



University of Cincinnati

Covid-19 Remote Technology Experience Survey Report

August 2020

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CONTENTS

| | |
|---|----|
| ACKNOWLEDGEMENTS | 4 |
| ACRONYMS | 5 |
| LIST OF TABLES | 6 |
| BACKGROUND | 9 |
| <i>Introduction and Purpose</i> | 9 |
| <i>Methodology</i> | 9 |
| <i>Demographics</i> | 10 |
| SUMMARY OF FINDINGS | 10 |
| <i>Teaching and Learning</i> | 10 |
| <i>Technology and Tools</i> | 11 |
| <i>Open-Ended Text Responses</i> | 12 |
| <i>Positive Responses/Recommendations</i> | 12 |
| <i>Specific Student Concerns</i> | 13 |
| <i>Technology Needs</i> | 14 |
| <i>Access Needs</i> | 14 |
| <i>Change Fatigue and Communication</i> | 15 |
| SURVEY RESULTS | 15 |
| <i>Profile of Respondents (all) (Tables 1 – 3)</i> | 15 |
| <i>Key Result Area 1: Background information by roles (Tables 4 – 28)</i> | 17 |
| <i>Faculty Only Responses (Tables 7 – 15)</i> | 18 |
| <i>Staff Only Responses</i> | 23 |
| <i>Student Only Responses (Tables 17 – 23)</i> | 24 |
| <i>Teaching Assistants Only Responses (Tables 24 – 28)</i> | 28 |
| <i>Key Result Area 2: Technology/ Tools Usage (Tables 29 – 35)</i> | 30 |
| <i>Access Type (Tables 33-35)</i> | 33 |
| <i>Key Result Area 3: Technology Experience (Tables 36 – 41)</i> | 35 |
| <i>Key Result Area 4: Technology Support (Tables 42 – 48)</i> | 38 |
| <i>Key Result Area 5: Moving Forward/ Preparedness (Tables 49 – 50)</i> | 42 |
| <i>Summary of Responses to Open- Ended Questions (OEQs 1-5)</i> | 43 |



| | |
|--------------------------------------|----|
| DISCUSSION..... | 45 |
| <i>Demographics</i> | 45 |
| <i>Timing of Survey</i> | 45 |
| <i>Teaching and Learning</i> | 45 |
| <i>Tools and Technology</i> | 46 |
| REFLECTIONS AND RECOMMENDATIONS..... | 47 |
| Appendices..... | 51 |
| <i>Appendix A: Survey</i> | 51 |

ACKNOWLEDGEMENTS

This study, a university-wide Covid-19 Remote Technology Experience survey is the result of a partnership involving the University of Cincinnati Faculty Senate, Staff Senate, the Undergraduate and Graduate Student Government, and IT@UC and is part of an ongoing effort to inform the university how to better support the faculty, staff, and students as the university continues in hybrid and online modes of operations.

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ACRONYMS

| | |
|-------|--|
| A&F | Division of Administration & Finance |
| A&S | College of Arts & Sciences |
| CAHS | College of Allied Health Sciences |
| CEAS | College of Engineering & Applied Sciences |
| CECH | College of Education, Criminal Justice, Human Services, and Information Technology |
| CoB | Lindner College of Business |
| CoL | College of Law |
| CoM | College of Medicine |
| CoN | College of Nursing |
| CoP | College of Pharmacy |
| CCM | College of the Conservatory of Music |
| DAAP | College of Design, Art, Architecture and Planning |
| ID | Instructional Design |
| IT@UC | University of Cincinnati Information Technologies |
| OEQ | Open Ended Question |
| UC | University of Cincinnati |
| UCL | UC Libraries |

LIST OF TABLES

Table 1. Faculty, Staff and Student response rates

Table 2: Gender Identification (All)

Table 3: Racial/Ethnic Heritage (All)

Table 4. Gender by Role

Table 5. Race/Ethnic Heritage by Role

Table 6. Age by Role

Table 7. Faculty College Affiliation

Table 8. How many classes did you have to convert to remote teaching due to Covid-19?

Table 9. Have you received or been offered help with converting your classes to remote teaching?

Table 10. Have you been sufficiently supported in the transition to remote teaching by UC?

Table 11. What kind of training would you have liked to receive?

Table 12. How do you describe your transition to remote teaching?

Table 13. Describe your previous experience with traditional online teaching.

Table 14. Please check ALL that apply to your method of remote teaching due to COVID-19.

Table 15. Based on your experience, rate the technology support provided by CETL courses and workshops for Covid-19 related transition to remote teaching.

Table 16. Please select the response that most accurately applies to your current mode of work.

Table 17. Student College Affiliation

Table 18. What is your student classification?

Table 19. If your work requires access to your system in your lab or to one of UC's systems, do you have remote access (/remote connection)?

Table 20. Did you experience issues in using software or tools for your coursework or research?

Table 21. Please list the software(s) you have issues with.

Table 22. What is the issue?

Table 23. Do you have sufficient privacy at home to attend live classes?

Table 24. Are you a Teaching Assistant (TA)?

Table 25. As a TA do you think your students responded well to the shift to online teaching?

Table 26. What are some of the difficulties you faced?

Table 27. I feel confident to transition to Canvas as a Teaching Assistant.

Table 28. Have you been sufficiently supported in the transition to remote teaching by UC?

Table 29. What are the primary devices you use for remote teaching/learning/work?

Table 30. Other: Type of Device (Other Specified); Top 10 phrases listed

Table 31. Which of the following tools/platforms do you use for remote teaching/learning/work?

Table 32. OTHER: What are the top technology tools/ platforms? Top 10 phrases listed

Table 33. I use Public WiFi Access Points/hotspots for teaching/learning/work.

Table 34. I use UC provided WiFi access points/ hotspots for teaching/learning/work.

Table 35. Issues with the UC VPN prevented me from accessing UC resources.

Table 36. Connectivity Issues: Based on your experience to date pick ALL that are TRUE for you.

Table 37. Have you used your own funds to upgrade or purchase devices to facilitate remote teaching/working/learning?

Table 38. Issues with a device negatively affected the performance of my responsibilities.

Table 39. Issues with internet connection negatively affected the performance of my responsibilities.

Table 40. Lack of funds prevented me from acquiring technology needed to fully engage via remote mode.

Table 41. I am reluctant to share about my lack of resources.

Table 42. Overall technology support

Table 43. IT@UC phone call support

Table 44. IT@UC ticket support

Table 45. IT@UC Website

Table 46. Your unit website

Table 47. Your unit Instructional Design support



Table 48. IT@UC Knowledge Base

Table 49. Do you have sufficient hardware and software resources to continue teaching/learning/ working remotely?

Table 50. I feel confident to transition to Canvas.

BACKGROUND

Introduction and Purpose

On March 26, 2020, the University of Cincinnati (UC) moved to a predominantly remote mode of operation to prevent the spread of COVID-19. All teaching and learning abruptly transitioned to remote while some personnel remained on campus because their work could not be done remotely or as essential personnel. The ability to communicate at a distance became crucial for everyone. As such, the work of IT@UC, the unit that supports technology needs of students, faculty, and staff at UC, became an even more critical support. Given this unprecedented event of the pandemic, and the continuing online work that is expected for all constituents through at least Fall 2020, Faculty Senate, in collaboration with IT@UC, Staff Senate, and Undergraduate and Graduate Student Government representatives met to create a survey to collect feedback from UC faculty, staff, and students about their experiences with technology resources and support as they transitioned to remote teaching, working, and learning. The input serves to help IT@UC, as well as the various colleges and other units such as those providing academic support, to consider the resources required to optimize the university mission as UC continues remote and online operations.

Methodology

Faculty Senate, Staff Senate, the Undergraduate and Graduate Student Government and IT@UC created the survey which underwent several reviews and revisions by these groups as well as external faculty and staff reviewers. The survey was programmed into Qualtrics, an online survey software, and consisted of a total of 49 questions. *Role* of the individual was the only question that required an answer; all other questions were optional and could be left blank. *Role* also determined the block of questions the respondent would answer (see Appendix A). The role options consisted of Faculty (full and part-time), Staff (full and part-time) and Students (undergraduate, graduate and teaching assistant (TA)) and Other. The faculty survey responses consisted of 34 questions, staff of 27 questions, and students of 34 questions (additional 6 for TAs). 36 of the questions were multiple choice and 13 of the questions were text entry. All responses were anonymous; however, three \$25 UC bookstore gift cards were raffled to 3 participants of those who chose to include their emails at the end of the survey. These emails were stripped from the data after the raffle names were randomly selected. According to Qualtrics, the length of time to complete the survey ranged between 8-12 minutes, however the recorded average was 31.1 minutes, which includes people who did not complete the survey in a single setting.

The online survey was distributed via email on May 11, 2020 to the following groups: Faculty, Staff, and Students. The survey remained open through May 28 and closed with 2300 recorded responses. There was, however, very low undergraduate student participation and thus, the survey was reopened the week of June 8–12, 2020 for undergraduate students, increasing the

final recorded survey response to 2600. Key results are analyzed, visualized, and explained in this report.

Demographics

This report presents survey findings which are based on responses received from 614 faculty and 666 staff (each group approximately 25% of the respondents), as well as 1303 students comprised of a relatively higher response rate from graduate students who comprised almost 40% of total respondents compared to 10% for undergraduates. Of the 614 faculty who took the survey, all colleges were represented, with the highest represented colleges being A&S (26.35%) and UCBA (12.5%); 10% to 6% each were from CECH, CCM, CEAS, UC Clermont, and CoM; 5% to almost 3% each were from CoB, CAHS, CoN, DAAP, and ELCE; with the rest from the remaining colleges and the Office of Research. The largest percentages of students were from CEAS (28%), CAHS (13%) and A&S (10%), with 10% to 6% from CoN, CECH, CCM, CoB and CoM; and 4% to almost 2% from Pharmacy, DAAP, and UC Online.

Of all respondents, almost 62% identified as female compared to 35% as male. The disparity of females over male held true in each category. Of all respondents, the two largest categories by race identified as white (67% of responses) and Asian (14%), although these percentages differed widely depending on category of respondents (76% identified as white faculty, 83% as white staff, and 55.7% as white students; while 5% identified as Asian faculty, 1% as Asian staff, and as 25% Asian students). Of all respondents, an additional 2.7% identified as Hispanic or Latino, 2.2% as African American, 1.8% as Asian American, and 1.4% as Middle Eastern. Not surprisingly, most students identified as being in the 18-29 age range (71%), with another 20% in the 30-39 age group. As compared to the 40-49 and 50-59 age groups where percentages of staff and faculty were close, staff and faculty numbers were most disparate in the 30-39 group with 7% more staff in that age range than faculty, and in the over-60 group with 10% more faculty in that age range than staff.

While faculty and students could work only through fully remote means during this period, some staff reported being on campus; approximately 86% of staff worked fully remote, while 12% worked partly on campus, and 2% worked fully on campus.

SUMMARY OF FINDINGS

This section encapsulates the five Key Result Areas that are represented in the Tables below.

Teaching and Learning

In considering online teaching experience before the move to remote teaching, approximately equal percentages of faculty reported that they did not have prior experience teaching online courses compared to those who had taught at least one course online (48% versus 46.5%). For the transition to remote teaching, 85% of those responding needed to convert courses (that is, they had been teaching face-to-face prior to the move off campus). Most of those converted one (25%) or two (30%) courses, but almost 18% had to convert three, and 11% converted four

or more. A substantial majority of faculty noted both receiving help with converting those classes and feeling supported in the transition (84% and 70% respectively); on the other hand, almost equal percentages of faculty ranked the transition as either very difficult, difficult, or somewhat difficult (approximately 39%) as those who ranked their experiences very easy, easy or somewhat easy (41%). In reporting how they taught those courses, almost 40% of the faculty taught their courses synchronously, conducting live sessions on scheduled class time; 25.5% taught asynchronously; while 33 % reported teaching asynchronously with some synchronous meetings.

Of the 83% of students who identified as TAs, the majority felt confident moving online (81%) and felt supported doing so (65%, with 21% not feeling supported). In addition, 65% noted their impression that their students handled the transition well. Of the 35% who indicated issues with transition, approximately 50% reported in text responses a variety of concerns relating to technology, such as bad connections, exams, use of Canvas, and various access issues; another 47% noted issues not clearly related to technology, but instead reflecting on their students' work or attitude, such as concerns about student motivation, attendance, declining work quality (42%), and their mental health issues (5%).

Although 63% of students attending classes said yes to the question “do you have sufficient privacy at home to attend live classes,” a substantial minority, 37%, noted they only sometimes had privacy (30%) with the remaining 7% noting that they did not have privacy to do so.

Technology and Tools

Of the kinds of devices on which individuals worked, almost half of all respondents (49%) noted a personal desktop/laptop or tablet; 25.6% noted cell phones; and 19% noted using a UC laptop/desktop or tablet. Though relatively few, it should be noted that 4.3% total shared computers, with 1.9% using a device from an employer that is not UC, and another 2.4% sharing family devices.

Of the various technologies used for teaching, learning, and work among all respondents, 16% of respondents noted WebEx as their most used technology, with Canvas a close second at 15%. A wide range of other top technologies used included, in decreasing order from 10.5% to almost 8%: Teams, VPN, Blackboard, and DUO. Of tools outside of UC's enterprise technology system, Zoom was used by almost 8% and YouTube by almost 6%, with a range of other technology rated top by under 2% of respondents.

Although a strong majority--almost 67% of users--noted that they did not have any technology concerns, almost 24% did have problems with the top two listed technologies, Canvas and WebEx. Other tools with which users had problems, listed in decreasing in the range of 7%--4%, were the following: Zoom, Any Connect, Blackboard, Honorlock, and Kaltura. Users noted concerns using connections such as VPN (11%), remote desktops (8.1%), and those related to library matters (5.3%), the last of which may also have indicated other VPN concerns.

In response to technology support, the majority in all groups noted mostly general satisfaction (excellent, good, or neutral responses), with only approximately 5% or less reporting fair or poor responses to tech support in general, phone call, and ticket support (with significant portions of the respondents listing the latter two as either not applicable or unsure). Slightly higher percentages, though still less than 10% of various respondent groups, noted dissatisfaction (poor or fair responses) with unit and university websites in providing support.

Internet concerns ranked high as problems; when asked about hardware of Internet connection issues, 40% of all respondents reported problems with reliability or sufficiency of Internet connections, with another 43% of respondents dividing concerns almost evenly between reliability or sufficiency of software and that of laptop/desktop concerns. It is noteworthy to see the relatively larger concerns voiced by students as represented in these figures. Of those who strongly agreed or agreed that devices “negatively affected performance of their responsibilities,” were 22% of faculty, 12% of staff, 24% of graduate students, and 33% of undergraduates; those who said that Internet connections negatively affected their performance were 29% of faculty, 17% of staff, 31% of graduate students, and 42% of undergraduates. In addition, over one third of students, 21% of faculty, and 12% of staff reported using public Wi-Fi hotspots, while over 33% of faculty and students and almost a third of staff used UC Wi-Fi access.

Half of faculty respondents noted using their own funds “to facilitate remote teaching, working, and learning” as did substantial portions of staff (34%), graduate students (40%), and undergraduate students (37%). Asked whether lack of funds impeded the ability to fully engage in remote work, those agreeing or strongly agreeing consisted of 20% of faculty, 7.5% of staff, 16% of graduate students, and 13% of undergraduate students.

Moving forward, the majority of all groups noted that they now have sufficient hardware and software resources to continue their work, with 11% of faculty, 3.4% of staff, and almost 7% of graduate students and 4% of undergraduate students stating that they still do not.

Open-Ended Text Responses

Positive Responses/Recommendations: Of the open-ended questions asked, one which garnered many responses asked individuals to identify what was working well for them. Many respondents who registered success in remote work in the Spring reported the help of university support units, including IT@UC (for example, “UC IT help desk is amazing”, CET&L “great and super helpful”), and FEC; specific support included Canvas and WebEx workshops, and online information and resources. An equal number of responses praised programs, departments, and colleges that provided disciplinary-specific workshops, WebEx Q&A or town hall meetings, one-to-one support from learning and technology teams and from IT and ID personnel within colleges; and a variety of help from program directors and individual colleagues. Many noted specific individuals who were not only reported as providing needed help but were also credited with “creat[ing] badly needed collegiality.” Others sought to pass

on their own technology recommendations including faculty and staff who sought to share specific tools and software that they found were useful to them, including resources like Lynda.com, Google Voice, and lightboard. Others shared pedagogical recommendations, including benefits of using asynchronous teaching, while recommending that faculty be permitted to use both asynchronous and other creative means to teach rather than expected or prescribed methods. Students suggested spaces to work away from home if possible, but if not, having “a virtual ‘e-space’ or ‘e-café’ of some sort . . . [to] feel the presence of other people working” in order to recreate the energy of a learning environment.

Specific Student Concerns: Some students voiced concerns about sufficiency of information concerning the move to Canvas and requested more training or the hope that instructors or other units would provide more guidance. One student noted, “I have never used Canvas before and am worried that taking online classes through Canvas will not go as smoothly as hoped. Hopefully, the instructors will be able to provide a lot of guidance on how to submit assignments/complete modules, etc.” A part-time graduate student explained, “I have not received any communication from the graduate school on information regarding support or training for transitioning” and wondered if there had been “tables or other info handouts [provided that did not reach] “evening and weekend students.”

One student captured concerns noted by other students about the intrusive nature of work in a home environment. Frequent individual responses did include concerns about privacy, workspace, and focus, all of which are noted in this response. The student recognized that, “now my teachers have been able to peek into my life a bit. It is very revealing of one's socioeconomic status as either a student [or] teacher with this remote learning. [M]y ability to focus shifted from learning and retaining things in class when I would worry about whether or not my dog would start barking, or someone in my home would be making noises, that clearly hint at my life background or my neighborhood and my living arrangements. I don't come from much and I don't have peace and quiet every day of the week. I don't have a separate desk space like others do, so I was left with using my bed as a desk. I attended school separate from my home life before the quarantine and I didn't feel that my home life was even threatened to be exposed and thus judged by my classmates or my teachers. [E]specially attending a prestigious college at the university, my image was apart from that role as a performing student. I think that should be addressed for students and teachers.”

Other comments suggest anxiety about the lack of reliability of needed means of access and required communication; one student asked, “If the home internet dies, what should a student do?” and another who indicated that, “when using WebEx or Zoom, a couple of times my laptop got frozen and interrupted my classes. I am unsure why this happened. I am always a bit scared it happens again.” One faculty member noted, “faculty need to be sensitive to the fact that some students will have work and family pressures making regular participation a challenge. Asynchronous courses work much better for such students. At the same time,

students who are available really do enjoy being able to connect with their profs and classmates live. We need to be sensitive and flexible.”

Technology Needs: When asked what devices and resources they had to purchase, of the 945 text responses, 17% mentioned laptop or computer, 11 % mentioned monitor, and others noted computer peripherals such as headphones, microphones, mouses, or tablets (5% each), webcams (3%), phones (2%), and light (1%). On the other hand, these were often described as critical components for them being able to report that they managed well in a remote setting.

Problems encountered included not having discipline-specific software where courses had special visual, aural, experiential, or notational requirements, like the arts, science, math, and others. Proctoring of tests and problems with this came up repeatedly, especially because of the higher reliance required in an all online environments. A number of faculty specifically mentioned not being happy with the quality of Honorlock and as presenting problems, including that it “did not really help to prevent cheating [as they did not have] enough live proctors [so that] they flag some students without a reasons but then miss the most suspicious ones.” One faculty suggested that, “If we have remote teaching, there should be in-class exams as remote exams with Honorlock does not work well.”

Access Needs: Faculty, staff, and students noted problems with various means of access, including VPN connections. Students described being unable to get access to academic journal articles, databases, and other library resources, and experiencing broken links. One student explained that, “The proxy and the VPN need to be reliable. With the library closed, we are using more the off-campus access to the subscriptions of our library and other databases, and if we cannot connect, our work suffers a lot.” Some responses inferred, and one indicated, not knowing how to resolve such problems. Faculty and staff noted similar problems with access to library resources or noted concerns regarding finding out who could help restore such access or aid in gaining access by others.

Consistent comments from all respondent groups described the need for good Internet and bandwidth. One faculty member noted that this problem could have differential impacts on certain populations such as working parents and those with young children whose education was also interrupted. Such a burden is a special concern in relation to live meetings or class lessons, especially where Internet is also unreliable or where children at home need concurrent access. Additionally, students in particular noted the inability to resolve this particular need due to lack of funds, such as one graduate student who said limited resources made it difficult to continue to pay an extra \$50 per month for Internet he had previously depended on from UC. A faculty member also identified that “a real hindrance” to teaching and learning was students who did not have reliable internet and computers. Specific problems that students noted were the result of poor Internet or broadband included group exams using screen share, phone/video calls to study with peers, and use of WebEx for class meetings. Faculty noted similar concerns.

Change Fatigue and Communication: A number of respondents noted that multiple and ongoing technological changes in addition to those specifically related to COVID-19 made them feel less able to move forward, including the change to Canvas. For example, one respondent called the many changes “demoralizing” and reported feeling “broken by the constant switching and program changing at UC.” Responses from others seemed to suggest communication issues as they did not know that there was help available to meet expectations or for availability of devices, such as that students could request laptops or that faculty could take home desktop equipment such as monitors. One student noted this in regard to financial help in general, stating that, “I think financial support including tuition assistance is something that a lot of students are worried about because either their parents have lost jobs or they themselves have had their co-ops delayed/canceled but I don't know how much any of the organizations [such as senates, student groups, and IT@UC] listed above can help with that.”

