online-based content, activities, and assignments that students do own their own time.

During my Fall 2020 blended courses, my lectures and demonstrations were usually... (select all that are true)
- short (<15 minutes), live, and done using video-conferencing.
- short (<15 minutes), live, and done in-person.
- short (<15 minutes), and recorded ahead of time.
- long (>15 minutes), live, and done using video-conferencing.
- long (>15 minutes), live, and done in-person.
- long (>15 minutes), and recorded ahead of time.
- None of my blended courses included lectures or demonstrations.

During my Fall 2020 blended courses, I utilized group work and collaborative learning by having students... (select all that are true)
- work on their own time outside of scheduled class sessions.
- work in physical groups during socially-distanced, in-person class sessions.
- work in virtual groups during video-conference, online class sessions (i.e. Breakout rooms in Zoom).
- use digital collaboration tools during socially-distanced, in-person class sessions (i.e. Google docs and virtual whiteboards).
- use digital collaboration tools during video-conference, online class sessions (i.e. Google docs and virtual whiteboards).
- work in virtual groups during socially-distanced, in-person class sessions with some students in-person and some students online (i.e. breakout rooms in Zoom).
- None of my blended courses included group work or collaborative learning.

During my Fall 2020 blended courses, I facilitated class discussions that were... (select all that are true)
- whole-class, live, and in-person.
- small-groups, live, and in-person.
- whole-class, live, and online.
- small-group, live, and online.
- discussion board, text-based, and done on students own time.
- discussion board, audio or video recording-based, and done on students own time.
- done live with a group chat tool.
- None of my blended courses included class discussions.

Please share any successes or challenges with lecture, demonstrations, group work and collaborative learning, or class discussion during your blended teaching. (Optional)

The following questions are designed to get a better understanding of the types of teaching and learning experiences you utilized in ONLY your fully online courses. Fully online courses do NOT include in-person meetings, and may have live, synchronous class sessions as well as asynchronous activities and assigned done in the students own time.

In my Fall 2020 online courses, my lectures and demonstrations were usually... (select all that are true)
- short (<15 minutes), live, and done using video-conferencing.
- short (<15 minutes), and recorded ahead of time.
- long (>15 minutes), live, and done using video-conferencing.
- long (>15 minutes), and recorded ahead of time.
- Other
- None of my fully online courses included lectures or demonstrations.

In my Fall 2020 online courses, I utilized group work and collaborative learning by having students... (select all that are true)
- work on their own time outside of scheduled class sessions.
- work in virtual groups during video-conference, online class sessions (i.e. Breakout rooms in Zoom).
- use digital collaboration tools during video-conference, online class sessions (i.e. Google docs and virtual whiteboards).
- Other
- None of my fully online courses included group work or collaborative learning.

In my Fall 2020 online courses, I facilitated class discussions that were... (select all that are true)
- whole-class, live, and online.
- small-group, live, and online.
- discussion board, text-based, and done on students own time.
- discussion board, audio or video recording-based, and done on students own time.
- done live with a group chat tool.
- Other
- None of my fully online courses included class discussions.

Please share any successes or challenges with lecture, demonstrations, group work and collaborative learning, or class discussion during your fully online teaching. (Optional)

Which of these approaches did you utilize to help students feel connected and part of a community in your course(s)? (Select all that apply)
- I created opportunities for students to talk and work with other students.
- I held regular office hours and/or offered 1:1 meetings.
- I was regularly present and active in the online assignments.
- I provided time before or after class sessions for social interactions.
- I encouraged students to keep their cameras on during video-conference based class sessions.
- I created and shared short social or personal videos.
- I held optional, live, social meetings such as a coffee hour.
- Other

When students could not attend live, in-person class sessions, I... (select all that apply)
- opened a video-conferencing session so that the student could attend the class remotely.
- recorded the class session so that it could be watched later.
- moved the class session to online format for everyone using video-conferencing.
- offered a separate online class session for those that could not attend in-person.
- created instructional content and learning activities that could be done online on the students own time.
- used the same types of accommodations used for illnesses prior to COVID-19, such as access to slides, notes, and 1:1 meetings.
- I never had this experience.
- Other

When students attended an in-person session remotely, I could... (select all that apply)
- easily see them.
- easily hear them.
- attend to them as well as the in-person students.
- effectively integrate them into the classroom activities.
- effectively share screen and whiteboard content with them.
- None of these statements are true for me.