SURVEY RESULTS

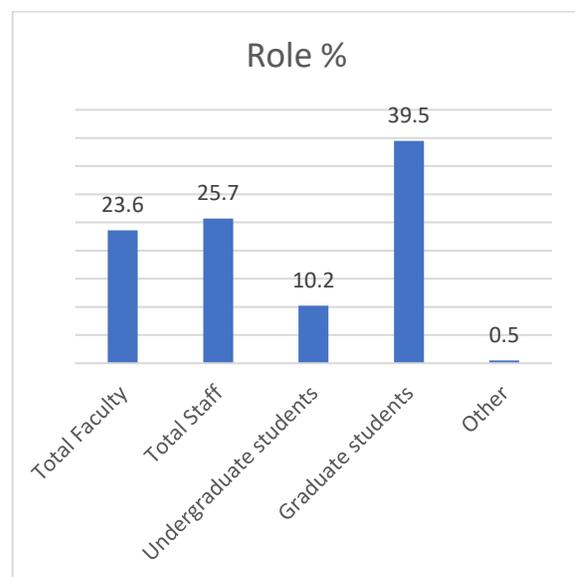
Please note that null or blank responses in the charts imply non-responses.

Profile of Respondents (all) (Tables 1 – 3)

The survey received 2600 responses from full- and part-time faculty (23.6%), full- and part-time staff (25.7%), undergraduate (10.2%) and graduate (39.5%) students, and Other (0.5%), thus it was essentially an even 50% split of faculty and staff and 50% student response intake (Table 1).

Table 1. Faculty, staff and student response rates

| Role | Responses (N) | Responses (%) |
|-----------------------|---------------|---------------|
| Full-time Faculty | 463 | 17.8% |
| Part-time Faculty | 151 | 5.8% |
| Total Faculty | 614 | 23.6% |
| Full-time Staff | 649 | 25% |
| Part-time Staff | 17 | 0.7% |
| Total Staff | 666 | 25.7% |
| Undergraduate | 264 | 10.2% |
| Graduate | 1027 | 39.5% |
| Other | 11 | 0.4% |
| Total Students | 1302 | 50.1% |
| Other | 18 | 0.5% |



This survey was completed predominantly by people who identify as female, 61.6%, with 35% participation of people who identify as male. Less than 2% of people preferred not to answer and less than 1% identified as non-binary/conforming or preferred to self-describe (Table 2). In terms of racial/ethnic identification, 67% identified as white, followed by 14.2% Asian, then 3.5% Black as well as prefer not to answer, 2.7% Hispanic or Latino, 2.2% African American, 1.8% Asian American, 1.5% Other, 1.4% Middle Eastern, and less than 0.5% of people selected American Indian or Alaskan Native and Native Hawaiian or Other Pacific Islander (Table 3).

Table 2: Gender Identification (All)

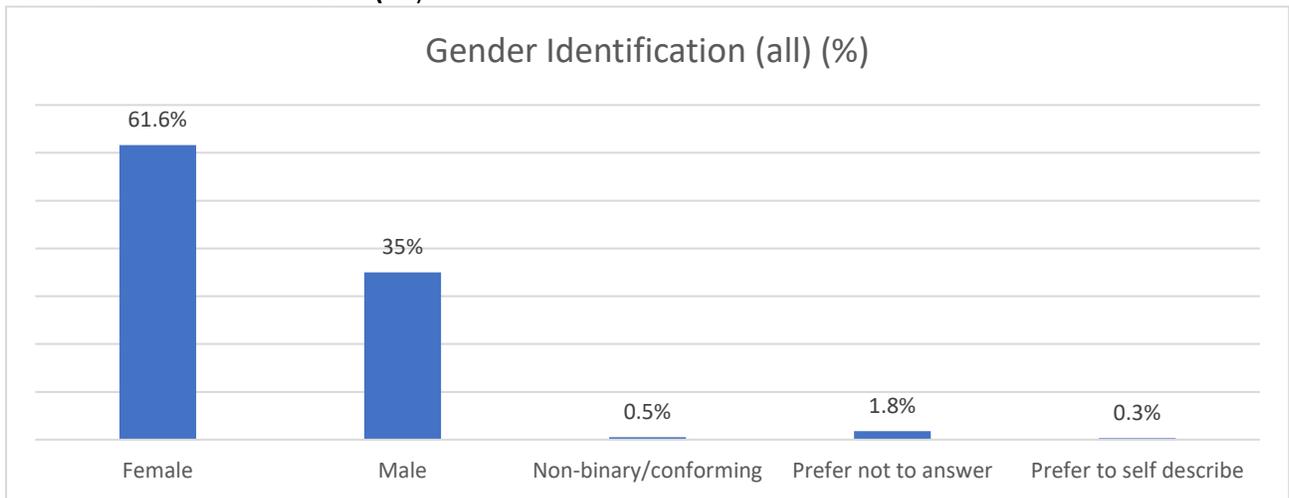
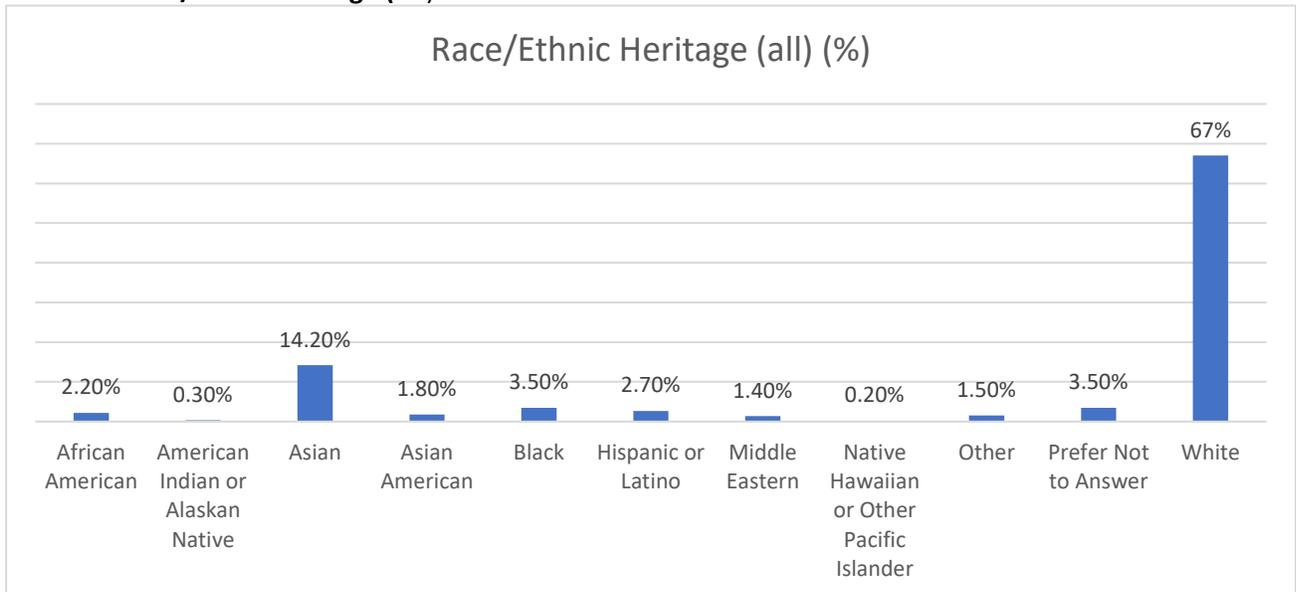


Table 3: Racial/Ethnic Heritage (All)



Key Result Area 1: Background information by roles (Tables 4 – 28)

Background information presented in this area includes demographic information across roles, as well as role-specific responses relating to each group’s experiences with technology and online work, as well as their impressions of the support received to become able to teach, study, or work remotely. The majority of each group was satisfied with their experience and support received, but to varying degrees as noted in the Tables below.

Tables 4-6 demonstrate the gender, age, and race by faculty, staff, and students. People who identify as female in each role were the majority of respondents. White was the most common race/ethnic response across roles, and the student category is the most diverse in terms of race/ethnic heritage. Not surprisingly, most students identified as being in the 18-29 age range (71%). Staff and Faculty were represented about equally in the 40-49 and 50-59 age year ranges, with the largest divergence in the over 60 group with 10% more faculty in that age range than staff.

Table 4. Gender by Role

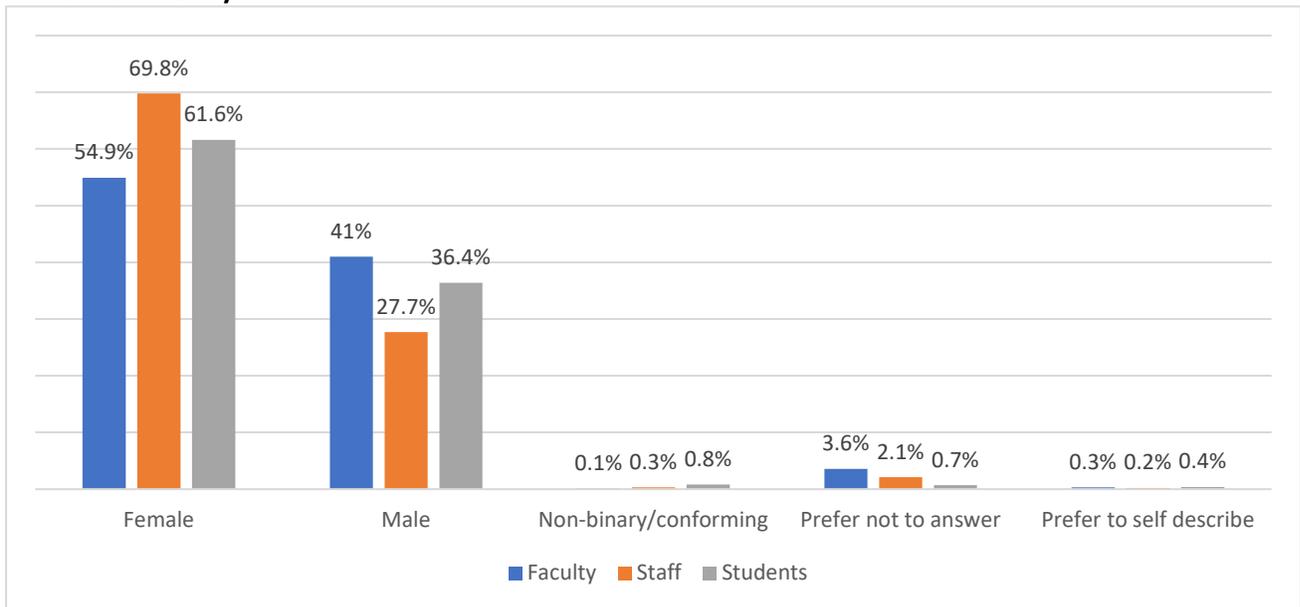


Table 5. Race/Ethnic Heritage by Role

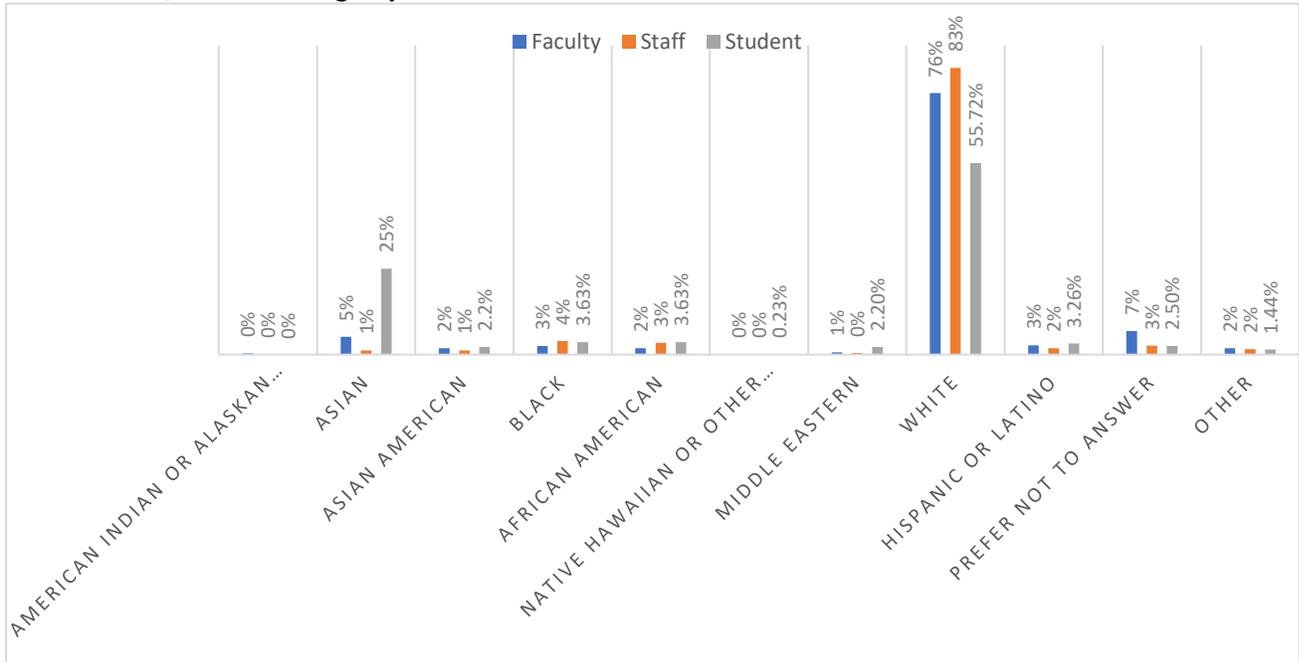
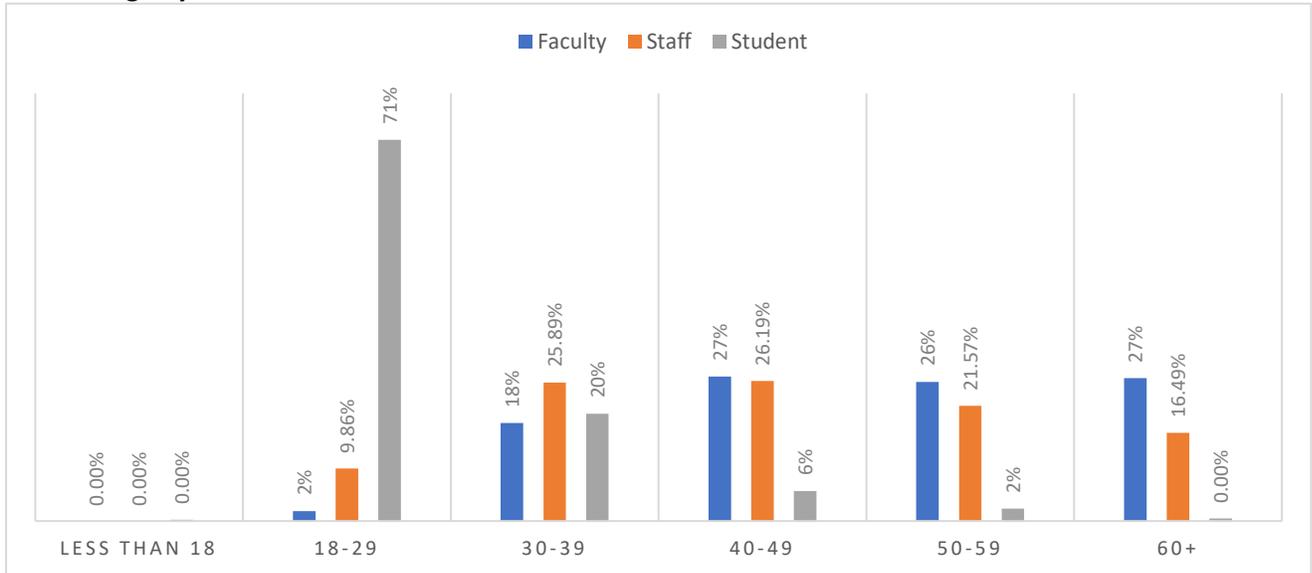


Table 6. Age by Role



Faculty Only Responses (Tables 7 – 15)

Of the 614 faculty that took the survey, 26.35% were from A&S, 12.5% UCBA, 8.28% CECH, 7.77% CCM, 7.26% each from CEAS & UC Clermont, 6.25% CoM, 4.90% CoB, 4.73% CAHS, 3.55% each from CoN and DAAP, followed by less than 20 people from the remaining departments. (Table 7). These faculty reported that 55.5% of them had to convert 1 or 2 courses during the

COVID19 transition to fully remote operations, 18% had to convert 3 courses, ~10% had to convert 4 or 5 courses and 16% of faculty did not have to convert a single course (Table 8).

Table 7. Faculty College Affiliation

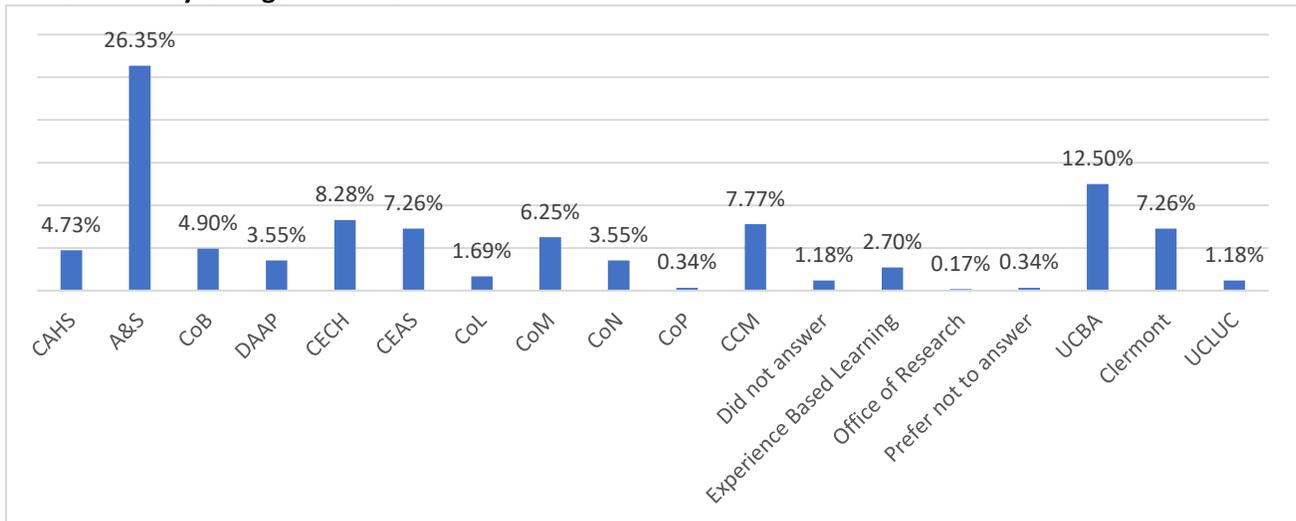
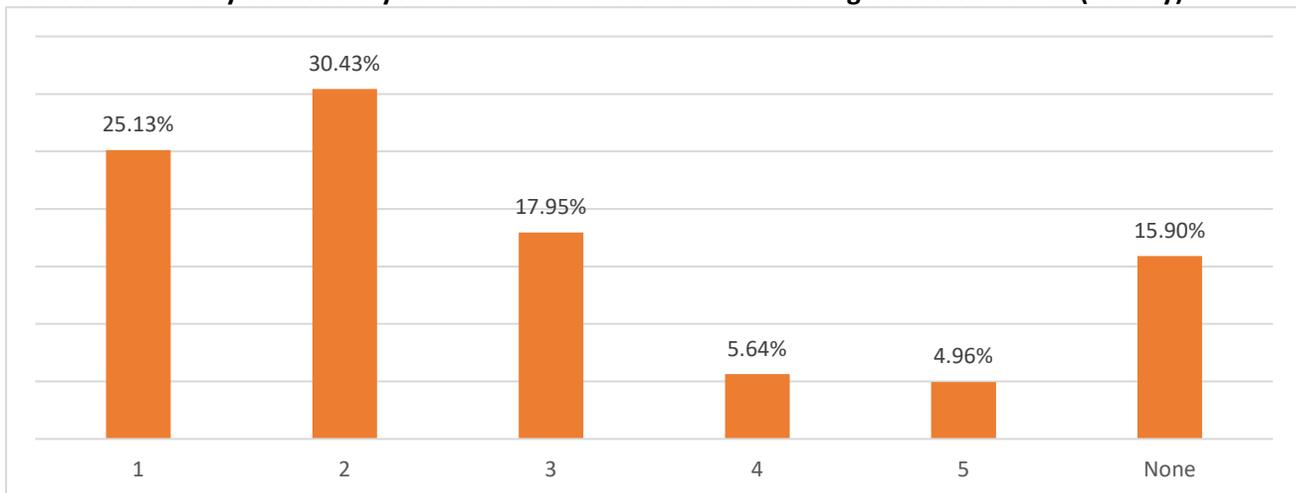


Table 8. How many classes did you have to convert to remote teaching due to Covid-19? (Faculty)



84% of the Yes/No respondents stated that they did receive or were offered help with converting the classes to remote teaching and learning and 69.5% were sufficiently supported in the transition (Tables 9 & 10).

Table 9. Have you received or been offered help with converting your classes to remote teaching? (Faculty)

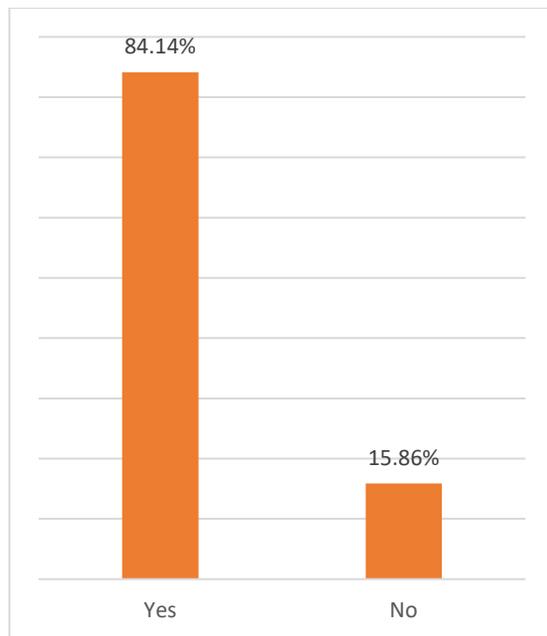
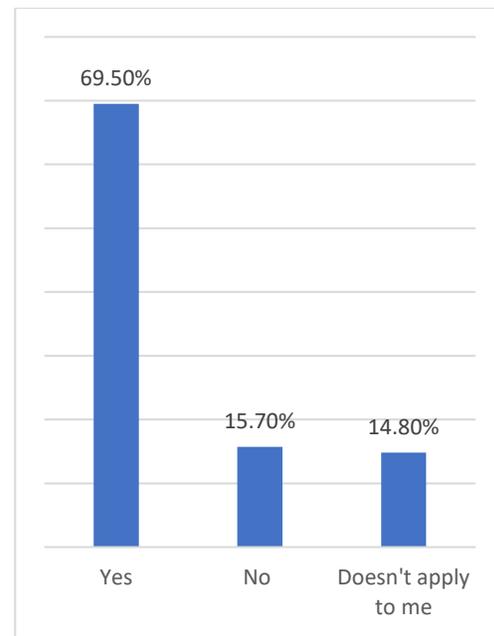


Table 10. Have you been sufficiently supported in the transition to remote teaching by UC? (Faculty)



Faculty were asked to describe what kind of training they would have liked to receive or describe any difficulties they were facing. The most recorded responses were “training for online teaching/University support” followed by Canvas training and better communication (Table 11). In addition, 26% of faculty reported that their transition to remote training was “somewhat difficult” (Table 12). Slightly more faculty responded they did not teach online (46.5%) before the turn to remote work as compared to those who had taught at least one online course in the past (43.2%) (Table 13).

Table 11. What kind of training would you have liked to receive, or describe any difficulties you're facing right now? (Faculty) (Text response: most frequent training mentioned)

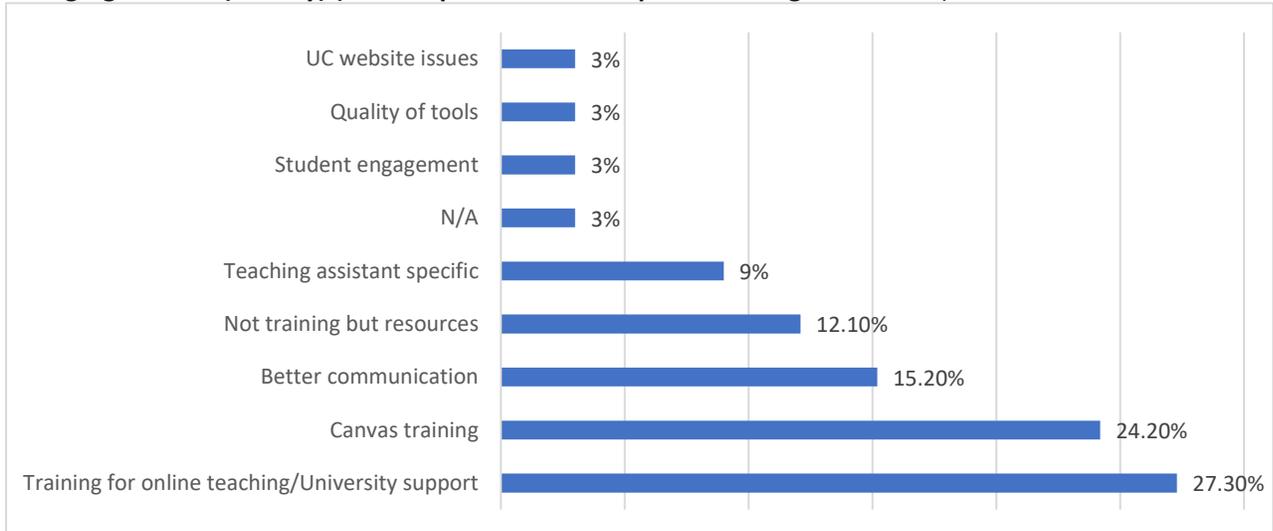


Table 12. How do you describe your transition to remote teaching? (Faculty)

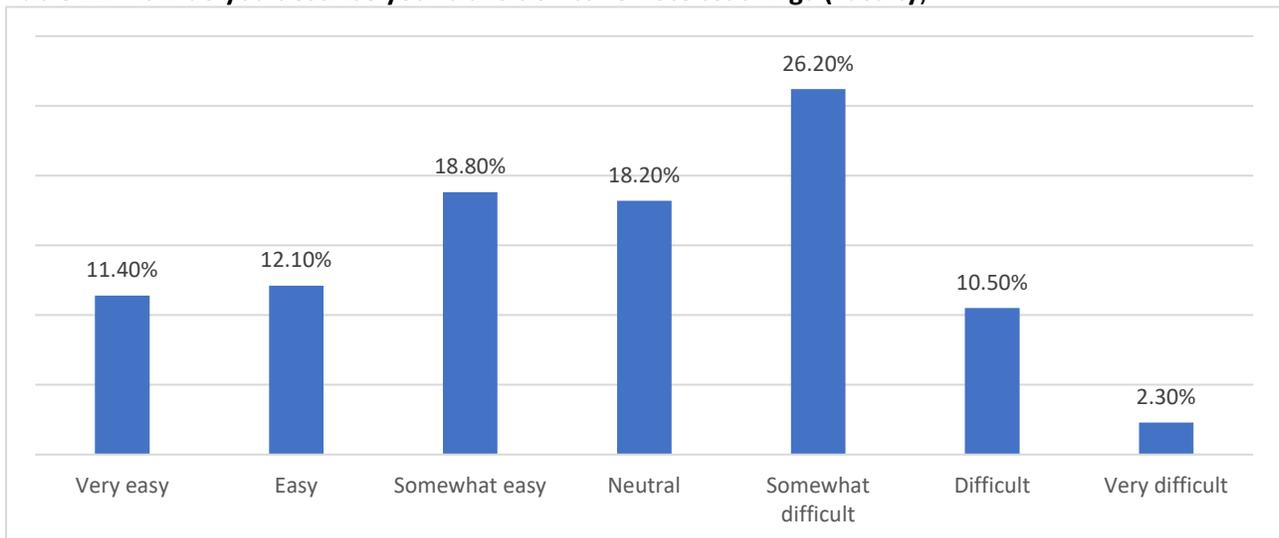
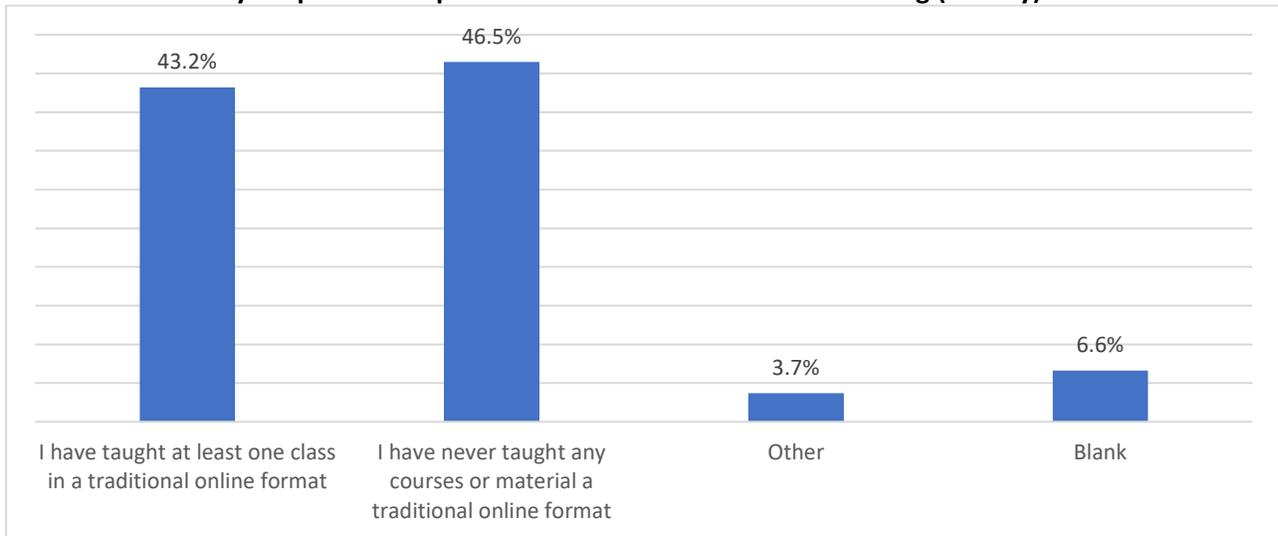
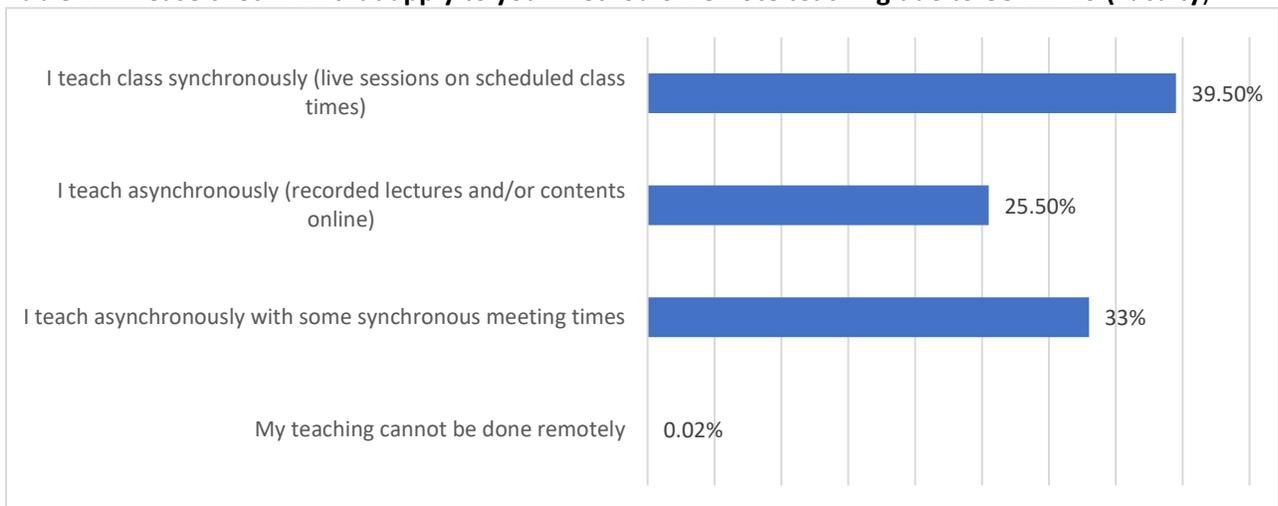


Table 13. Describe your previous experience with traditional online teaching (Faculty)



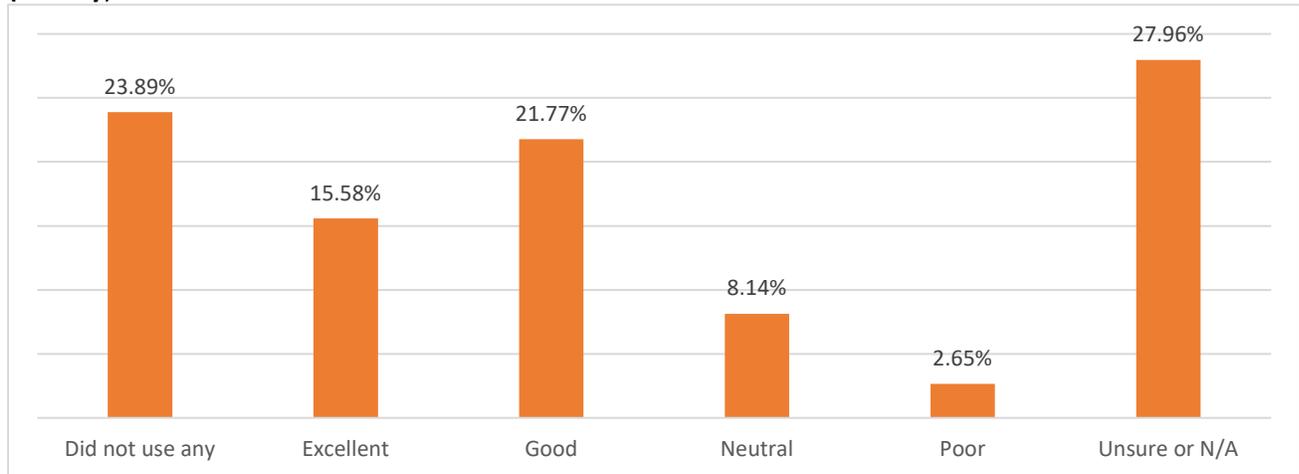
Of the 377 multiple selection responses, 39.5% taught synchronously, 33% taught asynchronously with some synchronous meeting times, 25.5% teach fully asynchronously and 0.02% reported that their teaching could not be done remotely (Table 14).

Table 14. Please check ALL that apply to your method of remote teaching due to COVID-19 (Faculty)



Of the 565 responses rating CETL courses and workshops support, over half either did not use or weren't sure they used the resources. Of those who did use these resources, the majority (37.35%) reported either Excellent or Good experience. (Table 15).

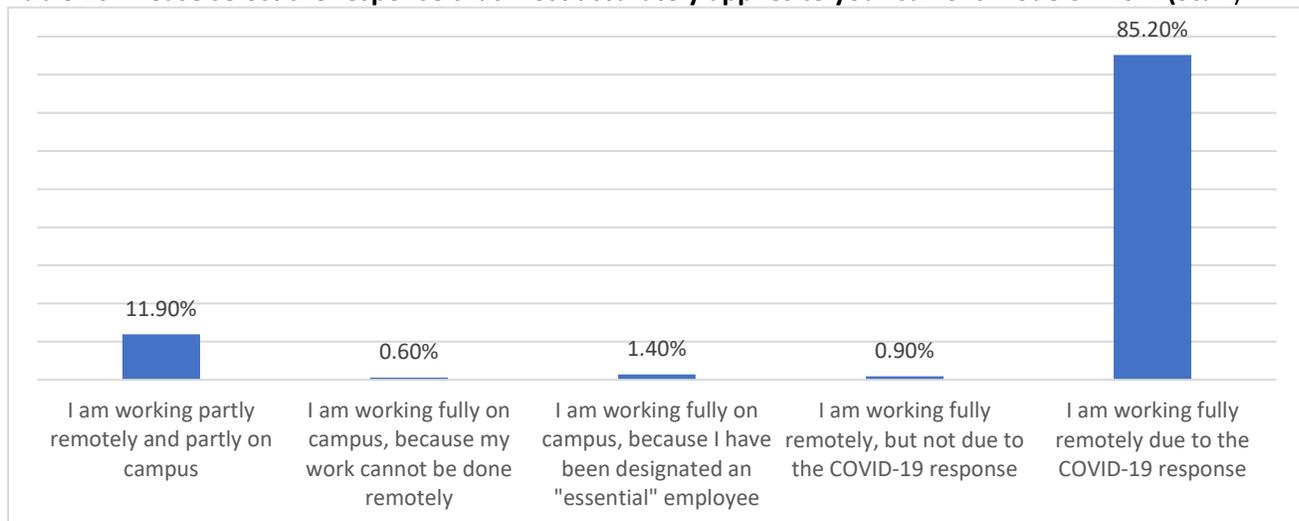
Table 15. Based on your experience, rate the technology support provided by CETL Courses and workshops for Covid-19 related transition to remote teaching? (If not used, select 'Unsure or N/A') (Faculty)



Staff Only Responses

Of the 656 staff responses regarding their current mode of work, 85.2% reported working fully remotely due to the COVID-19 response, 11.9% were working partly remote and partly on campus, and less than 3% staff reported to be either working fully on campus because they can't work remote, working fully on campus because designated as an "essential" worker or working fully remotely but not because of the COVID-19 response (Table 16).

Table 16. Please select the response that most accurately applies to your current mode of work (Staff)



Student Only Responses (Tables 17 – 23)

28% of the student respondents came from CEAS, 12.9% CAHS, 10.3% A&S, 8.9% CoN, 8.4% CECH, 7.9% from CCM and CoB, 6% from CoM, 3.4% from CoP, less than 3% from DAAP, 1.8% from UC Online, and the remainder included students from UCBA and UC Clermont (Table 17). Of these students, 78.3% were graduate students and 20% undergraduate students.

Table 17. Student College Affiliation

College Affiliation

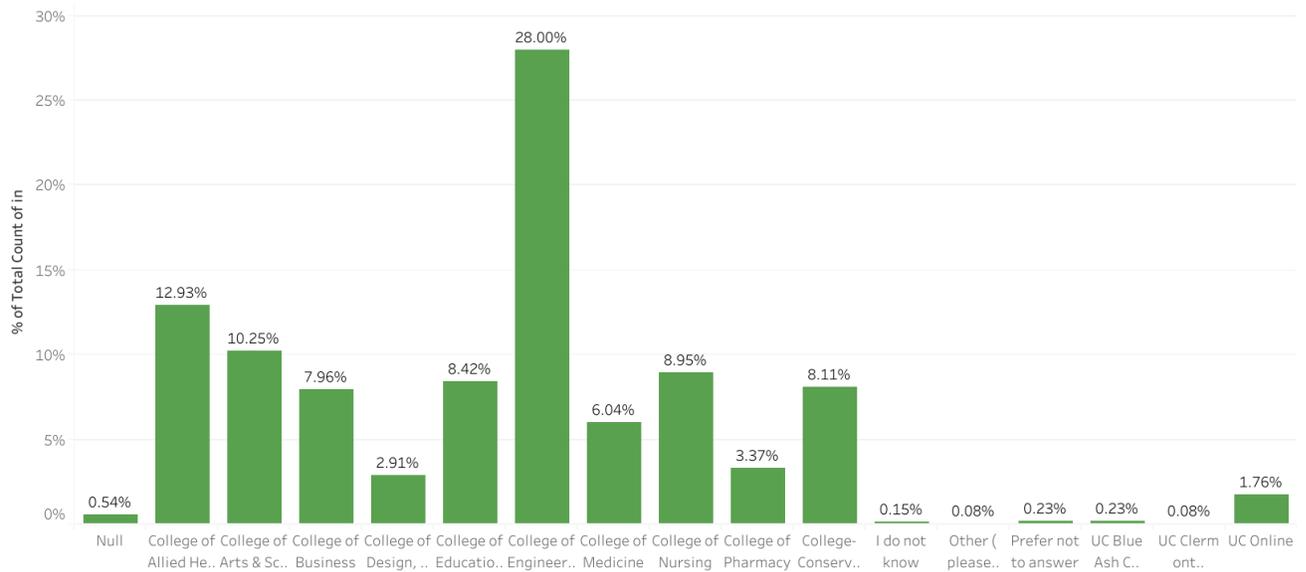
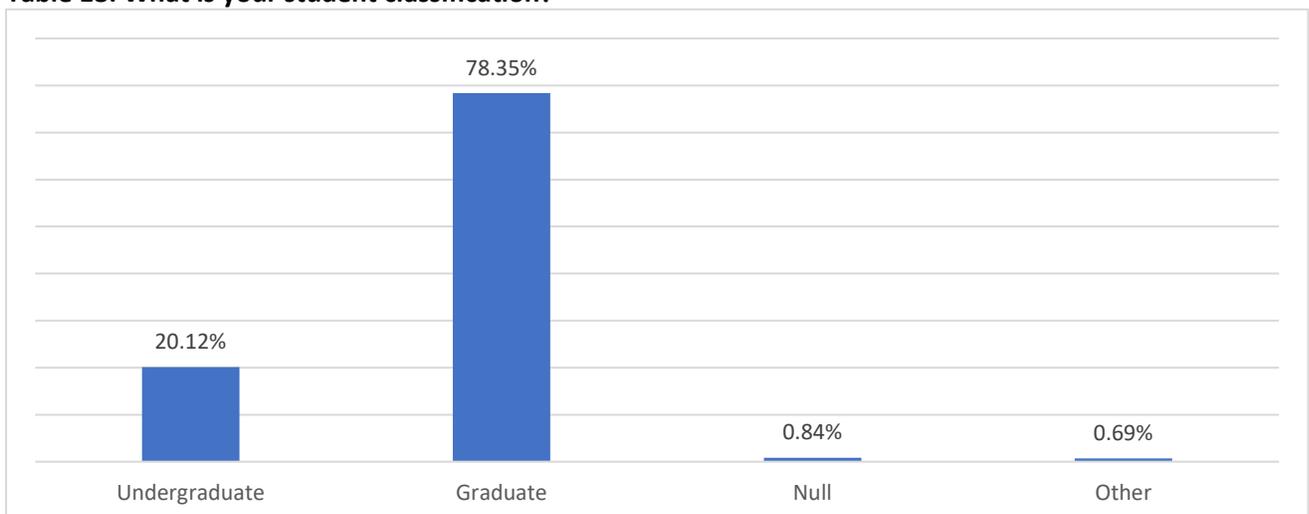
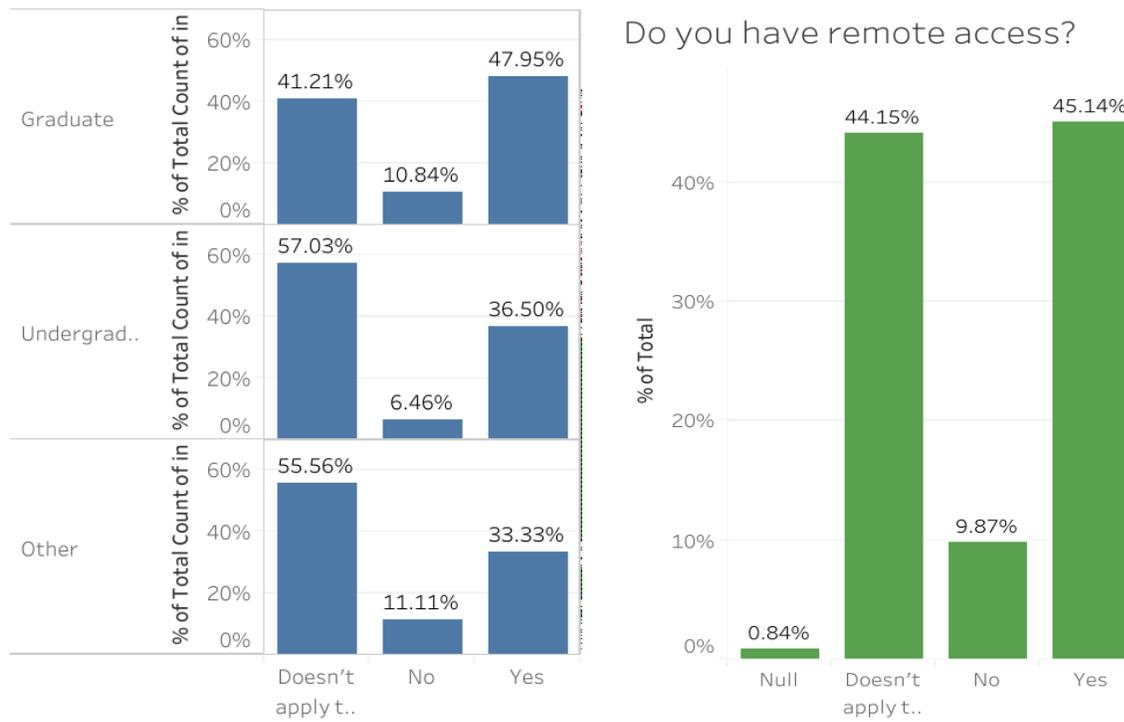