There are many strategies to promote academic integrity and discourage cheating when you design a course. Please indicate which strategies you utilized and your perception of their effectiveness.

- Reduced the weight of high-stakes exams
- Increased the number of exams
- Utilized more low-stakes assessments like quizzes
- Offered more revision and make-up opportunities
- Utilized combined individual then collaborative exam formatsReplaced exams with writing assignments
- Replaced exams with projects
- Replaced exams with presentations
- Other

There are many strategies to promote academic integrity and discourage cheating when giving quizzes and exams. Please indicate which strategies you utilized and your perception of their effectiveness.

- Emphasized the Honor Code and my expectations
- Required students to show their work
- Required written explanations to accompany numerical answers
- Wrote questions emphasizing process more than product
- Focused on analysis and interpretation rather than solving for answers
- Utilized randomized question banks
- Conducted remote proctoring
- Checked cheating sites (i.e. Chegg)
- Included oral exam questions
- Made exams open-note, open-book
- Other

Please consider sharing any successes or challenges associated with assessing student learning this semester. (Optional)

Please select all the statements that are true for you about teaching from home.

- My internet access and bandwidth are sufficient.
- My computer and hardware (e.g. monitor, printer) are sufficient.
- My workspace is sufficient.
- Care-giving and/or family responsibilities make it challenging to teach from home.
- None of these statements apply to me.

Please share anything else that you think is important for us to know about your teaching from home environment. (Optional).

To what extent did you utilize these technologies and tools during your Fall 2020 teaching? CanvasVideo-conferencing (i.e. Zoom, WebEx; Google Meet)
- Collaborative software (i.e. Google docs, Jamboard)
- Adobe Creative CloudPolling software (i.e. Poll Everywhere, Kaltura)
- Direct instant messaging (i.e. Google Chat, Slack)
- VoiceThread
- Hypothes.is
- YouTube or other Streaming/Hosting Services
- CamtasiaRecorded video of class sessions
- Live broadcast video of class sessions
- Other

If any of these technologies or tools were particularly beneficial to your teaching this Fall, please tell us which ones and why. (Optional)

Is there any software (whether or not currently licensed by WFU) that would be useful to you for Spring 2021 and beyond? (Optional)

How prepared did you feel to teach online and blended courses this Fall?
- Very prepared
- Prepared
- Somewhat prepared
- Unprepared
- Very unprepared

There were many efforts to help faculty prepare for online and blended teaching during Fall 2020. Please select all that you believe positively contributed to your preparedness for the Fall semester.
- Teaching Online, a self-paced course offered by the WFU Office of Online Education
- Book groups, offered by the CAT
- Peer Learning Communities, organized by the WFU CAT
- Technology Workshops, offered by WFU IS
- Department-based initiatives
- Resources created by disciplinary societies
- WFU Remote Teaching Facebook group
- Conversations with colleagues
- Other (please describe)

Compared to prior to the pandemic, I now... (select all that apply)
- talk to more of my departmental colleagues about teaching.
- talk to more colleagues in other departments about teaching.
- read more books, journals, and/or websites about teaching.
- work more with my ITG on teaching technology needs.
- interact more with teaching support staff in the CAT, Office of Online Ed, DISC, and/or Academic Technology.
- Other
- None of these statements are true for me.

Please share any thoughts on ways the University, and the CAT specifically, can continue to support you in your online and blended teaching. (Optional)

APPENDIX B: STUDENT SURVEY QUESTIONS

Synchronous online class sessions are LIVE sessions in which everyone joins through a video-conference program such as Zoom. Please select all of the activities you experienced in any of your Fall 2020 synchronous online class sessions.

- watching my professor lecture and/or demonstrate something.
- working individually, for instance on problem sets, writing prompts, or projects.
- working in small groups, for instance on problem sets, writing prompts, or projects.
- participating in whole-class discussions (i.e. using video-conferencing).
- participating in small-group discussions (i.e. breakout rooms).
- working in a collaborative digital space, such as a Google document or virtual whiteboard.
- I did not have any synchronous online learning experiences.