Table 18. What is your student classification?



Students were asked to indicate their need to access systems remotely to continue their work. The survey shows that 48% of graduate students, 36.5% undergraduate students, and 33% other were able to access these systems remotely and 11% grad, 6.5% undergrad, and 11% other were not able to access lab or UC systems remotely (Table 19).

Table 19. If your work requires access to your system in your lab or to one of UC's systems, do you have remote access (/remote connection)? (Students)



Almost 67% of students did not experience any issues with software or tools for coursework or research, while 23.5% did (Table 20). WebEx was overwhelmingly the software with which most people experienced issues (30.6%), with Canvas being the second (13.4%), although a variety of other tools were also noted that included both enterprise-level tools and those not part of UC's suite of tools (Tables 21 - 22).

Table 20. Did you experience issues in using software or tools for your coursework or research? (Students)

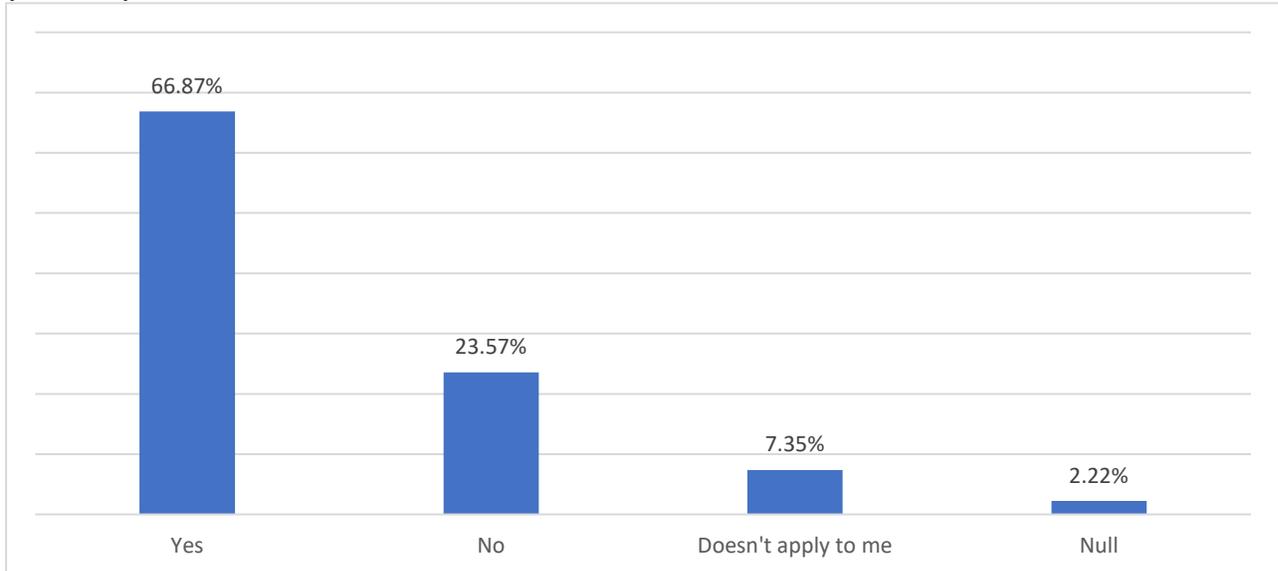


Table 21. Please list the software(s) you have issues with (Students) (Text response: most frequent software mentioned)

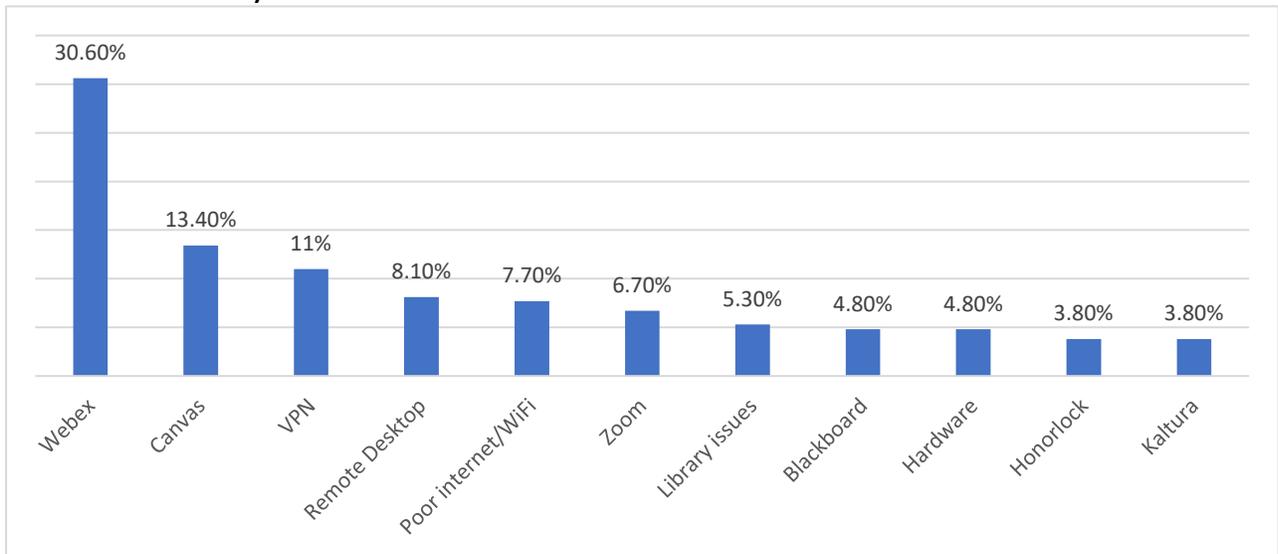
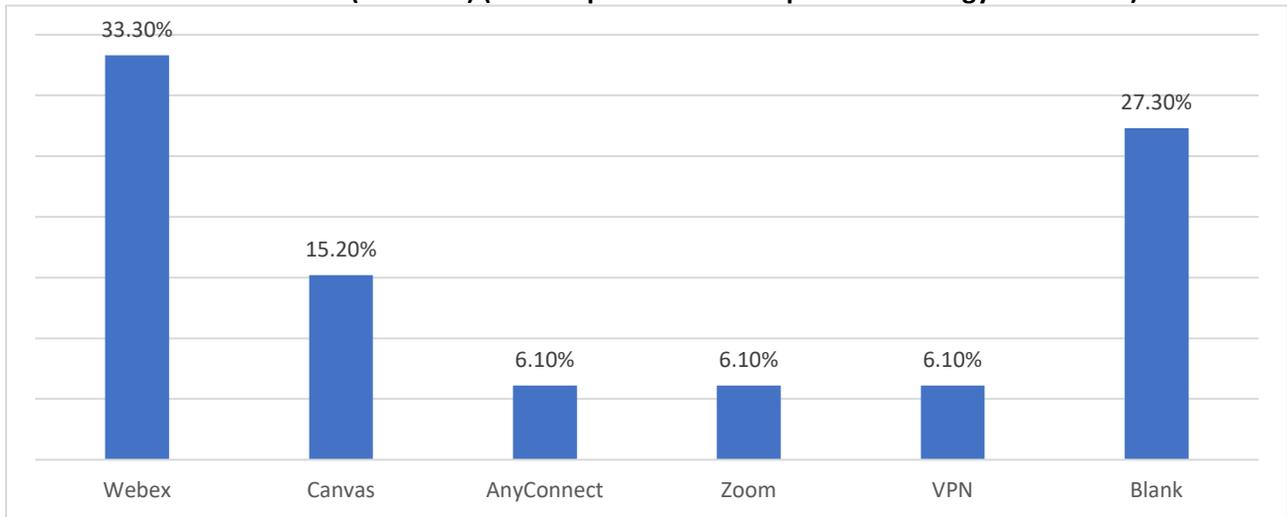
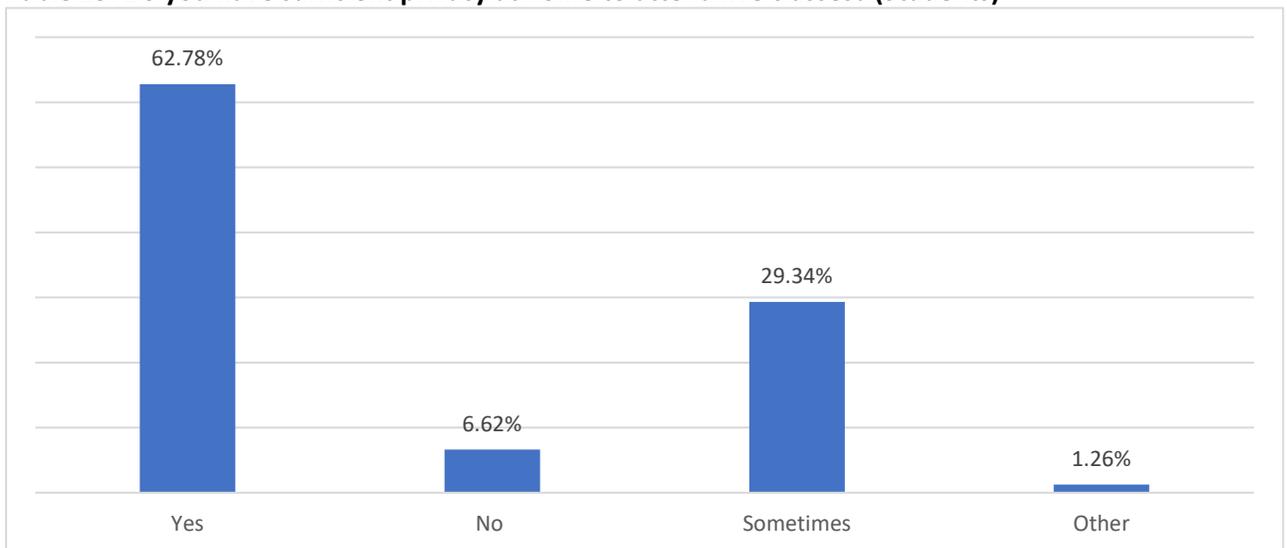


Table 22. What is the issue? (Students) (Text response: most frequent technology mentioned)



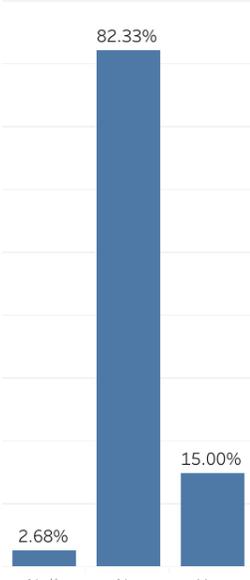
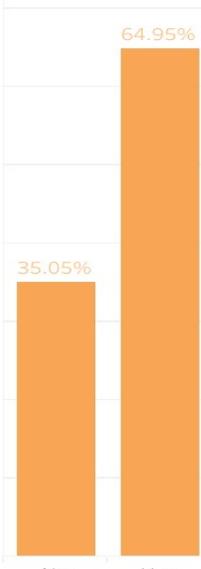
Almost 63% of students noted having sufficient privacy to attend live classes, but 7% stated that they did not and almost a third (30%) saying they sometimes did not. Open-ended text responses expounded on this, combined with other concerns such as problems in responding to synchronous requirements in classes. (Table 23)

Table 23. Do you have sufficient privacy at home to attend live classes? (Students)



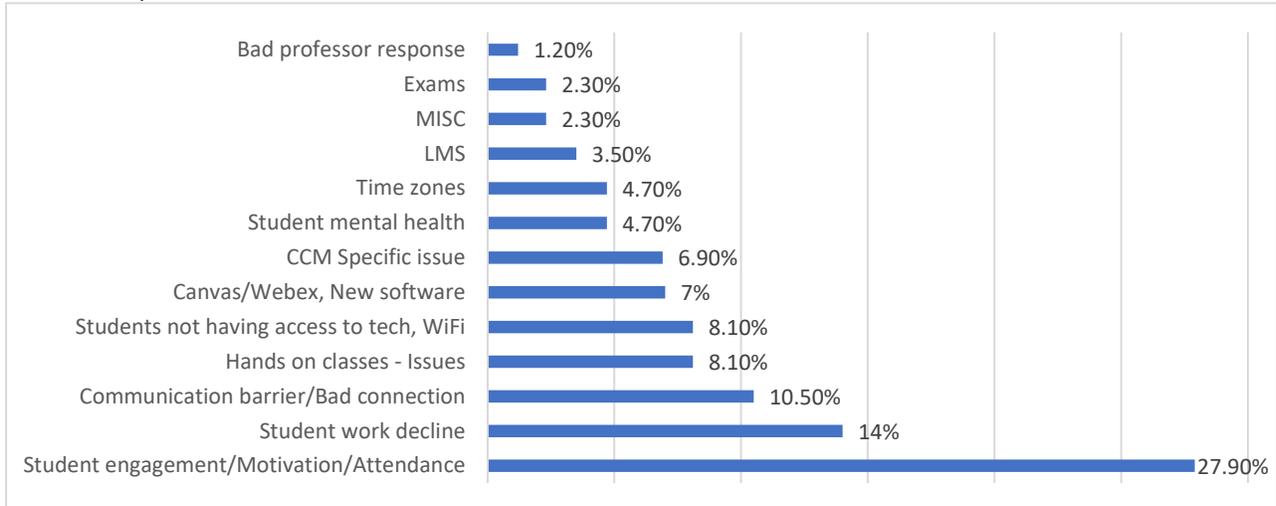
Teaching Assistants Only Responses (Tables 24 – 28)

15% of the students who responded to the survey were Teaching Assistants (TAs) (Table 24) and 65% of these students thought that their students responded well to the shift to online teaching, but 35% of them did not, which indicates a certain level of struggle for the TAs and the students in the transition (Table 25).

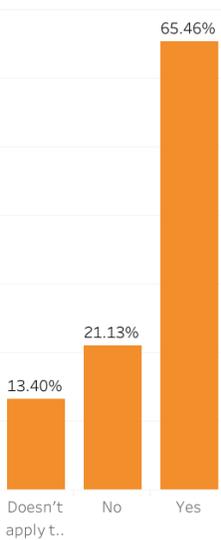
| Table 24. Are you a Teaching Assistant (TA)? | Table 25. As a TA do you think your students responded well to the shift to online teaching? | | | | | | | | | | | | | | |
|---|--|------------|------|-------|----|--------|-----|--------|---|----------|------------|----|--------|-----|--------|
|  <table border="1"> <caption>Data for Table 24: Are you a Teaching Assistant (TA)?</caption> <thead> <tr> <th>Response</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>Null</td> <td>2.68%</td> </tr> <tr> <td>No</td> <td>82.33%</td> </tr> <tr> <td>Yes</td> <td>15.00%</td> </tr> </tbody> </table> | Response | Percentage | Null | 2.68% | No | 82.33% | Yes | 15.00% |  <table border="1"> <caption>Data for Table 25: As a TA do you think your students responded well to the shift to online teaching?</caption> <thead> <tr> <th>Response</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>No</td> <td>35.05%</td> </tr> <tr> <td>Yes</td> <td>64.95%</td> </tr> </tbody> </table> | Response | Percentage | No | 35.05% | Yes | 64.95% |
| Response | Percentage | | | | | | | | | | | | | | |
| Null | 2.68% | | | | | | | | | | | | | | |
| No | 82.33% | | | | | | | | | | | | | | |
| Yes | 15.00% | | | | | | | | | | | | | | |
| Response | Percentage | | | | | | | | | | | | | | |
| No | 35.05% | | | | | | | | | | | | | | |
| Yes | 64.95% | | | | | | | | | | | | | | |

In the open-ended response inquiring further into what were some of the difficulties these TAs experienced, almost 42% identified problems related to course responses or attitudes by students including engagement, motivation, and work decline, while another 5% specifically noted mental health issues. Approximately 50% reflected more technology-related issues, such as communication barrier/bad connection, issues with hands-on classes, exams, and students not having access to tech/Wi-Fi (Table 26).

Table 26. What are some of the difficulties you faced? (TAs) (Text response: most frequent issue mentioned)



A large majority (80%) of the TAs feel confident to transition to Canvas, with almost 20% did not (Table 27). Regarding support, 65% of TAs felt they were sufficiently supported in the transition to remote teaching, but 21% did not (Table 28).

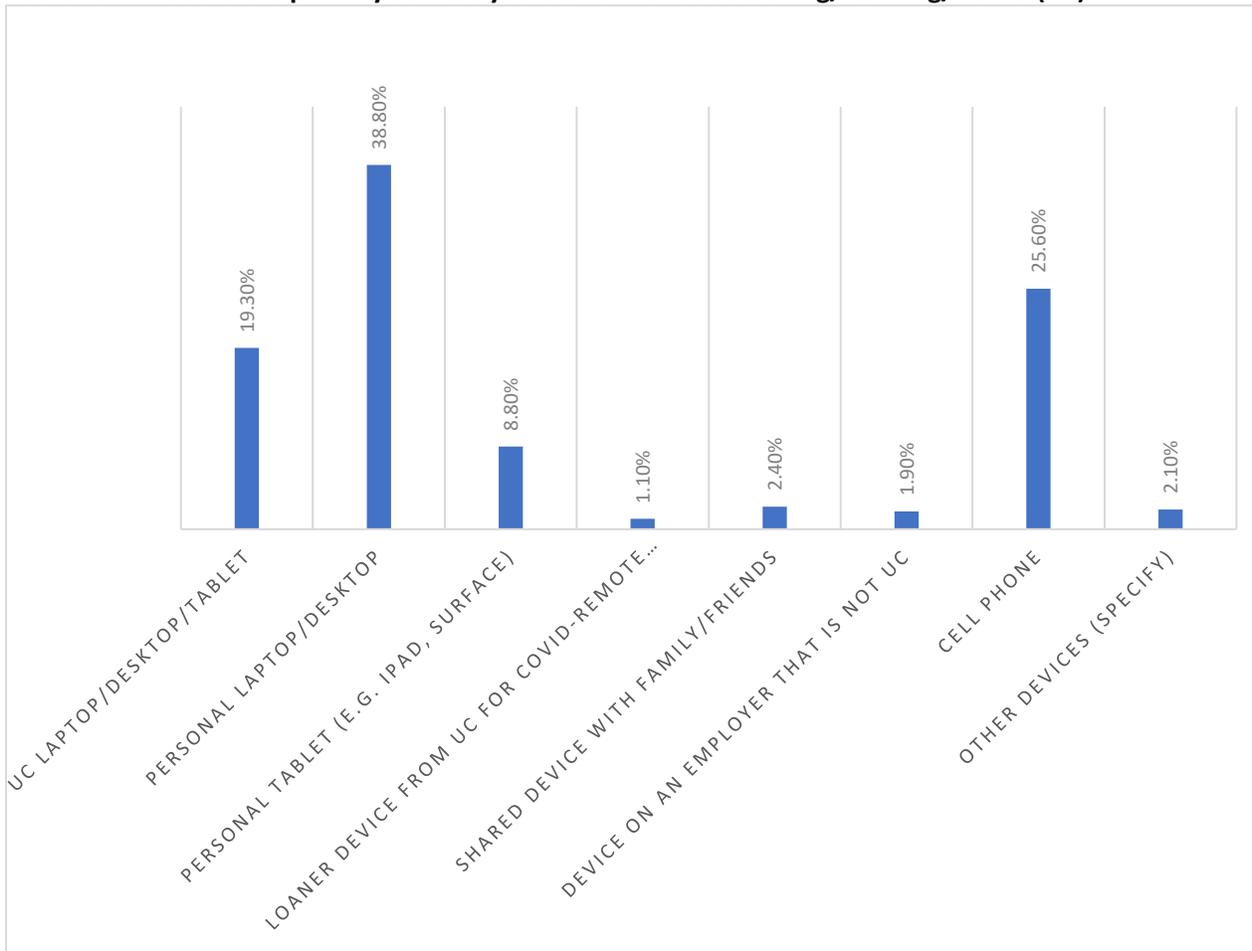
| Table 27. I feel confident to transition to Canvas as a Teaching Assistant? | Table 28. Have you been sufficiently supported in the transition to remote teaching by UC? (TAs) | | | | | | | | | | | | | | |
|---|--|------------|----|--------|-----|--------|--|----------|------------|-------------------|--------|----|--------|-----|--------|
|  <table border="1"> <thead> <tr> <th>Response</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>No</td> <td>19.41%</td> </tr> <tr> <td>Yes</td> <td>80.59%</td> </tr> </tbody> </table> | Response | Percentage | No | 19.41% | Yes | 80.59% |  <table border="1"> <thead> <tr> <th>Response</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>Doesn't apply t..</td> <td>13.40%</td> </tr> <tr> <td>No</td> <td>21.13%</td> </tr> <tr> <td>Yes</td> <td>65.46%</td> </tr> </tbody> </table> | Response | Percentage | Doesn't apply t.. | 13.40% | No | 21.13% | Yes | 65.46% |
| Response | Percentage | | | | | | | | | | | | | | |
| No | 19.41% | | | | | | | | | | | | | | |
| Yes | 80.59% | | | | | | | | | | | | | | |
| Response | Percentage | | | | | | | | | | | | | | |
| Doesn't apply t.. | 13.40% | | | | | | | | | | | | | | |
| No | 21.13% | | | | | | | | | | | | | | |
| Yes | 65.46% | | | | | | | | | | | | | | |

Key Result Area 2: Technology/ Tools Usage (Tables 29 – 35)

This section presents details on the kinds of devices; tools and technology platforms; and access used by respondents.

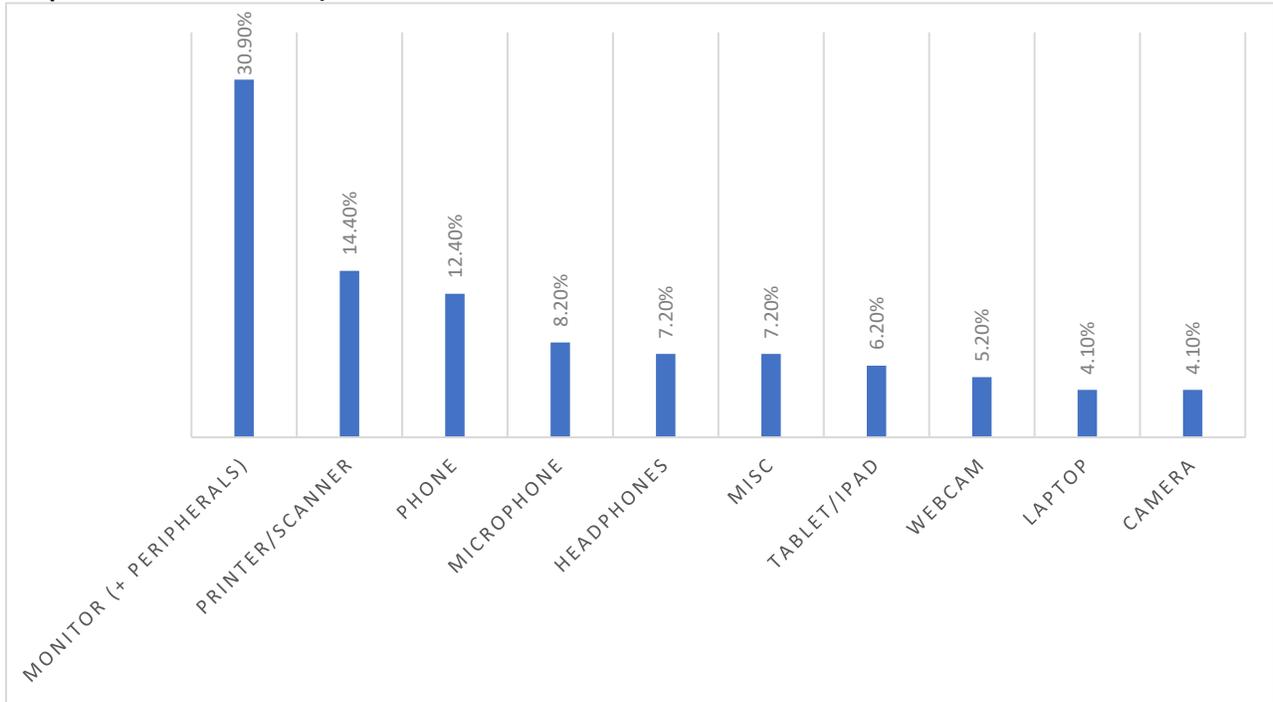
Of the 4518 (multiple responses selection) of all respondents (faculty, staff and students), 38.8% stated they use a personal laptop/desktop to conduct remote teaching/learning/work, 25.6% said a cell phone and less than 20% of people said a UC laptop/desktop/tablet (Table 29).

Table 29. What are the primary devices you use for remote teaching/learning/work? (All)



Of respondents noting “Other” platforms used for remote teaching/learning/work identified monitors plus peripherals, printer/scanners, and phones as the top three tools that they used (Table 30).

Table 30. Other: Type of Device (Other Specified). Top 10 phrases listed. (All) (Text response: most frequent issue mentioned)



The reported top five technology platforms used by all respondents were WebEx (16.2%), Canvas (14.2%), Microsoft Teams (10.5%), VPN (10.4%), Blackboard (8.3%), followed by DUO (7.9%), Zoom (7.8%), Kaltura (5.8%) and YouTube (5.7%) (Table 31). These are all UC supported platforms except for Zoom which some respondents indicated needing for use between UC and other institutions as well as preferences for Zoom for certain uses (e.g., sound fidelity). In listing “Other” technology platforms used, the top 3 text responses were Google Drive (docs, etc.), Catalyst, and Slack. For the top 10 text answers see Table 32.

Table 31. Which of the following tools/platforms do you use for remote teaching/learning/work? (All)

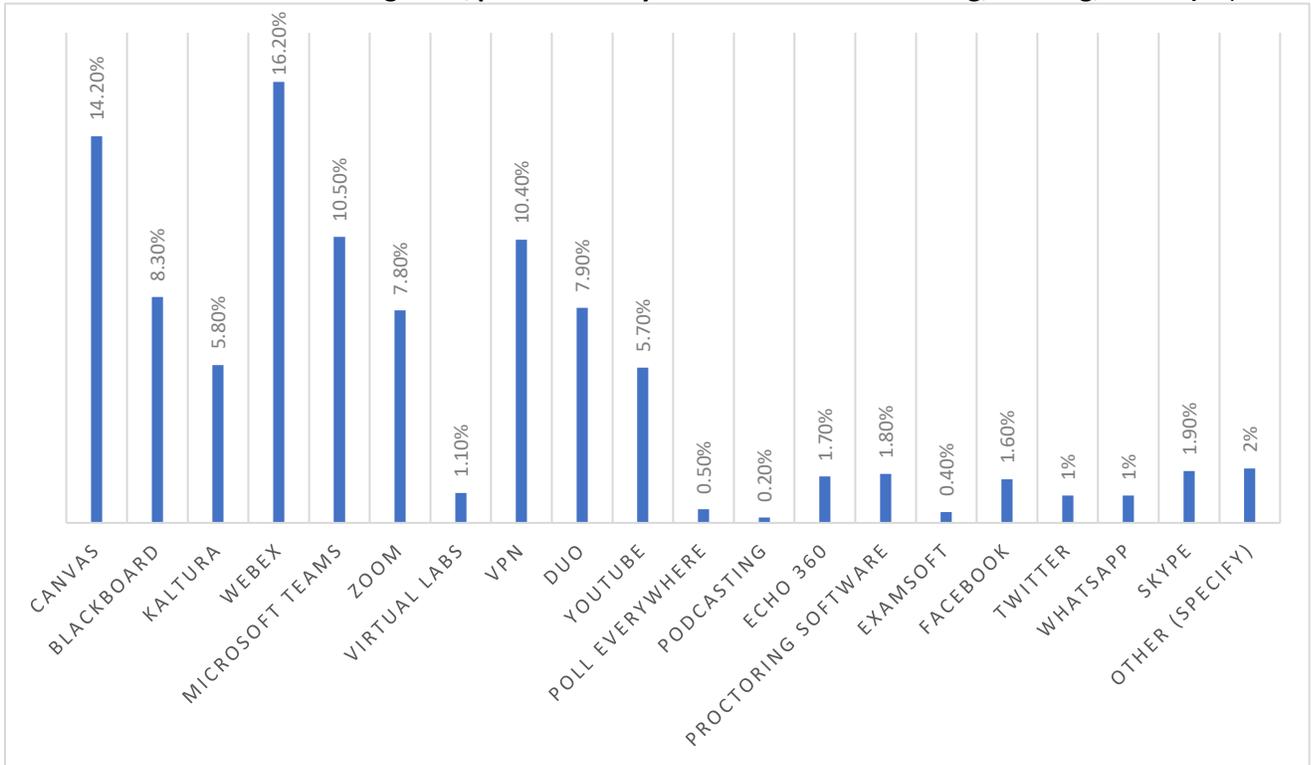
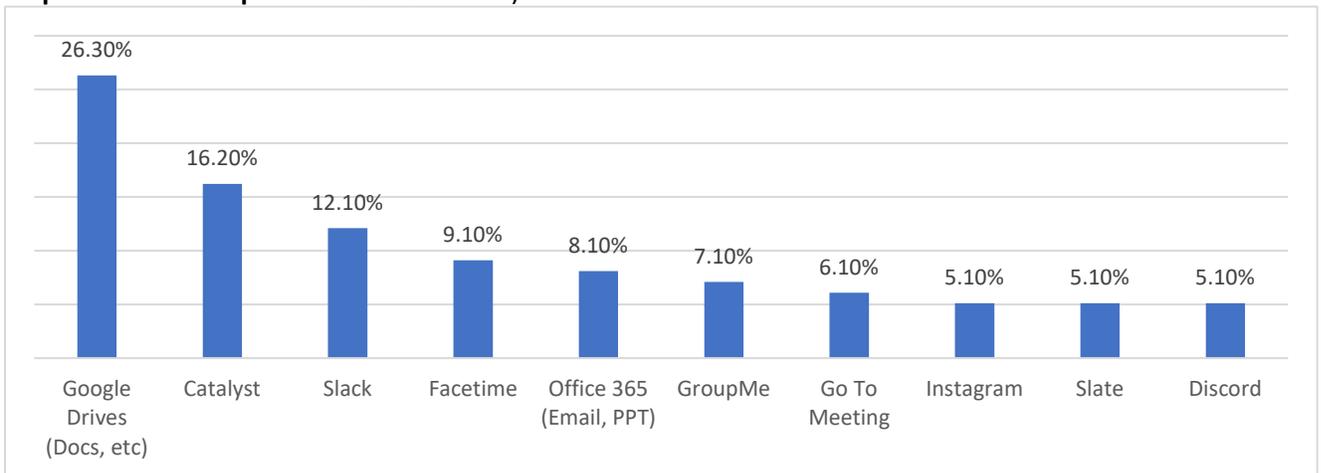


Table 32. OTHER: What are the top technology tools/ platforms? Top 10 phrases listed. (All) (Text response: most frequent issue mentioned)



Access Type (Tables 33-35)

Those using public Wi-Fi were the minority in each respondent category, but over a third of the students reported using this always, often, or sometimes (36.2%), followed by faculty (21.3%), and staff (12.2%) (Table 33). Those percentages increased for faculty and staff when asked if they used UC provided Wi-Fi, though students again led in percentage, with 35.9% students, 35.8% faculty, and 31.4% staff reporting that they always, often, or sometimes used this. (Table 34). While 42% students, 44.5% faculty and 48.9% staff stated they never had an issue connecting with VPN that prevented resource access, almost 35% of faculty, almost 24% of staff, and 34% of students always, often, or sometimes reported having problems. Many text responses related to VPN specifically noted inability to access library resources as well as continued problems with resolving these access issues. This survey was live after the VPN tunnel split, which occurred on March 25, 2020 (Table 35).

Table 33. I use Public WiFi Access Points/hotspots for teaching/learning/work (All)

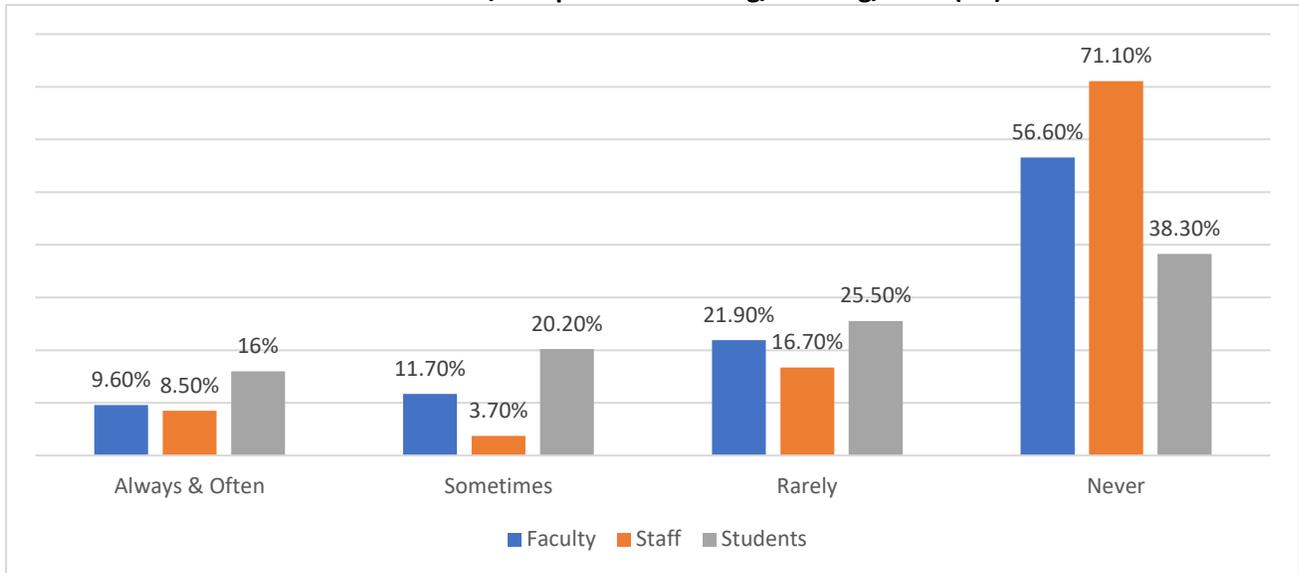


Table 34. I use UC provided WiFi access points/ hotspots for teaching/learning/work (All)

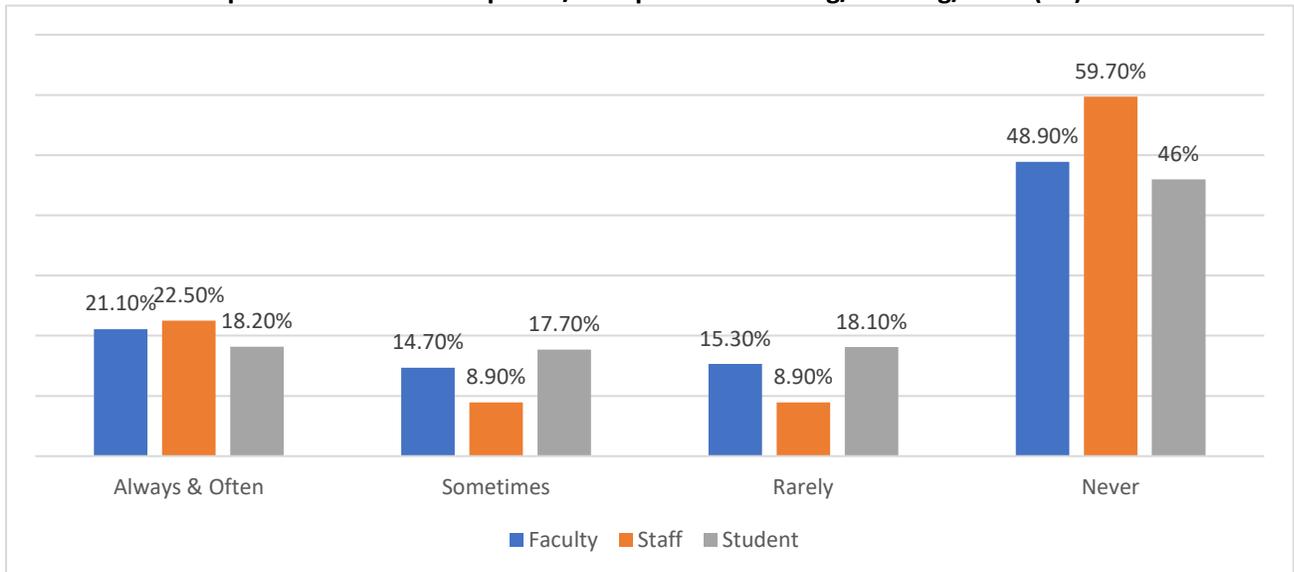
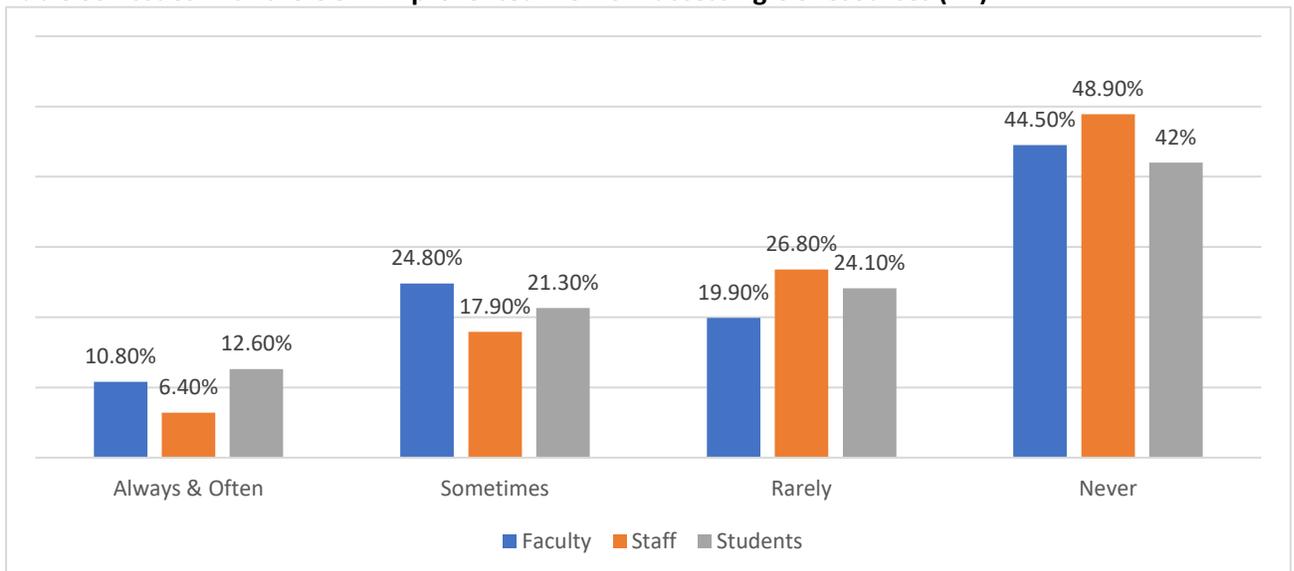


Table 35. Issues with the UC VPN prevented me from accessing UC resources (All)

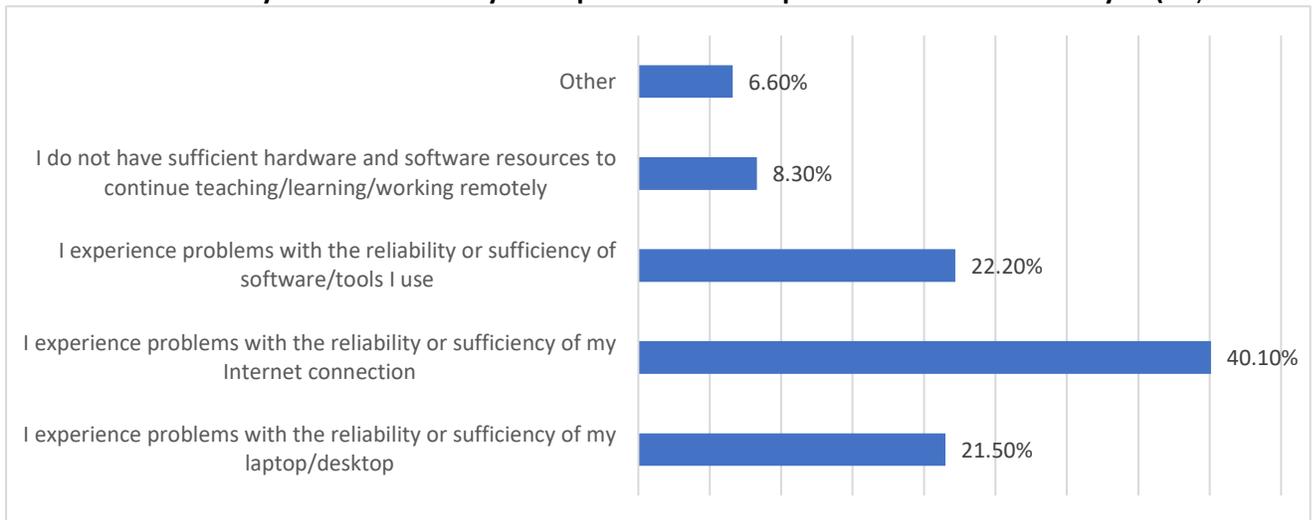


Key Result Area 3: Technology Experience (Tables 36 – 41)

These Tables indicate concerns that might impede ability to perform responsibilities by faculty, staff, and students, including connectivity issues, hardware or software, as well as the use of, or lack of ability to use funds to remediate problems.