Socially-Distanced, In-Person class sessions are live sessions that take place in physical classrooms with students sitting apart from each other, everyone is wearing a mask, and instructors usually remain near the front of the room. Please select all of the activities you experienced in any of your Fall 2020 socially-distanced, in-person class sessions.

- watching my professor lecture and/or demonstrate something.
- working individually, for instance, on problem sets, writing prompts, or projects.
- working in small groups, for instance, on problem sets, writing prompts, or projects.
- participating in whole-class discussions.
- participating in small-group discussions.
- working in a collaborative digital space, such as a Google document or Jamboard.
- I did not have any socially-distanced, in-person learning experiences.

Asynchronous learning experiences are times when students access and complete content, discussions, or assignments online and on their own time. Please select all of the activities you experienced in any of your Fall 2020 asynchronous class sessions.

- watching recorded lectures and/or demonstrations.
- responding to polls, quiz questions, and prompts inserted within assigned videos.
- working individually, for instance on problem sets, writing prompts, or projects.
- working in small-groups, for instance on problem sets, writing prompts, or projects.
- contributing to a discussion using a discussion forum (i.e. within Canvas, Slack).
- contributing to a discussion of texts or videos using collaborative annotation tools (i.e. Hypothes.is, VoiceThread).
- I did not have any asynchronous learning experiences.

To protect your time, you were selected to share your experiences about your blended courses. Other students will share their experiences in fully online courses. Please consider ONLY your blended courses in the next set of questions. Blended courses include a mix of fully in-person class sessions AND either live online class sessions or online-based content, activities, and assignments that you do in your own time.

In my Fall 2020 blended courses, lectures and demonstrations were presented to me as...(select all that are true)
- short (<15 minutes), live, and done using video conferencing.
- short (<15 minutes), live, done in-person.
- short (<15 minutes), recorded ahead of time.
- long (>15 minutes), live, done using video conferencing.
- long (>15 minutes), live, done in-person.
- long (>15 minutes), recorded ahead of time.
- None of my blended courses included lectures or demonstrations.

In these courses, I was engaged with lectures and demonstrations when they were... (select all that are true)
- short (<15 minutes), live, and done using video conferencing.
- short (<15 minutes), live, done in-person.
- short (<15 minutes), recorded ahead of time.
- long (>15 minutes), live, done using video conferencing.
- long (>15 minutes), live, done in-person.
- long (>15 minutes), recorded ahead of time.
- None of my blended courses included lectures or demonstrations.

In my Fall 2020 blended courses, I experienced group work and collaborative learning...(select all that are true)
- on my group's own time outside of the scheduled class session.
- in a physical group during socially-distanced, in-person class sessions.
- in a virtual group during video-conference, online class sessions (i.e. Breakout rooms in Zoom).
- using digital collaboration tools during socially-distanced, in-person class sessions (i.e. Google docs and virtual whiteboards).
- use digital collaboration tools during video-conference, online class sessions (i.e. Google docs and virtual whiteboards).
- in a virtual group during socially-distanced, in-person class sessions with some classmates socially-distanced and in-person and some classmates online (i.e. Breakout rooms in Zoom).
- None of my blended courses included group work or collaborative learning.

In these courses, I was engaged with group work and collaboration when it was… (select all that are true)
- on my group's own time outside of the scheduled class session.
- in a physical group during socially-distanced, in-person class sessions.
- in a virtual group during video-conference, online class sessions (i.e. Breakout rooms in Zoom).
- using digital collaboration tools during socially-distanced, in-person class sessions (i.e. Google docs and virtual whiteboards).
- use digital collaboration tools during video-conference, online class sessions (i.e. Google docs and virtual whiteboards).
- in a virtual group during socially-distanced, in-person class sessions with some classmates socially-distanced and in-person and some classmates online (i.e. Breakout rooms in Zoom).
- None of my blended courses included group work or collaborative learning.

In my Fall 2020 blended courses, I experienced class discussions that were…(select all that are true)
- whole-class, live, and in-person.
- small-group, live, and in-person.
- whole-class, live, and online.
- small-group, live, and online.
- discussion board or forum-based, text, on our own time (i.e. Canvas, or Slack).
- discussion board or forum-based, audio or video recordings, on our own time.
- with a group chat tool (i.e., Google Chat, WhatsApp, Live Tweeting, or Facebook Live), live.
- None of my blended courses included class discussion.

In these courses, I was engaged with class discussion when it was … (select all that are true)
- whole-class, live, and in-person.
- small-group, live, and in-person.
- whole-class, live, and online.
- small-group, live, and online.
- discussion board or forum-based, text, on our own time (i.e. Canvas, or Slack).
- discussion board or forum-based, audio or video recordings, on our own time.
- with a group chat tool (i.e., Google Chat, WhatsApp, Live Tweeting, or Facebook Live), live.
- None of my blended courses included class discussion.

Please continue to consider ONLY your blended courses in this set of questions. Indicate your agreement with the following statements. I felt more connected and part of a community in my blended courses when my instructor...
- shared short social or personal videos.
- provided time before or after class for social interactions.
- held optional, live, social meetings, such as a coffee hour.
- held regular office hours and/or offered 1:1 meetings.
- created discussion board or chat spaces for social interactions.
- encouraged us to keep our cameras on during video-conferencing class sessions.
- was present and actively involved in the online assignments.
- created opportunities to talk and work with other students.

To protect your time, you were selected to share your experiences about your fully online courses. Other students will share their experiences in blended courses. Please consider ONLY your fully online courses in the next set of questions. Fully Online courses do NOT include in-person meetings, and may have live, synchronous class sessions as well as asynchronous activities and assignments done on your own time.

In my Fall 2020 fully online courses, lectures and demonstrations were presented to me as... (select all that are true)
- short (<15 minutes), live, and done using video conferencing.
- short (<15 minutes), recorded ahead of time.
- long (>15 minutes), live, done using video conferencing.
- long (>15 minutes), recorded ahead of time.
- None of my fully online courses included lectures or demonstrations.

In these courses, I was engaged with lectures and demonstrations when they were... (select all that are true)
- short (<15 minutes), live, and done using video conferencing.
- short (<15 minutes), recorded ahead of time.
- long (>15 minutes), live, done using video conferencing.
- long (>15 minutes), recorded ahead of time.
- None of my fully online courses included lectures or demonstrations.

In my Fall 2020 fully online courses, I experienced group work and collaborative learning...
(select all that are true)
- on my group's own time outside of the scheduled class session.
- in a virtual small group during video-conferencing, online class sessions (i.e. Breakout rooms in Zoom).
- using digital collaboration tools during video-conferencing, online class sessions (i.e. Google docs and virtual whiteboards).
- Other
- None of my fully online courses included group work or collaborative learning.

In these courses, I was engaged with group work and collaboration when it was ... (select all that are true)
- on my group's own time outside of the scheduled class session.
- in a virtual small group during video-conferencing, online class sessions (i.e. Breakout rooms in Zoom).
- using digital collaboration tools during video-conferencing, online class sessions (i.e. Google docs and virtual whiteboards).
- Other
- None of my fully online courses included group work or collaborative learning.

In my Fall 2020 fully online courses, I experienced class discussions that were... (select all that are true)
- whole-class, live, and online.
- small-group, live, and online.
- discussion board or forum-based, text, on our own time (i.e. in Canvas, or Slack).
- discussion board or forum-based, audio or video recordings, on our own time.
- with a group chat tool (i.e., Google Chat, WhatsApp, Live Tweeting, or Facebook Live), live.
- None of my fully online courses included class discussion.

In these courses, I was engaged with class discussion when it was ... (select all that are true)
- whole-class, live, and online.
- small-group, live, and online.
- discussion board or forum-based, text, on our own time (i.e. in Canvas, or Slack).
- discussion board or forum-based, audio or video recordings, on our own time.
- with a group chat tool (i.e., Google Chat, WhatsApp, Live Tweeting, or Facebook Live), live.
- None of my fully online courses included class discussion.