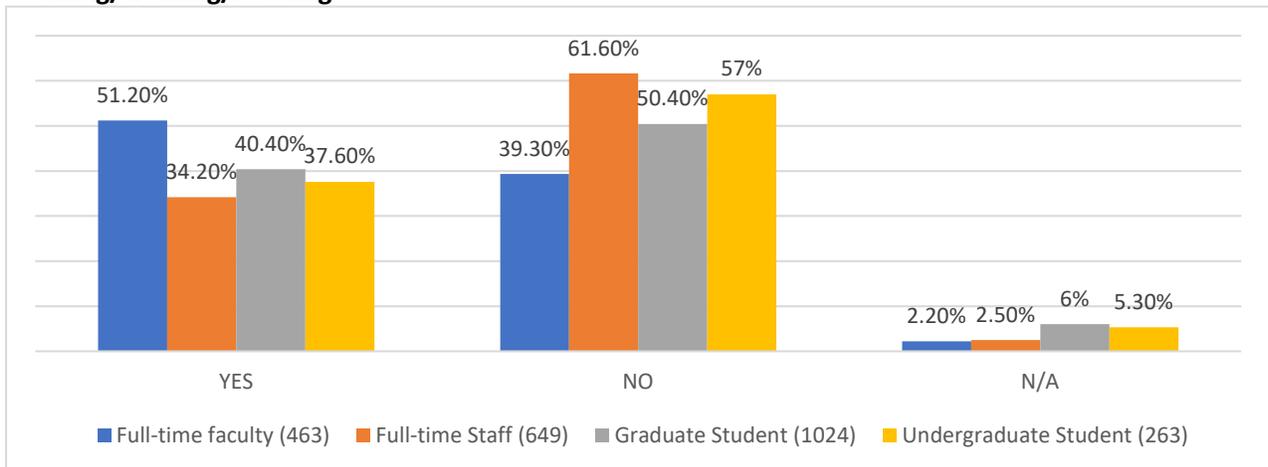
Internet reliability or sufficiency was the top connectivity issue reported amongst all respondents at 40%, followed by reliability/sufficiency of software/tools (22.5%) and laptop/desktop (21.5%) (Table 36).

Table 36. Connectivity Issues: Based on your experience to date pick ALL that are TRUE for you (All)



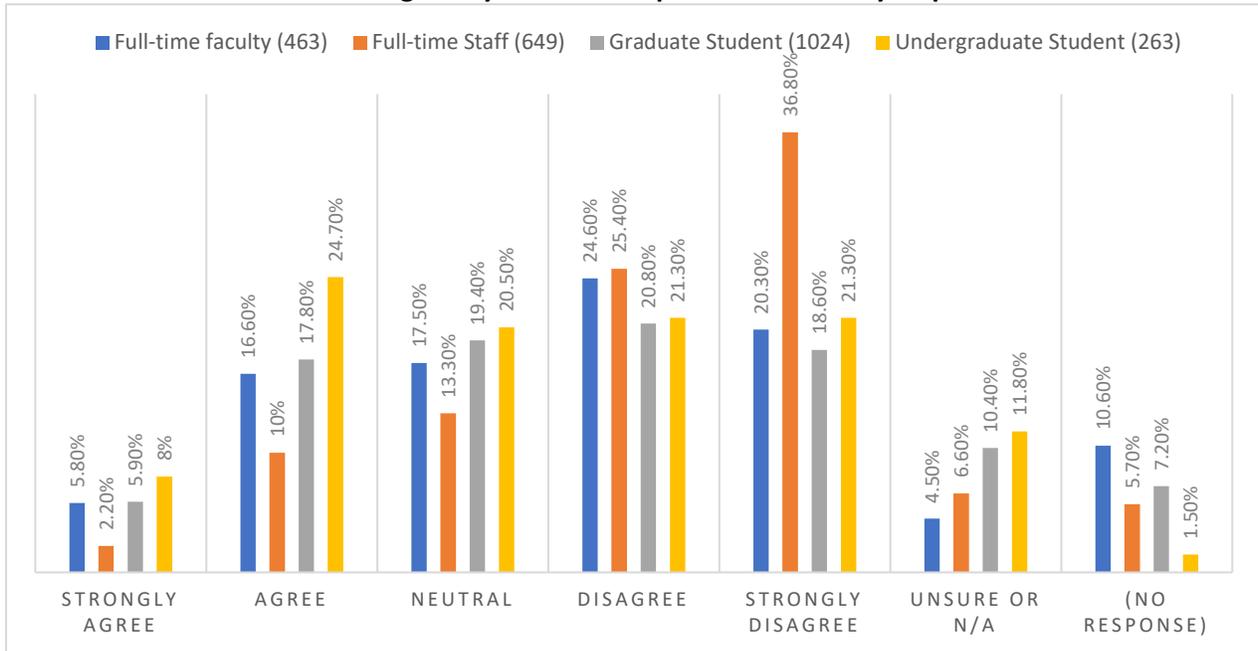
More than 50% of faculty, 34.2% of staff, 40.4% of graduate students, and 37.6% of undergraduate students used their own funds to upgrade or purchase devices for remote activities. (Table 37).

Table 37. Have you used your own funds to upgrade or purchase devices to facilitate remote teaching/working/learning?



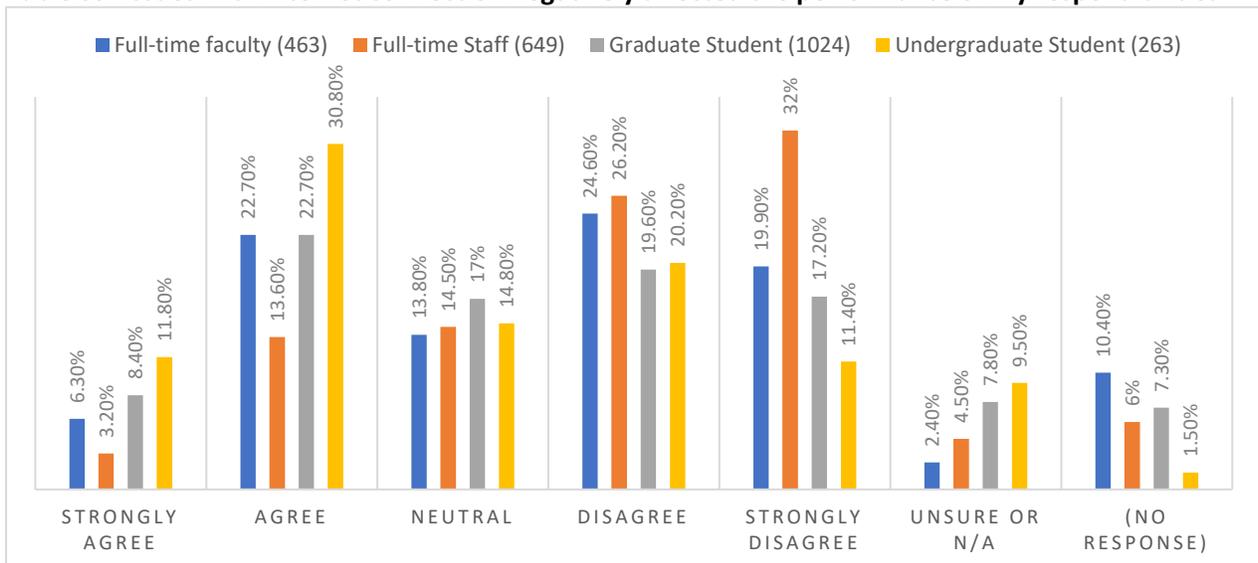
Approximately 32% of undergraduate students, 24% of graduate students, 22% of faculty, and 12% of staff strongly agreed or agreed that issues with devices negatively affected performance of their responsibilities.

Table 38. Issues with a device negatively affected the performance of my responsibilities



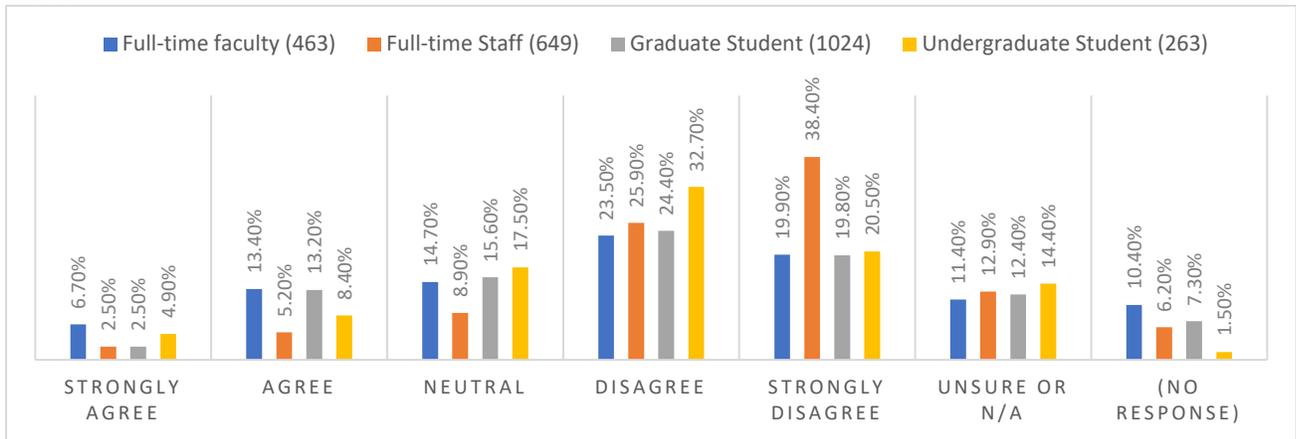
Approximately 30% of graduate students and 41% of undergraduate students strongly agree or agree that problems with the Internet negatively affected their ability to perform their responsibilities; this was also reported by 29% of faculty and almost 17% of staff. (Table 39)

Table 39. Issues with internet connection negatively affected the performance of my responsibilities



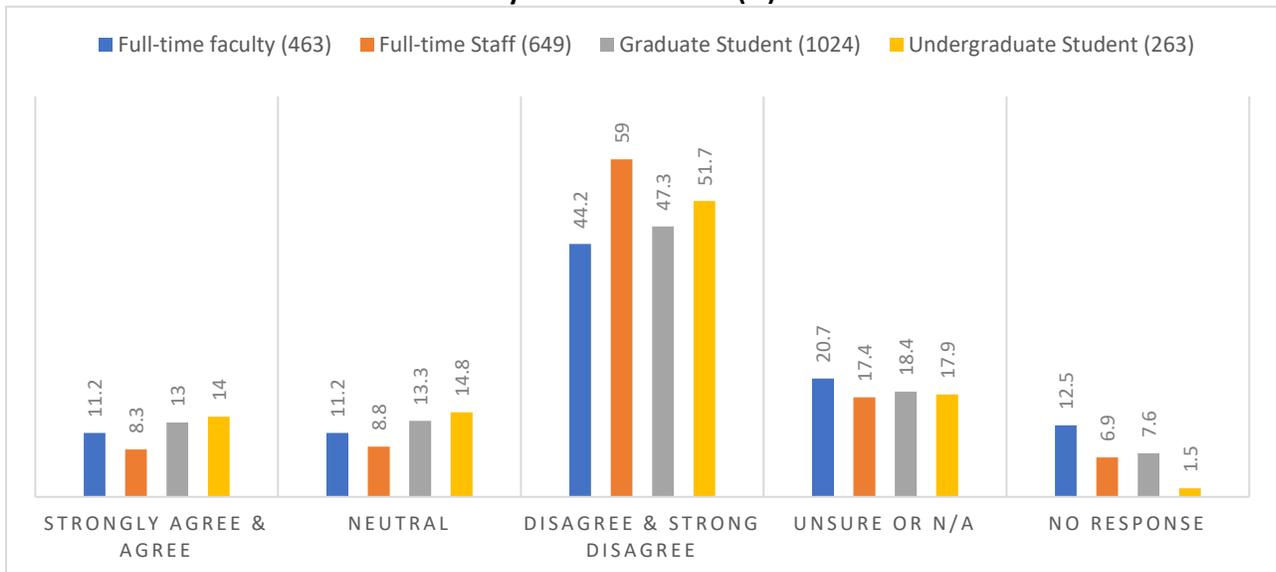
Most groups were either neutral or did not agree with the statement that lack of funds prevented them from being able to acquire needed technology, although 20% of faculty, 7.7% of staff, 15.7% of graduate students, and 13.3% of undergraduate students either strongly agreed or agreed with the statement (Table 40).

Table 40. Lack of funds prevented me from acquiring technology needed to fully engage via remote mode



Although Table 40 showed a minority of those who indicated that funding was an issue in being able to acquire needed technology, it is relevant to note that 14% of undergraduate students, 13% of graduate students, 11.2% of faculty, and 8.3% of staff strongly agreed or agreed with the statement, “I am reluctant to share about my lack of resources.” (Table 41).

Table 41. I am reluctant to share about my lack of resources (%)



Key Result Area 4: Technology Support (Tables 42 – 48)

For the following tables, respondents were asked to rate various technology support services for the COVID-19 related transition as provided by IT@UC. Disregarding unsure or NA responses, of the qualitative choices listed, the highest combined responses were to the Excellent and Good categories as compared to the other categories (neutral, fair, or poor); this holds true for all areas including overall support, phone call support, ticket support, the IT@UC website, and the IT Knowledge Base, although for some areas, there are relative increases in fair and poor responses. Similar responses were provided for the same rating requesting relating to resources provided by the unit website and unit Instructional Design (ID) support.

Tables are not individually summarized, but text responses relating to support for this Key Result Area and For Key Result Area 5 are summarized in Open Ended Questions (OEQ’s) 1-5 further below and provide more detail on some of these tables.