Please continue to consider ONLY your fully online courses in this set of questions. Indicate your agreement with the following statements. I felt more connected and part of a community in my fully online courses when my instructor...
- shared short social or personal videos.
- provided time before or after class for social interactions.
- held optional, live, social meetings, such as a coffee hour.
- held regular office hours and/or offered 1:1 meetings.
- created discussion board or chat spaces for social interactions.
- encouraged us to keep our cameras on during video-conferencing class sessions.
- was present and actively involved in the online assignments.
- created opportunities to talk and work with other students.

When students could not attend in-person class sessions, my professors ... (Select all that apply)
- opened a video-conferencing (i.e. Zoom) session during the in-person class session so that the student could attend the class remotely.
- recorded the in-person class session so it could be watched later.
- moved the entire class to a live online class session using video-conferencing.
- offered a separate online class session for those that were not able to attend in-person.
- created instructional content and learning activities that could be online at any time.
- used the same types of accommodations used for illnesses prior to COVID-19, such as providing access to slides, lecture notes, and offering 1:1 meetings.
- Other

You selected that your professors would open a Zoom session so that some students could attend remotely. We would like to follow up. What was your experience with this approach?
- I attended an in-person class session(s) remotely while other students were simultaneously attending in-person.
- I attended an in-person class session(s) in which other students were simultaneously attending remotely.
- None of these statements are true for me.

When I had to attend an in-person class session remotely, I could generally... (select all that are true).
- see and hear my professor.
- read the whiteboard or other real-time instructional content.
- see and hear my classmates.
- ask questions or contribute to class discussions or activities.
- get help from the instructor about the real-time assignments or activities.
- work with my classmates on problems, projects, and group activities.
- None of these statements are true for me.

Where were you located for the Fall 2020 semester?
- In the Winston-Salem area, either on or off campus
- In the Eastern Standard/Daylight time zone, but NOT within the Winston-Salem area.
- In the U.S. but in a time zone other than the Eastern Standard/Daylight time zone
- In a country other than the U.S.

Please select all of the statements that describe the specific location(s) where you participated in learning experiences during Fall 2020.
- In my dormitory room or apartment
- Study spaces in the ZSR library (Open or Reservable)
- Designated late night (10pm - 1am) study spaces in the lower gym in the Sutton Center
- Study spaces in the Gym
- Study spaces in the Benson Center
- Empty classrooms (Reynolda campus or Wake Downtown).
- At outside tables, tents around campus
- Other shared, common indoor spaces around campus (not already listed)

Please select all the statements that are true about your Fall 2020 online learning environment.
- My internet access and bandwidth are sufficient for online learning.
- My computer and hardware (e.g., monitor, printer) are sufficient for online learning.
- My workspace is sufficiently large for online learning.
- My workspace is sufficiently quiet and private for participation in class discussions and assessments.
- On-campus workspace for live online class sessions is sufficient and consistently available.
- I had other challenges with workspace that are not listed. (Please describe)
- None of these are true for me.

When I was in-person but classmates were attending remotely, I could generally... (select all that are true.)
- see my remote classmates.
- hear my remote classmates.
- work with my remote classmates on problems, projects, and group activities.
- engage my remote classmates in class discussions.
- None of these statements are true for me.

This semester you may have experienced new instructional technologies and/or learning activities. Which would you like to continue to use when we are able to return to a more traditional format?

- collaborative annotation of texts and videos (i.e. using Hypothes.is or VoiceThread)
- recorded lectures
- group discussions and collaborative work using video-conferencing breakout rooms
- a mix of in-person and online class sessions
- working in a collaborative digital space (i.e. Google documents or Jamboards)
- responding to polls, quiz questions, and prompts inserted within assigned videos
- video-conference-based office hours and 1:1 appointments
- Other

During Fall 2020, courses were offered in 3 modalities: fully online, blended, and socially-distanced fully in-person. This semester I was enrolled in ... (select all that are true)

- Fully online courses.
- Blended courses.
- Socially-distanced, fully in-person courses.

In Fall 2020, I was engaged with my courses when they were ... (select all that are true)

- Fully online courses.
- Blended courses.
- Socially-distanced, fully in-person courses.

Please tell us about an online activity or assignment that helped you learn this semester. What made it effective or engaging? (Optional)

This survey has addressed many aspects of online and blended learning, but we could not mention everything. Please consider sharing anything else that will help us understand your online and blended learning experience. (Optional)