Table 42. Overall technology support

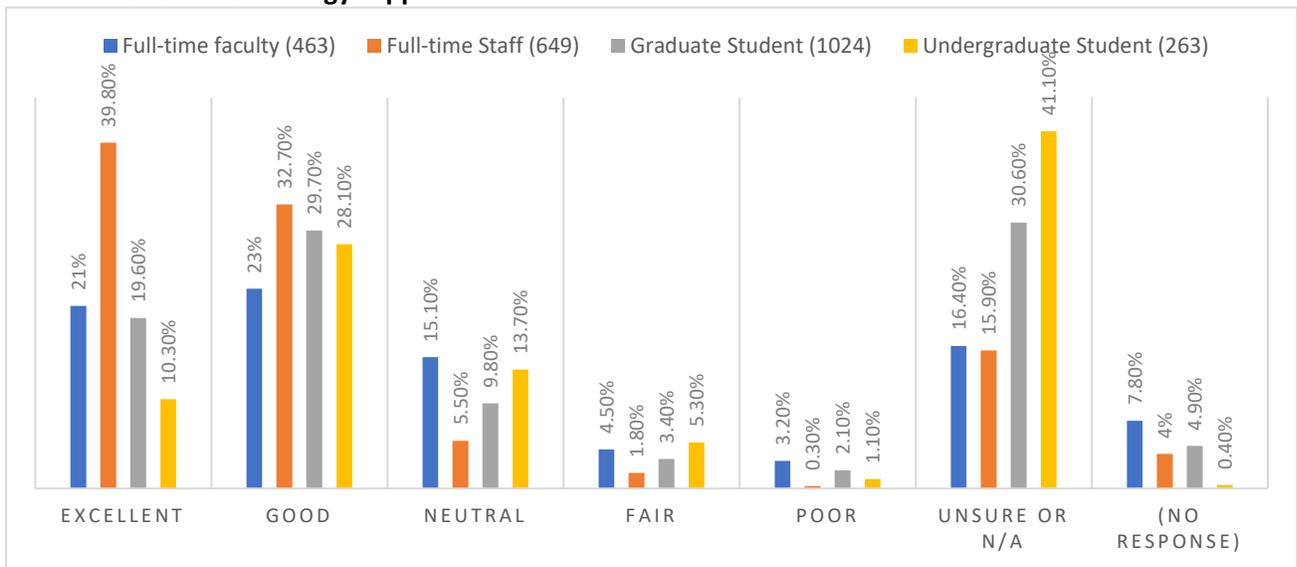


Table 43. IT@UC phone call support

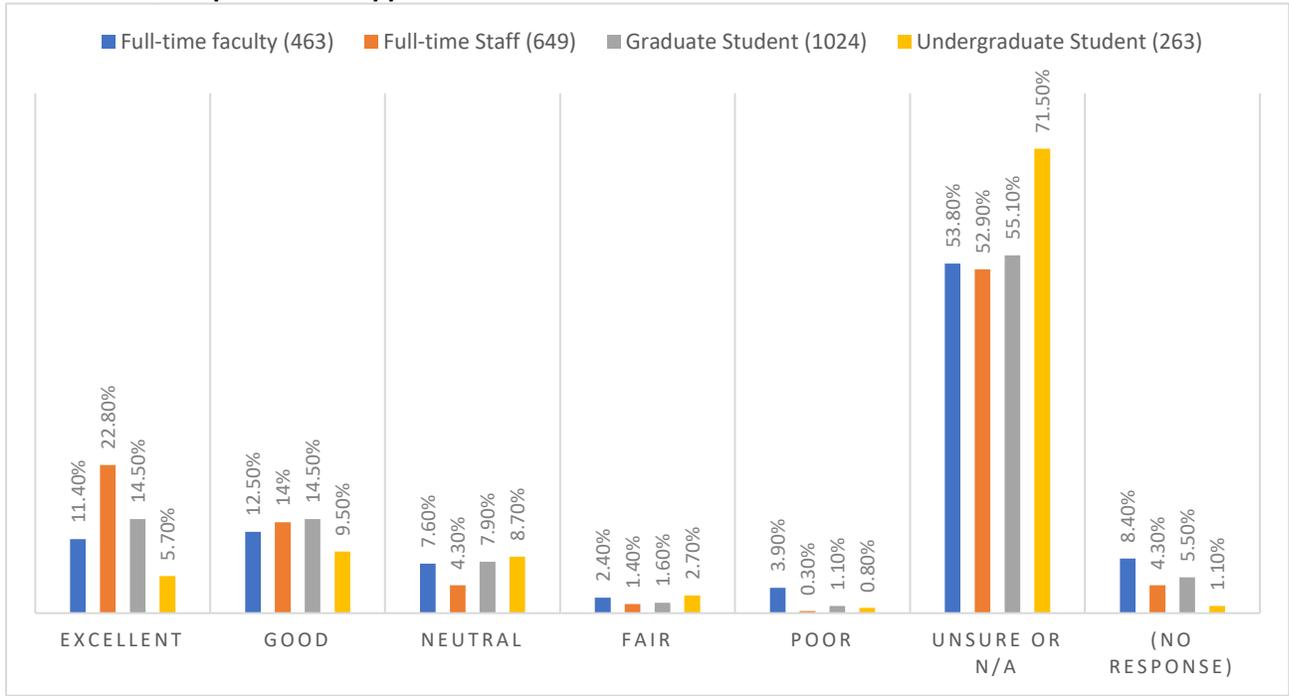


Table 44. IT@UC ticket support

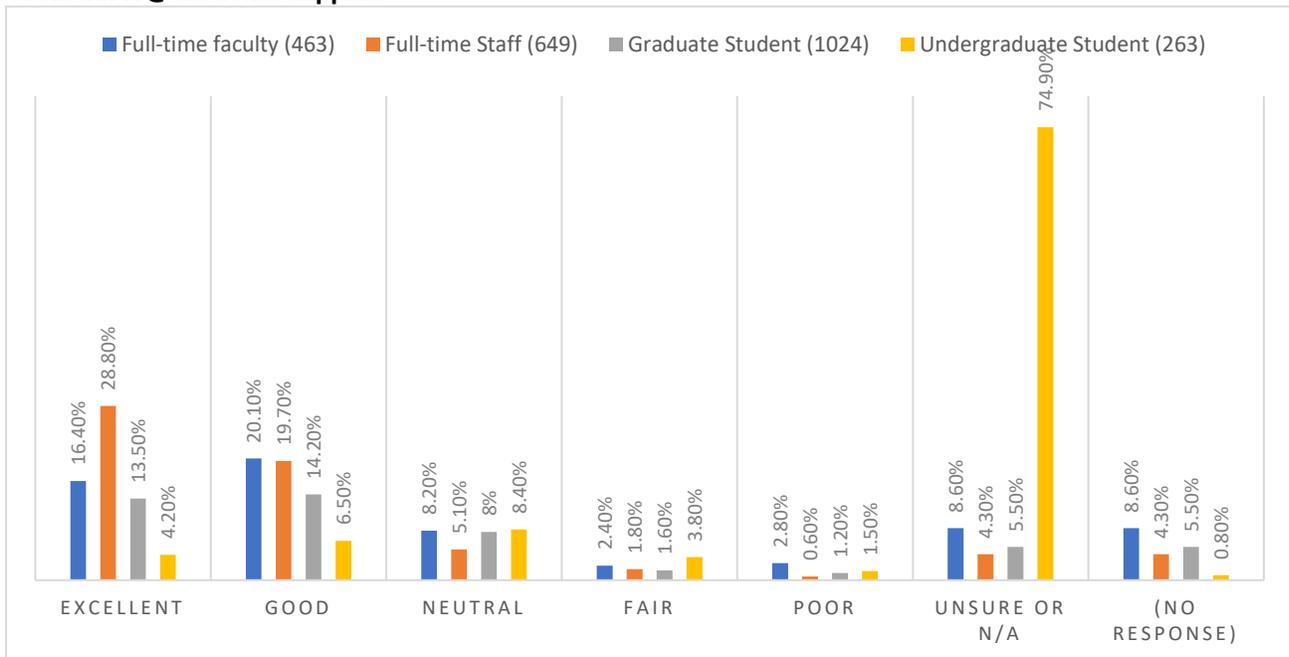


Table 45. IT@UC Website

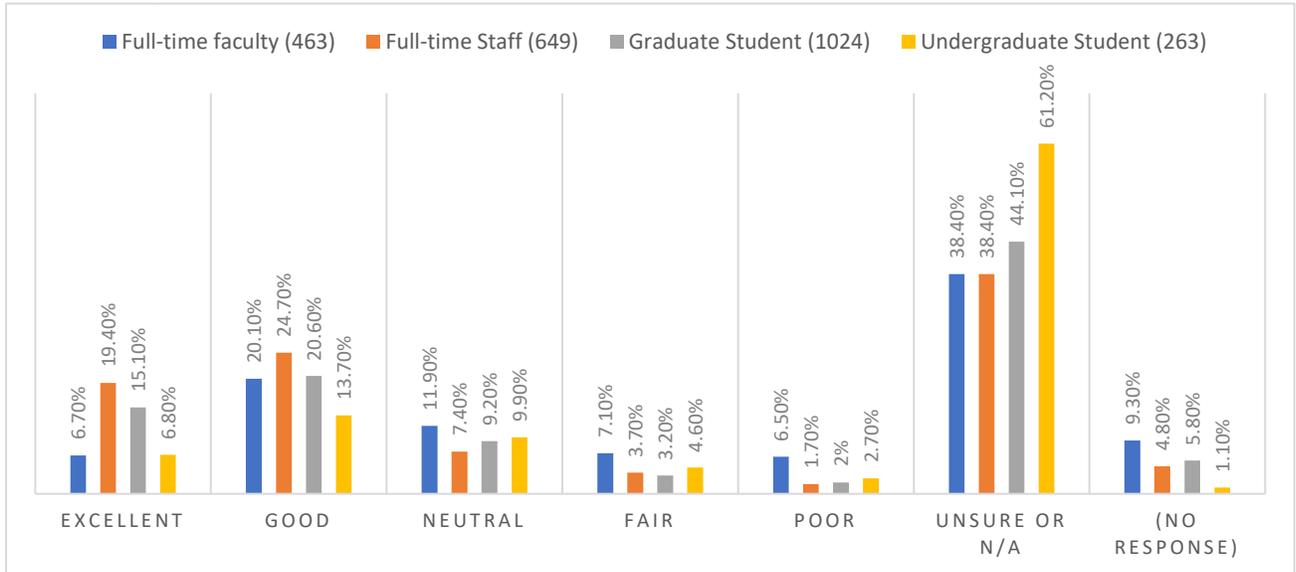


Table 46. Your unit website

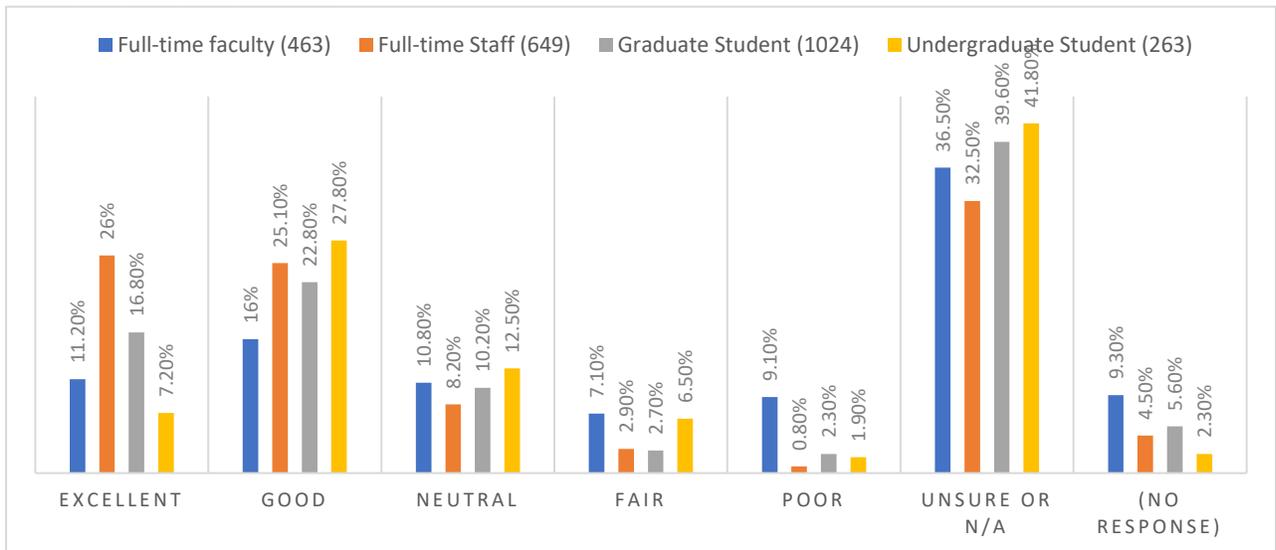


Table 47. Your unit Instructional Design support

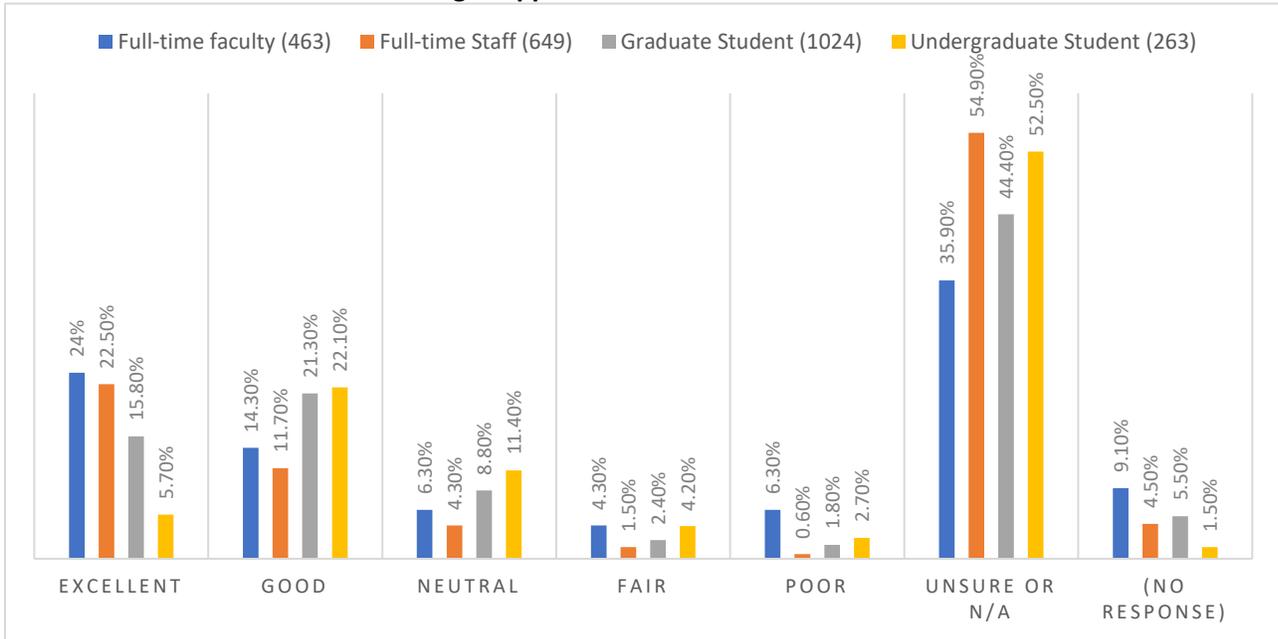
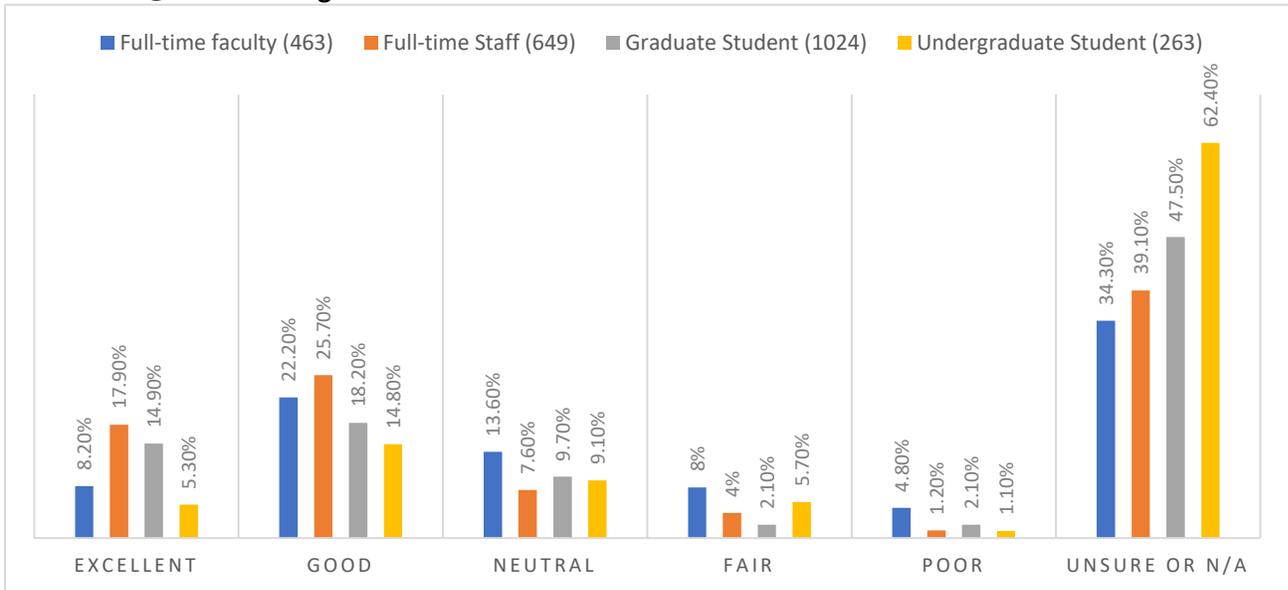


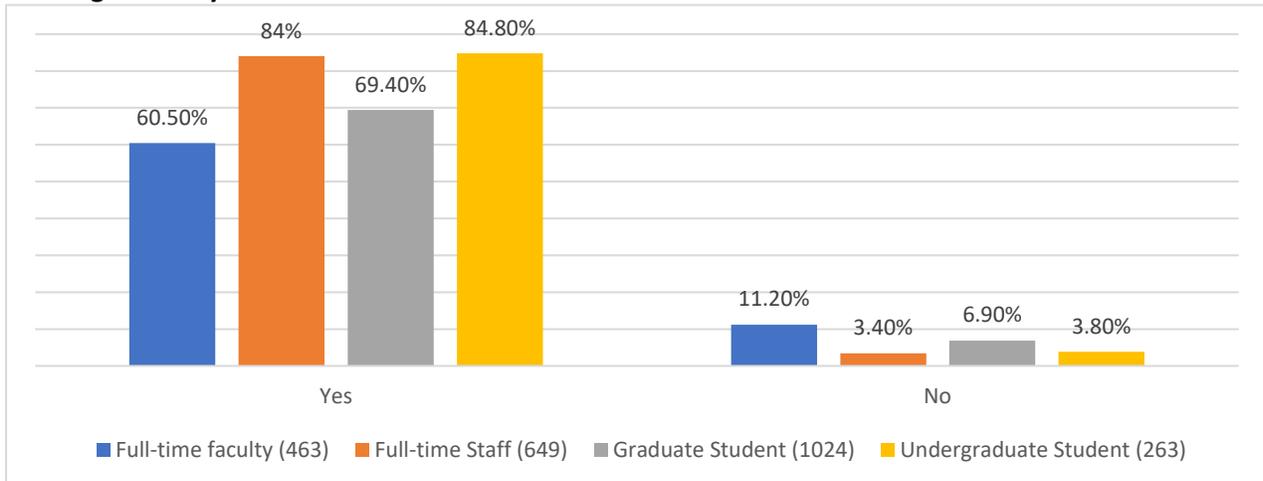
Table 48. IT@UC Knowledge Base



Key Result Area 5: Moving Forward/ Preparedness (Tables 49 – 50)

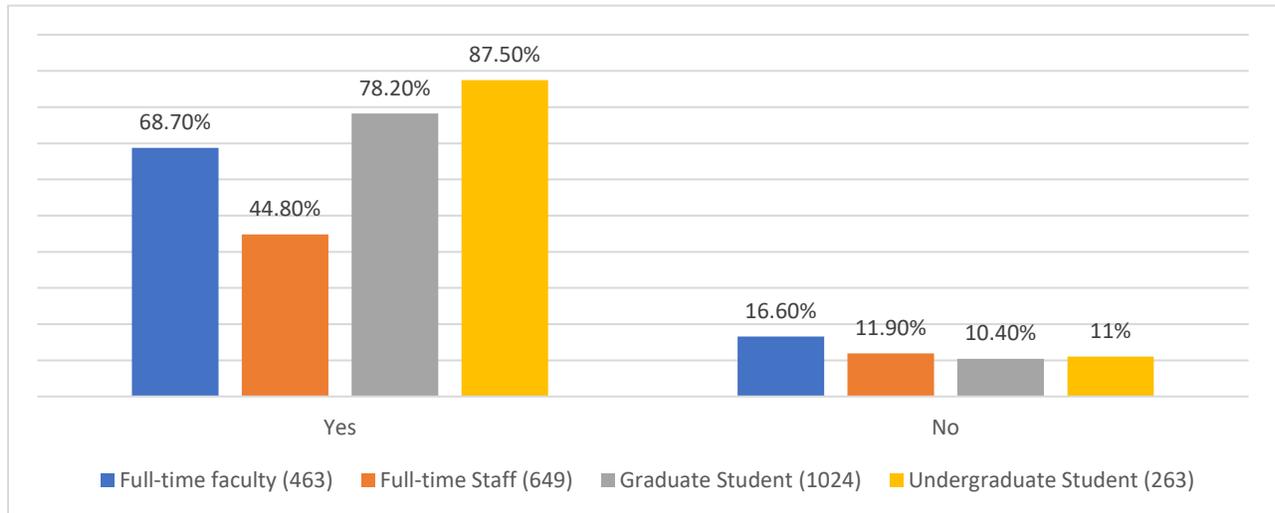
Faculty, staff and students predominantly indicate that they have sufficient hardware and software resources to continue teaching/learning/working remotely, with 60.5% of faculty feeling prepared, 69.4% of graduate students, 84% of staff, and 84.8% of undergraduate students. In terms of confidence transitioning to Canvas, 44.8% of the staff report feeling confident (note: a higher percentage of staff may have answered NA as less may require the use of Canvas); 68.7% of faculty, 78.2% of graduate students, and 87.5% of undergraduate students.

Table 49. Do you have sufficient hardware and software resources to continue teaching/learning/working remotely?



While substantial numbers of all groups noted feeling confident in transition to Canvas, 16% of faculty, 12% of staff, 10.4% of graduate students and 11% of undergraduates noted concern. Because a significant amount of these groups may not have yet used Canvas or are still learning how to use it, this may account for some of the lack of confidence in the transition. This suggests extra support and resources will be useful in the weeks before and during early Fall term for all constituent groups.

Table 50. I feel confident to transition to Canvas



Summary of Responses to Open- Ended Questions (OEs 1-5)

OEQ1. If you are not confident about transitioning to Canvas, why? How can we help you? (All) (Text response)

Faculty reported not having sufficient time, training, or ability to balance the extra work required under the quick change to remote teaching, especially for the faculty who had not yet transitioned to Canvas before the pandemic. Others noted problems balancing a job, family responsibilities, and having to learn more in-depth use of Canvas. Some noted the desire for more discipline-specific Canvas workshops and others noted that workshops were full and that they hoped more would open up. Students reported interest in guidelines or quick-use information packets that could provide them with an introduction to the new platform.

OEQ2. Please share any comments including what worked well for you regarding your technology use and support in transition to remote teaching (All) (Text response)

Many respondents reported that WebEx and Canvas worked well for them. They identified Canvas assistance and responses from IT@UC to be helpful. Others who had prior knowledge of working with technology could often work through problems on their own and found devices and software that fit their disciplinary needs to be especially useful. Additionally, those faculty who could bring devices home noted increased satisfaction. Having access to devices such as their desktop monitor was noted repeatedly, and many pedagogical suggestions were noted such as recording synchronous lectures and providing recordings for students who could not attend. Many noted that it worked best for them to have departmental support for disciplinary-specific concerns.

OEQ3. Please share any comments regarding issues/deficiencies related to technology that are preventing you from your optimal remote teaching/learning/working experience (All) (Text response)

The deficiencies shared by respondents often centered on lack of a reliable Internet connection or broadband problems; other accessories such as a webcam or microphone were noted as crucial for virtual meetings and synchronous classes. Concerns were especially noted where specialized equipment were required for certain disciplines; where the home setting did not provide areas dedicated to working for long hours every day; and where multiple members of the household were also working or studying. Some noted the need for financial assistance in mitigating these concerns.

Students' concerns included accessibility concerns such as delays in accessing material that was close captioned, and certain class requirements of such as having to supply hard copies for faculty who needed material sent in or dropped off to them. Lack of printers also limited ability to design and revise materials, especially in particular disciplines. Students reported having problems with either dying or older laptops that could not handle some of the programs they were required to use but not having funds to replace devices. Potential health issues related to long periods of time in front of screens were also raised as a concern.

OEQ4. Please list any potential tool(s)/software specific to your field which are not currently offered by IT@UC that could improve the quality of your teaching/work/learning. (All) (Text response)

Some general use items not currently part of the enterprise tools that were mentioned as especially useful for some specific disciplines included Zoom and Adobe or proctoring services that provide services not provided by Honorlock; or particularized software that that could better replicate face-to-face experiences required for certain disciplines (although faculty were not always sure what these last kinds of software were). Faculty also noted that their desktops were often old and could not be updated adequately, or that they did not contain updated software. Others noted that access such as Internet and improved broadband should be compensated since UC services were unavailable to many and existing services were under par for the work required.

OEQ5. Please share your suggestions for IT@UC/ Faculty Senate/ Staff Senate/ Graduate and Undergraduate Student Government to help them optimize their support for you during remote teaching. (All) (Text response)

A number of respondents noted general suggestions such as a return to face-to-face teaching, lower cost of tuition and more funding for expenses incurred, more training and workshops, and, again, more help obtaining access to reliable Internet and broadband.

DISCUSSION

Demographics: The percentage of responses by gender and race do not reflect all groups proportionately. Also, many of the staff responses indicated that they also worked as faculty, so commentary predominantly focused on teaching. Because of this, it would be useful to understand more about the experiences of staff who did not also take on an instructional role in order to understand more about the experience of remote work for administrative activities. Relatively few undergraduate students were included in the survey which may impact our understanding of their experiences, and combined comments from students may reflect more heavily the graduate student experience.

Timing of Survey: The majority of the respondents completed the survey in May (to increase undergraduate responses, the survey was reopened for this group in June); therefore, it should be noted that since the survey results were obtained, there were a number of changes to resources and expanded support through some unit and at the University-wide level. It should be emphasized, therefore, that this is, in part, a snapshot look at the end of the 2020 Spring term. An emphasis on those areas that are not clear, such as the undergraduate and staff experience, or problems that have not been directly remediated by UC, such the need for reliable Internet and broadband, are, therefore, important to consider for future planning. As well, many of the comments reflect the unprecedented pedagogical and practical considerations of being in an online environment at a time when other factors intersect with and complicate teaching and learning, including lack of privacy, managing other needs in a home environment, and the overall anxiety of the pandemic. Management of the effects of these interrelated concerns should be addressed for all courses in the Fall, including face-to-face and hybrid courses, even if not all factors are within control of UC constituents.

Teaching and Learning: Overall, even though moving to remote work had to be completed quickly, substantial groups across respondents noted satisfaction with the support provided for teaching and learning as well as with their technology experiences. Support was noted as coming both from central university support as well as from college and departmental-level units. This suggests that the infrastructure existed from which support could be delivered.

While not typically the majority, varying percentages of respondents in all groups—faculty, staff, and students—noted uncertainty in how to prepare for and work in an online environment. Although not unexpected in a sudden transition, in order to elevate all assistance and support and to address those whose needs were not met, certain areas can benefit by attention. In addition to practical concerns related directly to job responsibilities, addressing the psycho-social benefits of appropriate support is important. Comments related to unit support and one-on-one support by central units indicated that isolation seems to have been mitigated where such support was robust. Unit support was identified as providing both better responses for disciplinary-specific concerns and improving unit collegiality.

Concerns noted by students, TAs, and faculty about the student experience also suggest that students can benefit by having more clear expectations about the online experience and information on how those experiences will vary from course to course. More information from a larger number of students directed at identifying varied ways to assist and inform students can be useful in this regard. As noted, interactions with other factors that are partially beyond the control of participants involved, such as home environment, are important to consider in considering what other factors can help mitigate these concerns.

Tools and Technology: Given that not all participants had the prior knowledge of how to use available technology, and little time to learn, it is not surprising that they might be seen as inadequate to meet needs. However, specific comments about where technology did not work as expected, how it was affected by factors such as unreliable Internet or broadband, how existing tools did not meet disciplinary needs, and where the support seemed most and least robust for these tools and technology are all areas that need to be considered. Because there were few alternatives to using technology, the anxiety concerning their use also could reasonably be expected to be higher for all constituents.

The intervening time to more adequately prepare for Fall may prove to be helpful but may be offset in part by the continued work of constituents over the summer to catch up on other requirements as well as the range of new tools and technologies with which respondents need to become familiar (Canvas, Teams, OneDrive, etc.). Thus, helping identify best options in approaches, basic guidelines in usage, and alignment with disciplinary needs are suggestions by respondents that continue to be relevant. Due to the absolute necessity of reliable devices, Internet, and broadband, requests for ancillary support for these through funding and other means should be a priority. Consequences of inadequacies in these areas identified by respondents include possible security concerns from use of shared devices and public Wi-Fi hot spots, limited ability to depend on synchronous engagements, and increase in dissatisfaction and anxiety about the online environment. Discipline-specific tools and software to provide adequate experiences online and the means to ensure safe and reliable online proctoring also were addressed; such concerns may require specialized responses depending on disciplinary needs. More specific responses relating to this Discussion can be found above in the Executive Summary and the Survey Results and Tables; possible responses are noted in the final Reflections and Recommendations.

REFLECTIONS AND RECOMMENDATIONS

The survey results helped to uncover some areas for further consideration and remediation by and for the UC community regarding remote operations that may improve experiences for all involved. Because this report and recommendations are not exhaustive, it is anticipated that those in certain units, such as IT@UC for example, units that support particular respondent groups, or particular colleges, may want to examine some areas more closely and derive their own recommendations. Here is a list of potential areas for further investigation and response:

1. **University and college leadership should work to ensure that all constituents have the appropriate technology and adequate internet/broadband that are required under the present circumstances.** Unlike a situation where faculty or students could choose face-to-face teaching if these components were unavailable or unreliable, where online may now be the only option, a means of supporting these requirements is a top priority. CARE funds, faculty development funds, and other funding sources designed to help with technology and professional advancement should be considered. Faculty and student responses noted success because of “being lucky enough” to have a laptop that housed software appropriate to the discipline and robust Internet; those reporting problems included concerns that their own devices, UC loaner laptops, and even their UC desktops did not have the latest software and were lacking disciplinary-specific requirements. Keeping available UC devices updated, then, is important. In addition, since dependence on public Wi-Fi and shared devices limited accessibility and efficiency and may be considered as potentially posing security risk, dissemination of information about those risks and adequate communication about alternative support available is needed. Assisting those experiencing financial or situational constraints that impede remediation of these concerns should be a top priority.
2. **Excellence in the transition to and continuance of online work depends on general support, but also on disciplinary-specific knowledge and support.** It is strongly recommended that colleges and units play an enhanced role in assisting their faculty with the transition. While the university services were lauded by many, those who noted having unit-level support were reported being able to deliver courses more easily and effectively. For example, one teaching staff member noted that the excellent support from their local IT was the reason for their successful transition to remote teaching and learning. They noted that “our [unit] IT team is excellent with their support. . . They are immediately accessible and have . . . taken over with screen sharing [and] helped me to navigate and understand everything with which I needed help. . . Because of that, I was able to create a positive teaching/learning environment for my class of 61 and their end-of-semester feedback was very positive about the experience and staying connected while remote.” Recognizing that staffing is lean across the university, areas can capitalize on their strengths, with local ID and IT personnel and

administrators and department heads as crucial components in faculty and student success as they may be best able to identify, disseminate, and organize discipline-specific support. To ensure this, colleges and units can continue to canvas their faculty, students, and staff to learn more about specific needs and work to address those; faculty can inquire of students about technologically-related concerns they may be experiencing; and colleagues can reach out to each other to share knowledge and support.

- 3. Faculty, administrators, and supervisory personnel should strive to be aware of limitations that students, TAs, and staff may face in completing their responsibilities and assist in steps to overcome these.** Faculty should be mindful of both technology and socio-emotional-environmental factors at play for some students who, for example, have difficulty in meeting synchronous responsibilities. Problems such as network insufficiency, lack of privacy, and lack of seemingly minor tools such as a webcam may affect student engagement and performance. Offering options to requirements that limit student choice in when and how they use technology should be considered. College administrators and department heads should also be sensitive of this in expectations of faculty teaching approaches, as respondents indicated concern about requirements of teaching only synchronously online. As one faculty member noted in choosing mostly asynchronous instruction, “[Students’] worlds were turned upside down too, and most of them were scrambling to find work so they could keep roofs over their heads. I wanted something that was as little of a burden on them as possible.” This is true, as well, for the faculty and staff who serve students. They, too, need to have the tools and the psycho-social support at hand to satisfy their responsibilities.
- 4. Faculty and staff expected progress and performance should be considered in light of the continuing constraints and added work faced by these individuals since March 2020.** Leadership at both the University and unit levels should consider how best to accommodate the impact of the increased responsibilities all constituents have experienced and consider making relevant accommodations to RPT and other expectations designed for normal working conditions. Many staff and faculty have spent the summer working and teaching, completing administrative tasks, conducting research, and learning basic functions of new technology and tools and other new expectations. The extra time spent on what would constitute normal preparation in areas of responsibility; limitations in making forward progress in research, teaching, service, and scholarship; and the lack of time and ability to reflect, re-energize, and plan adequately, all need to be considered in relation to expected progress during times without such added challenges and considerations. The same challenges should be considered in how they affect everyone at UC, including individuals in support and administrative positions.

- 5. Improved communication is crucial to ensure that all constituents know where and how to find resources available to them.** All groups reported lack of knowledge about key areas of support and, presumably, where to find them. Efforts should be made to centralize resources where possible (both on the university and unit level), but also provide useful redundancies. If an email or notice appears for general consumption, units should ensure that they highlight this to their faculty, students, or staff. General information on Bearcats Landing or in UC News is intended to reach relevant recipients, but it is crucial that college and unit leaders forward and supplement relevant information to increase the likelihood that those in need will be informed. This may include continuing to understand the experiences and needs of these constituents through surveys or short requests for feedback. This is especially true where the move to Bearcats Landing for faculty and staff, is still new and may not be commonly used. Given students' disparate experiences and needs, it is crucial to find the means whereby administrators, faculty, and student government groups all can provide clear and consistent communication to students about the availability of resources and how to obtain them.
- 6. Support continue to be needed in order to achieve research progress.** While research as an independent consideration was not emphasized through questions in this survey, responses suggested that research by faculty and student investigators was hindered by a variety of factors, including lack of access to lab equipment and on-campus computers which generally have more computational power than laptops to run software problems. The Advanced Research Computing (ARC) center at UC received two requests once UC facilities went remote requesting access to the HPC cluster and specifically stating in the user access form that they needed more resources because their home laptops could not run software they use in their lab workstations. The ability to adequately continue research, as well as continuing teaching, should, therefore, be considered and is impacted by other recommendations, such as discipline-specific software needs and guidance, as well as funding of graduate students in how to continue progress toward degree completion under changing circumstances.
- 7. Change fatigue has affected everyone at UC and, where such change is at the control of UC, its effects need to be addressed now and in future planning.** While UC and other institutions shared similar challenges in responding to a sudden move to remote teaching, UC personnel have also experienced an array of transitions over the past year that respondents remarked placed an extra burden on the transition to remote work. One major change not yet complete at the time of the move to remote work was Blackboard to Canvas which, as one faculty member noted "required learning a new teaching environment as well as learning a new teaching methodology and strategy."

Other changes included learning to use OneDrive, DUO, and Teams, as well as the update of the public website and the addition of the Intranet/Bearcats Landing. As technology and communication channels continue to evolve, it can be useful for those in charge of changes to plan with affected constituents the best timelines for deployment and the best means to communicate changes. Adequate time for and availability of professional development opportunities to master changes should also be ensured; this includes being sure the units that provide such professional development are adequately staffed. Faculty, staff, and students should also take advantage of such opportunities to gain at least a working knowledge of such tools, and to be sure they are aware of how and where to locate such resources. Assessing the impact of and responses to the changes can also help plan future changes. For the upcoming Fall term, this would suggest the need for continued support and resources, especially in the weeks leading up to and throughout the Fall semester at key moments (first week, midterm testing, end of term grading, and so on).

It is anticipated that the move to teaching online in the Fall will be smoother and provide improved experiences for all respondents given the time to prepare and the extra resources provided since Spring. It is suggested that UC continues to monitor the needs of all constituents to provide them targeted support and resources in the months ahead.

Appendices

Appendix A: Survey

Covid-19 Remote Technology Experience Survey (FINAL)

Start of Block: Introduction

Covid-19 Remote Technology Experience Survey

Purpose: To collect feedback from UC faculty, staff and students about their experiences with technology resources and support as they transitioned to remote teaching, working and learning. Your input will help IT@UC to optimize their support as we continue remote mode of operations. *This is an anonymous survey, your identifying information will not be collected or recorded.*

Created by: Faculty Senate, Staff Senate, Undergraduate and Graduate Student Government, and IT@UC

Reward: Optional drawing to win 1 of 3 \$25 gifts cards to UC Bookstore (requires your email address)

Length of Survey: 7-10 minutes

Demographic Information

Q1 To which gender do you most identify?

Female (1)

Male (2)

Non-binary/conforming (3)

Prefer not to answer (6)

Prefer to self describe (4) _____

Q2 What is your age?

▼ less than 18 (10) ... 60+ (15)

Q3 Which of the following best represents your racial or ethnic heritage?

▼ American Indian or Alaskan Native (1) ... Other (11)

Q4 What is your primary role at the University?

▼ Full-time faculty (1) ... Other (10)

Q5 With which division or college are you most closely affiliated?

▼ UC Blue Ash College (12) ... Prefer not to answer (34)

Q6 What department are you in your college/unit? _____

Technology Experience: Faculty

Q7 How many classes did you have to convert to remote teaching due to Covid-19?

▼ None (1) ... 5+ (6)

Q8 Have you received or been offered help with converting your classes to remote teaching?

Yes (1)

No (2)

N/A (3)

Q9 Have you been sufficiently supported in the transition to remote teaching by UC?

Yes (1)

No (2)

Doesn't apply to me (3)

Display This Question:

If Have you been sufficiently supported in the transition to remote teaching by UC? = No

Q10 What kind of training would you have liked to receive, or describe any difficulties you're facing right now.

Q11 How do you describe your transition to remote teaching?

▼ Very Easy (1) ... Very Difficult (7)

Q12 Describe your previous experience with traditional online teaching:

▼ I have never taught any courses or material in a traditional online format (1) ... Other (3)

Q13 Please check ALL that apply to your method of remote teaching due to COVID-19

- I teach class synchronously (live sessions on scheduled class times) (1)
- I teach asynchronously (recorded lectures and/or contents online) (2)
- I teach asynchronously with some synchronous meeting times (3)
- My teaching cannot be done remotely (4)

Q14 Based on your experience, rate the technology support provided by **CETL Courses and workshops** for Covid-19 related transition to remote teaching? (If not used, select 'Unsure or N/A')

▼ Excellent (1) ... Unsure or N/A (7)

Technology Experience: Staff

Q15 Please select the response that most accurately applies to your current mode of work?

▼ I am working fully remotely due to the COVID-19 response. (1) ... I am working partly remotely and partly on campus. (5)

Technology Experience: Students

Q16 What is your student classification?

- Undergraduate (1)
- Graduate (2)
- Other (3) _____

Q17 If your work requires access to your system in your lab or to one of UC's systems, do you have remote access (/remote connection)?

- Yes (1)
- No (2)
- Doesn't apply to me (3)

Display This Question:

If If your work requires access to your system in your lab or to one of UC's systems, do you have re... = Yes

Q18 How do you access your system remotely?

Q19 Did you experience issues in using software or tools for your coursework or research?

- Yes (1)
- No (2)
- Doesn't apply to me (3)

Display This Question:

If Did you experience issues in using software or tools for your coursework or research? = Yes

Q20 Please list the software(s) you have issues with:

Display This Question:

If If your work requires access to your system in your lab or to one of UC's systems, do you have re... = No

Q21 What is the issue?

Q22 Do you have sufficient privacy at home to attend live classes?

- Yes (1)
- Sometimes (2)
- No (3)
- Other (4) _____

Start of Block: Teaching Assistants

Display This Question:

If What is your primary role at the University? = Student

Or What is your primary role at the University? = Other

Q23 Are you a Teaching Assistant (TA)?

- Yes (1)
- No (3)

Display This Question:

If Are you a Teaching Assistant (TA)? = Yes

Q24 As a TA do you think your students responded well to the shift to online teaching?

- Yes (1)
- No (2)

Display This Question:

If As a TA do you think your students responded well to the shift to online teaching? = No

Q25 What are some of the difficulties you faced?

Display This Question:

If Are you a Teaching Assistant (TA)? = Yes

Q26 I feel confident to transition to Canvas as a Teaching Assistant?

- Yes (1)
- No (2)
- N/A (3)

Display This Question:

If Are you a Teaching Assistant (TA)? = Yes

Q27 Have you been sufficiently supported in the transition to remote teaching by UC?

- Yes (1)
- No (2)
- Doesn't apply to me (3)

Display This Question:

If Have you been sufficiently supported in the transition to remote teaching by UC? = No

Q28 What kind of training would you have liked to receive, or describe any difficulties you're facing right now.

Display This Question:

If Are you a Teaching Assistant (TA)? = Yes

Q29 Please check ALL that apply to your method of remote teaching due to COVID-19

- I teach class synchronously (live sessions on scheduled class times) (1)
- I teach asynchronously (recorded lectures and/or contents online) (2)
- I teach asynchronously with some synchronous meeting times (3)
- My teaching cannot be done remotely (4)

Technology Experience

Q30 What are the primary devices you use for remote teaching/learning/work? (check all that apply)

- UC laptop/desktop/tablet (3)
- Personal laptop/desktop (1)
- Personal tablet (e.g. iPad, Surface) (9)
- Loaner device from UC for Covid-remote work (4)
- Shared device with family/friends (5)
- Device of an employer that is not UC (8)
- Cell phone (10)
- Other devices, specify: (7) _____

Q31 Have you used your own funds to upgrade or purchase devices to facilitate remote teaching/working/learning?

- Yes (1)
- No (2)
- N/A (3)

Display This Question:

If Have you used your own funds to upgrade or purchase devices to facilitate remote teaching/working... = Yes
Or Have you used your own funds to upgrade or purchase devices to facilitate remote teaching/working... =
N/A

Q32 What devices and/or resources did you purchase?

Q33 Which of the following tools/platforms do you use for remote teaching/learning/work (Check ALL that apply)

- Canvas (1)
- Blackboard (2)
- Kaltura (3)
- WebEX (4)
- Microsoft Teams (5)
- Zoom (6)
- Virtual Labs (7)
- VPN (8)
- DUO (9)
- YouTube (10)
- Poll everywhere (11)
- Podcasting (12)
- Echo 360 (13)



Proctoring software (14)

Examsoft (20)

Facebook (15)

Twitter (16)

WhatsApp (17)

Skype (18)

Other (19) _____

Q34 Are you aware that you can request a loaner device for remote teaching/work/learning from UC?

Yes (1)

No (2)

N/A (3)

Technology Support

Q35 Based on your experience, rate the technology support sources for the Covid-19 related transition below. If not used select 'Unsure or N/A'

| | Excellent (1) | Good (2) | Neutral (3) | Fair (4) | Poor (5) | Unsure or N/A (6) |
|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Overall technology support (1) | <input type="radio"/> |
| IT@UC phone call support (2) | <input type="radio"/> |
| IT@UC ticket support (3) | <input type="radio"/> |
| IT@UC website (4) | <input type="radio"/> |
| Your unit website (5) | <input type="radio"/> |
| Your unit Instructional Design support (6) | <input type="radio"/> |
| IT@UC Knowledge base (7) | <input type="radio"/> |

Q36 Please add any comments/ suggestion related to Technology Support:

Connectivity

Q37 Based on your experience to date pick ALL that are TRUE for you:

- I experience problems with the reliability or sufficiency of my laptop/desktop (1)
- I experience problems with the reliability or sufficiency of my Internet connection (2)
- I experience problems with the reliability or sufficiency of software/tools I use (3)
- I do not have sufficient hardware and software resources to continue teaching/learning/working remotely (4)
- Other (5) _____

Q38 Please list and explain tools/software you have issues with:

Q39 Do you have sufficient hardware and software resources to continue teaching/learning/working remotely?

- Yes (1)
- Unsure (3)
- No (2)
- N/A (4)

Q40 WiFi / VPN

| | Always (1) | Often (2) | Sometimes (3) | Rarely (4) | Never (5) | N/A (6) |
|---|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| I use Public WiFi Access Points / hotspots for teaching/learning/work (1) | <input type="radio"/> |
| I use UC provided WiFi access points/ hotspots for teaching/learning/work (2) | <input type="radio"/> |
| Issues with the UC VPN prevented me from accessing UC resources (7) | <input type="radio"/> |

Q41 Based on your personal experience with respect to remote teaching/learning/working, please rate the following:

| | Strongly Agree (1) | Agree (2) | Neutral (3) | Disagree (4) | Strongly Disagree (5) | Unsure or N/A (6) |
|---|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Issues with a device negatively affected the performance of my responsibilities (1) | <input type="radio"/> |
| Issues with internet connection negatively affected the performance of my responsibilities (2) | <input type="radio"/> |
| Lack of funds prevented me from acquiring technology needed to fully engage via remote mode (3) | <input type="radio"/> |
| I am reluctant to share about my lack of resources (4) | <input type="radio"/> |

Q42 I am aware that Blackboard will no longer be available after June 30

- Yes (1)
- No (2)
- N/A (3)

Q43 I have used Canvas before

Yes (1)

No (2)

N/A (3)

Q44 I feel confident to transition to Canvas

Yes (1)

No (2)

N/A (3)

Display This Question:

If I feel confident to transition to Canvas = No

Or I feel confident to transition to Canvas = N/A

Q45 If you are not confident about transitioning to Canvas, why? How can we help you?

Q46 Please share any comments including **what worked well** for you regarding your technology use and support in transition to remote teaching.

Q47 Please share any comments regarding **issues/deficiencies** related to technology that are preventing you from your optimal remote teaching/learning/working experience

Q48 Please list any potential tool(s)/software specific to your field which are **not currently offered** by IT@UC that could improve the quality of your teaching/work/learning.



Q49 Please share your **suggestions for IT@UC/ Faculty Senate/ Staff Senate/ Graduate and Undergraduate Student Government** to help them optimize their support for you during remote-teaching.

Q50 **[OPTIONAL]**: If you would like to enter the raffle to win a \$25 gift card, please share your UC email:
