

Table 8. To what degree have following technological issues been challenging since the transition to remote learning? (1 – Not at all challenging to 4 – Very challenging)

	Mean (SD)	Min/Max
Student Lack of Access to Reliable Internet (n=1134)	2.48 (0.97)	1-4
Adequate digital replacement for face to face tools (e.g. whiteboard) (n=1134)	2.08 (1.05)	1-4
Ability to Participate in Synchronous Classes (n=1123)	2.04 (1.07)	1-4
Student Discomfort with tech/apps (n=1144)	1.95 (0.86)	1-4
Costs to Upgrade Technology at Home (n=1131)	1.93 (1.06)	1-4
Own Discomfort with tech/apps (n=1142)	1.88 (0.87)	1-4
Access Reliable Internet (n=1142)	1.68 (0.92)	1-4
Access to Library Resources (n=1136)	1.47 (0.85)	1-4
Access to Reliable Communication/Software Tools (n=1142)	1.42 (0.74)	1-4
Access to Specialized Software (n=1133)	1.41 (0.77)	1-4
Access to Reliable Device (laptop/mobile) (n=1142)	1.29 (0.68)	1-4

Table 9. To what degree have following technological issues been challenging since the transition to remote learning?

193 participants completed the open-ended responses:

	Other obstacles for students (housing, equipment, software, etc.)	Student engagement in class	Increased work load/time needed for class	Shared resources/work space	No online equivalent for activities (labs, music studio)	Technology Issues/Support	Physical strain/fatigue
Total	43	17	11	11	10	7	7

Below are direct quotes from participants' open-ended write-in sections that illustrate the themes identified above:

*" (I learned) how many of my students are struggling with
1) internet access and
2) taking all their courses online while coping with illness and/or economic insecurity."*

"My laptop has crashed multiple times during synchronous class activities. It was not built to handle this kind of heavy workload."

"My workspace at home is cobbled together with adjustable bar stools, pillows, and stacks of books to prop up equipment"

"I already knew this: But lead time is everything. Having to adapt a syllabus in the middle of the semester is HELL and it falls especially hard on those of who are supervising multiple sections of graduate student GATs as well as dealing with heavier teaching loads."

Table 10. How would you rate your current comfort level with the following aspects of remote learning? (1 – Not at all comfortable to 4 – Very comfortable)

	Mean (SD)	Min-Max
Online Apps (n=1069)	3.22 (0.75)	1-4
Online Course Delivery (n=1085)	3.09 (0.83)	1-4
Ease of Communication with Students (n=1067)	3.06 (0.86)	1-4
Working from home (n=1062)	3.03 (0.94)	1-4
Changes to grading (n=1057)	3.01 (0.92)	1-4
Online privacy -Protection of Student Data (n=1056)	2.98 (0.94)	1-4
Translating Lessons/Activities to Remote Learning (n=1064)	2.88 (0.92)	1-4
Reaching Student Not Responding (n=1079)	2.85 (1.04)	1-4
Assessing Student Learning in Remote (n=1061)	2.73 (0.98)	1-4
Helping Student Deal with Stress/Anxiety of COVID19 (n=1065)	2.66 (0.94)	1-4
Quality of Student Learning Online (n=1065)	2.46 (0.99)	1-4
Security of Proctoring Online assessments (n=995)	2.42 (1.09)	1-4
Evaluation of Teaching Effectiveness (n=1053)	2.37 (1.00)	1-4
Impact on P & T (n=993)	2.32 (1.14)	1-4

How would you rate your current comfort level with the following aspects of remote learning?

Table 11. 131 Respondents answered the open-ended question:

	Cheating	Increased workload/ time needed	Student engagement/ collaboration/ interaction	Shared space/ resources at home (students/instructors)	Online Exams/Quizzes
Total	13	7	6	5	4

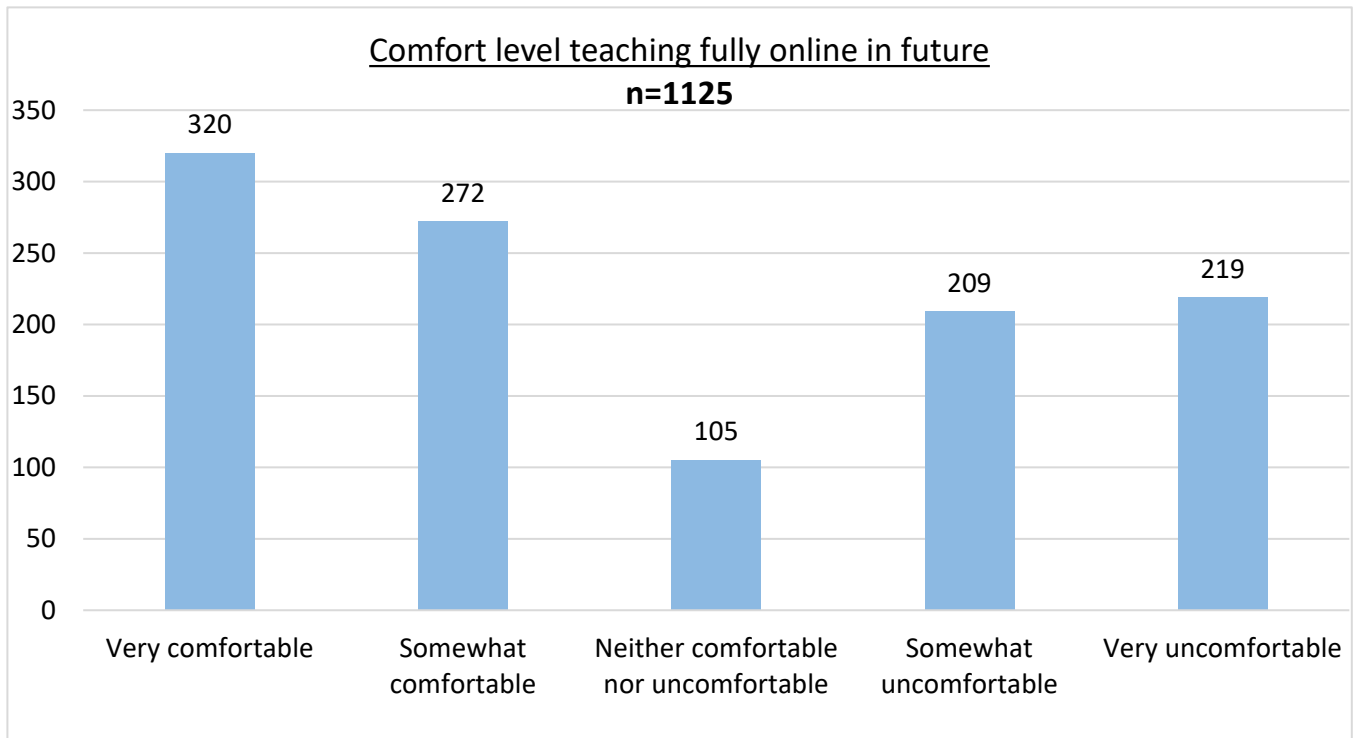
Below are direct quotes from participants' open-ended write-in sections that illustrate the themes identified above:

"Students are not doing well emotionally and need extra support."

"(I learned the following about remote learning) flexibility. I need to trust that my students tell me the truth when it comes to their lives, and I don't ask any questions regarding late work. You need an extension, here it is."

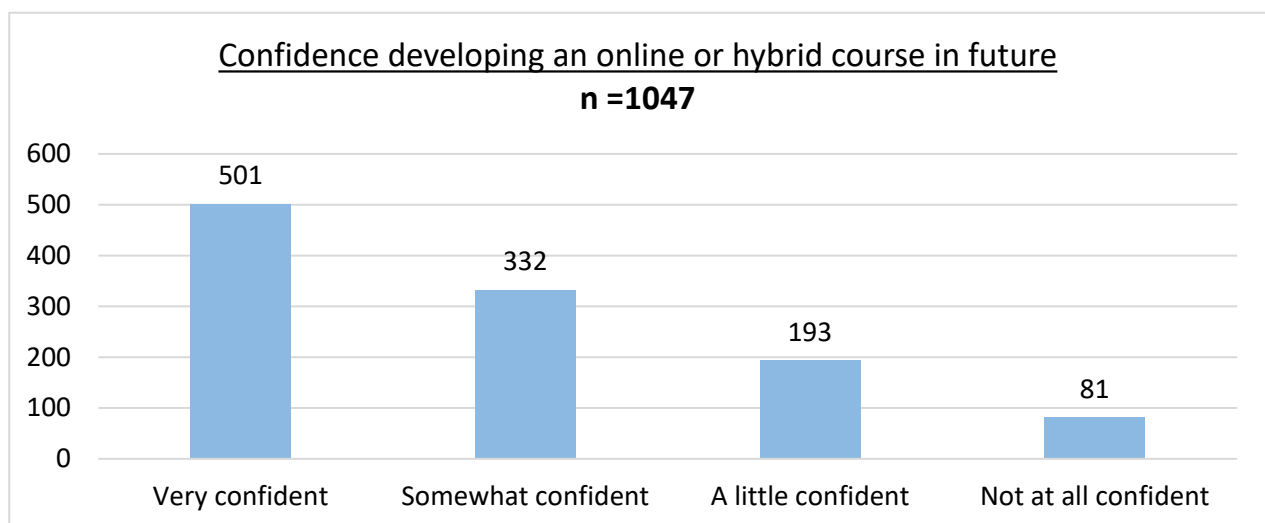
"I know that a small but significant number of students just find remote instruction too difficult. The reasons are varied: limited tech at home; the pressures of family life in isolation; but especially the lack of direct contact with both classmates and me, the instructor. Online teaching can approximate face-to-face teaching, but it cannot replicate the best of face-to-face teaching. It just can't."

Figure 7. How comfortable would you be teaching the class(es) you are currently teaching, entirely online, at some point in the future? (1 – Very comfortable to 5 - Very uncomfortable)



The overall mean for the comfort level of teaching fully online in the future is 2.77 with a standard deviation 1.66.

Figure 8. How confident are you that you could effectively develop and teach a new online or hybrid class in the future? (1- Very confident to 4 – Not at all confident)



The overall mean for confidence in developing an online or hybrid course in the future is 1.87 with a standard deviation 0.95.

Section 1 Key Findings

The most effective strategies overall were Instructor one-on-one meetings with students ($M = 3.49$, $SD = 1.64$) and teaching team feedback ($M = 3.41$, $SD = 1.54$).

“Every student has a different comfort level, a different ability to participate, and a different enthusiasm for online learning. None of them signed up for this and they make that point clear. They appreciate my accommodations and flexibility but would MUCH rather be meeting in person.”

“It was also easier to transition to online because I already knew the students and their abilities from the first half of the semester.”

Item: What is the most important thing you have learned about remote (online) instruction this semester?

Frequent themes: (Underlined themes are those that arose significantly in student surveys).

- Need for flexibility
- Lack of social cues, interactions reduced
- Technological tools
- Communication/Keeping in touch
- Student engagement and participation
- Takes more time

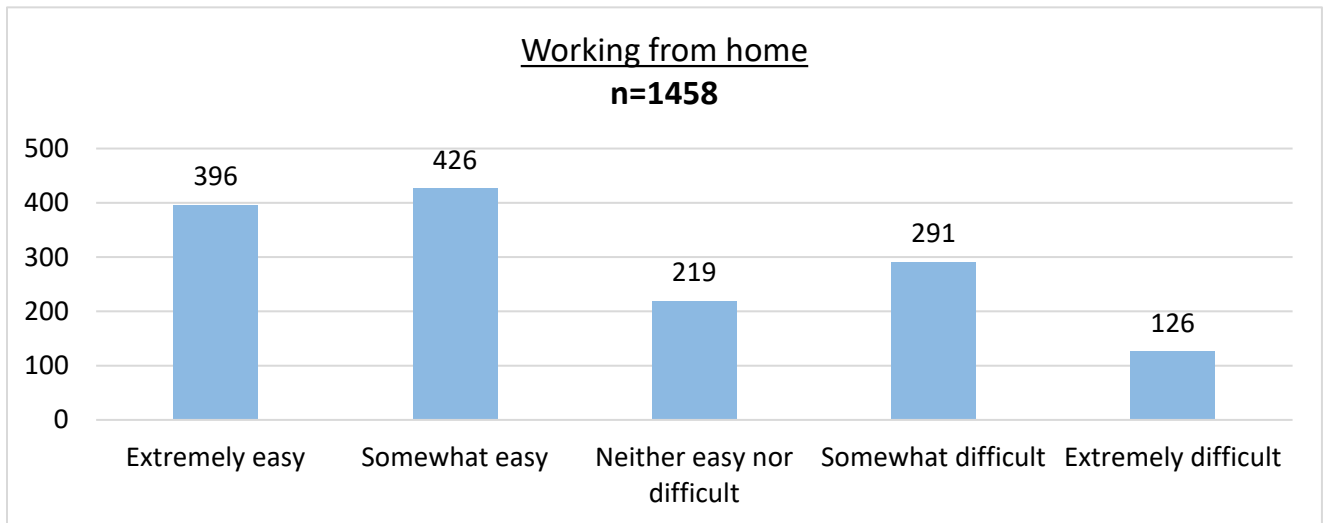
Item: What have been some of the most stressful or challenging aspects of transitioning to remote instruction?

Frequent themes: (Underlined themes are those that arose significantly in student surveys).

- Internet reliability
- Shared resources at home (both student and instructor)
- Conducting assessments
- Quick shift to online
- Student stress/anxiety
- Some elements do not translate to online (i.e. labs, field trips)
- Interactions, engagement and participation
- Time required

SECTION 2: CURRENT CHALLENGES AND CONCERNS FOR THE FUTURE

Figure 9. How is it for you to work from home? (1 – Extremely easy to 5 – Extremely Difficult)



The overall mean for the ease of working from home is 2.54 with a standard deviation 1.31.

Table 12. How worried are you about the following? (1 – Not worried at all to 4 - Very worried)

	Mean (SD)	Min-Max
Health & Wellbeing of my Students (n=1447)	3.19 (0.80)	1-4
Future of UArizona (n=1450)	3.06 (0.96)	1-4
My Future Financial Security (n=1451)	2.93 (0.99)	1-4
Health & Wellbeing of Loved Ones (n=1452)	2.89 (0.91)	1-4
My Job (n=1444)	2.76 (1.05)	1-4
My Current Financial Situation (n=1452)	2.64 (1.00)	1-4
My Own Health & Wellbeing (n=1445)	2.49 (0.95)	1-4

Key Findings: The most worried-about categories were the health of students ($M = 3.19$, $SD = 0.80$) and the future of the University of Arizona ($M = 3.06$, $SD = 0.96$).

Below are direct quotes from participants' open-ended write-in sections that illustrate the themes identified above:

"(The most stressful thing is that . .) my husband and I are both faculty and we have 3 kids under the age of 5 at home full-time with us during the quarantine."

"Home schooling my daughter with no reduction in work duties"

"Watching students struggle remotely and not always being able to reach or help them"

"Knowing that this will be used as an excuse in the future to save the university money, capture my intellectual property, and destroy the idea that "learning" can be done in any way other than "watching" videos on the internet

Table 13. In terms of planning for Summer and Fall 2020, please rate your concern about aspects of re-entry to the campus. (1 – Strongly Disagree to 4 – Strongly Agree)

	Mean (SD)	Min-Max
Having a Voice in Shaping My Work Environment (n=1420)	2.80 (0.94)	1-4
I Will Have the Right Tools/Resources to Do My Job (n=1410)	2.80 (0.76)	1-4
Buildings on Campus Having Appropriate Precautions to Prevent COVID-19 Resurgence (n=1393)	2.59 (0.82)	1-4
Feeling Safe on Campus (n=1411)	2.49 (0.99)	1-4
Feeling Safe in Immediate Work Environment (n=1421)	2.42 (1.02)	1-4
Access to Accurate and Timely Info on UArizona Policies and Procedures Related to COVID-19 (n=1318)	2.36 (0.90)	1-4

Table 14. 324 respondents provided open-ended answers:

	Job security/ Pay cuts/ Furloughs	Disconnect t between Admin and front lines	Workplace / Classroom Safety	Research	Student Safety	Childcare	Sustainabil ity of online learning
Total	45	19	10	10	9	7	6

What other needs do you still have related to COVID-19?

Frequent themes:

- Clear, concise communication about furloughs, policies, and plans for re-opening
- Research capabilities

SECTION 3: EQUITY

Figure 10. How much of your day is devoted to caring for others in your own home to the point where you are unable to attend to job responsibilities? (e.g. children, elders, sick or disabled persons)

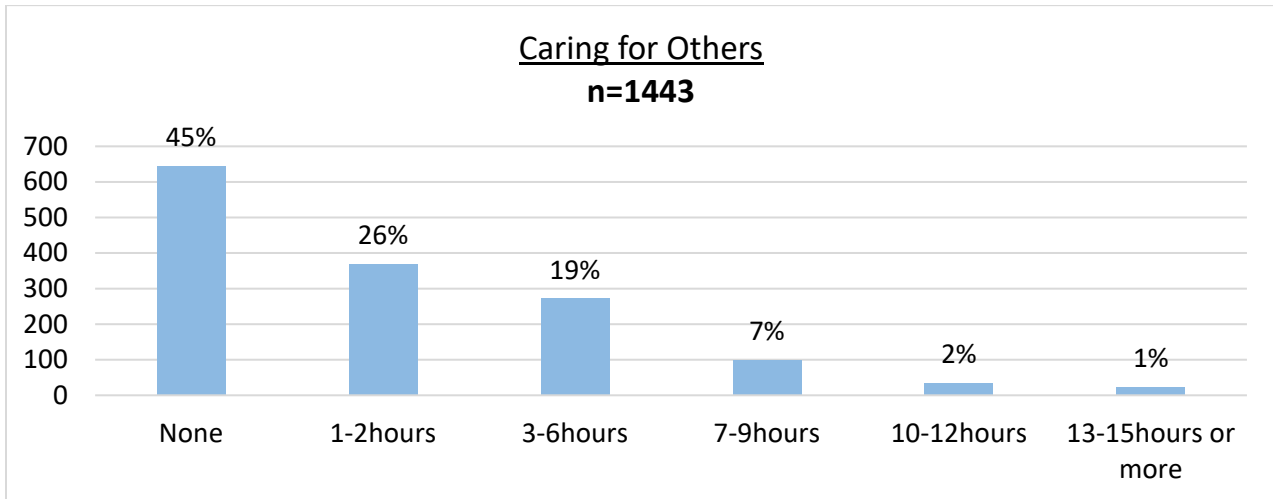


Table 15. During the COVID-19 response, how equitably (fair & just) do you feel the following processes are being experienced? (1 – Not at all to 4 – very; 0 – I don’t know)

	Mean (SD)	Min/Max
Faculty Remote Access (n=1452)	3.14 (0.79)	0-4
Staff Remote Access (n=1451)	3.12 (0.82)	0-4
Student Access to Remote Learning (n=1454)	2.92 (0.81)	0-4
Graduate Student Remote Access (n=1454)	2.82 (0.87)	0-4
Recruitment policies and practices (n=1454)	2.55 (0.96)	0-4
Financial Decisions (n=1454)	2.17 (0.98)	0-4

Figure 11. You indicated that at least one practice or process was "Not at all" or "Not very" equitable during the COVID-19 response. To which of the following factors would you attribute the treatment? Please select all that apply. (Participants selected all that applied).

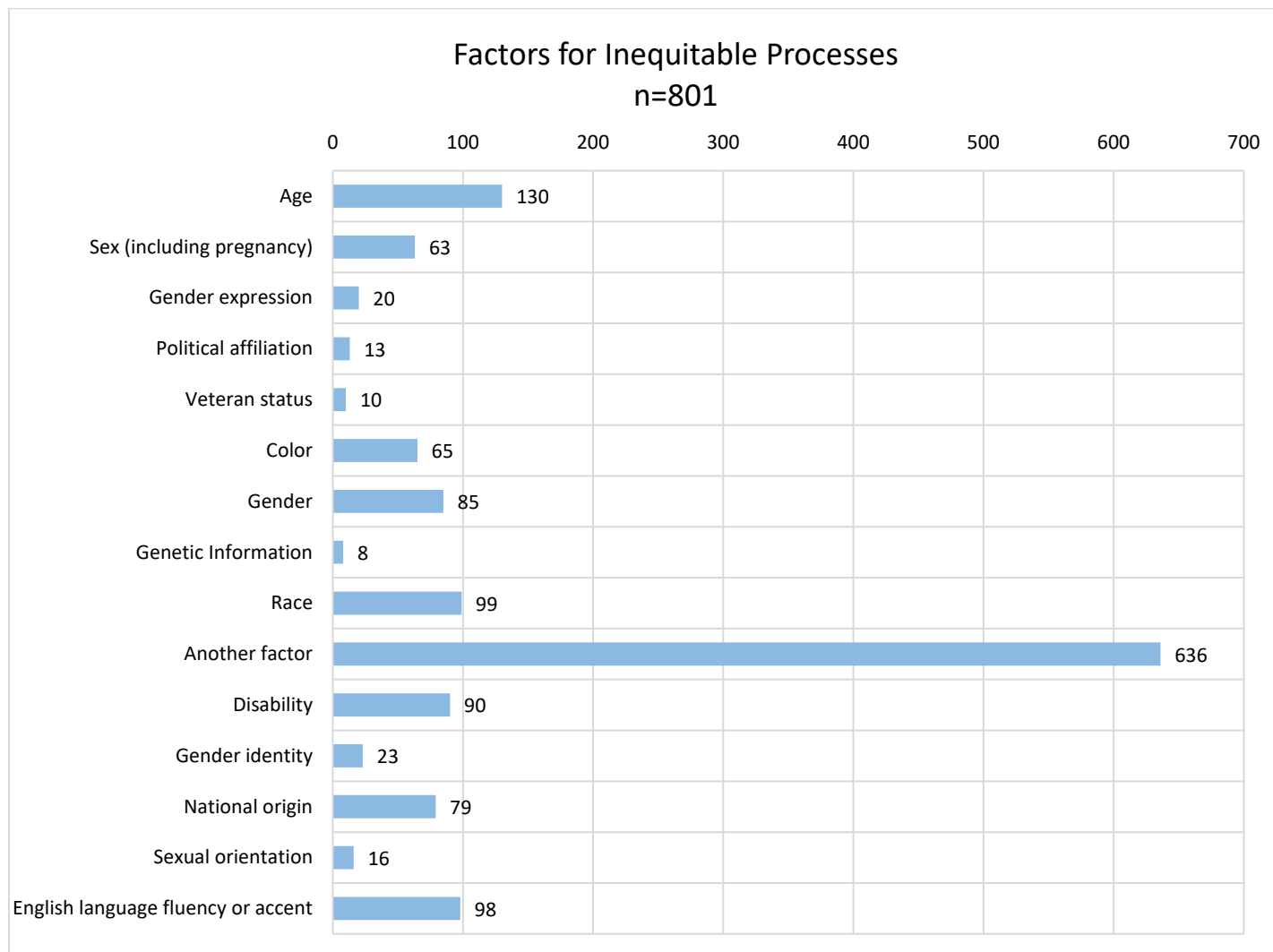
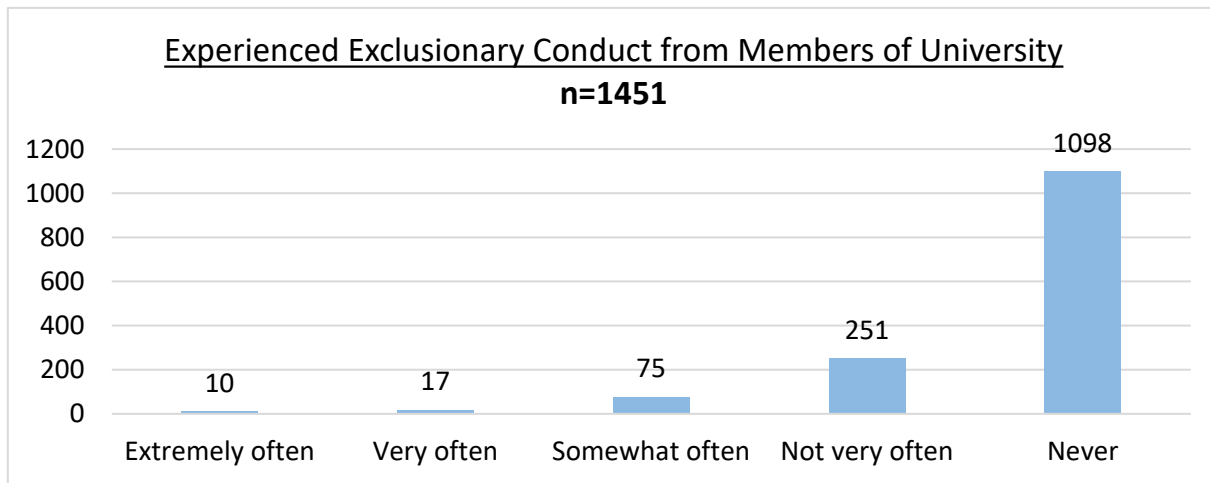


Table 16. "Other" Factors:

	Socio-economic Status	Rank/Position	Unequal/Unfair pay cuts/furloughs	Exclusion from decision making process	Caregivers/Parents
Total	213	76	74	48	21

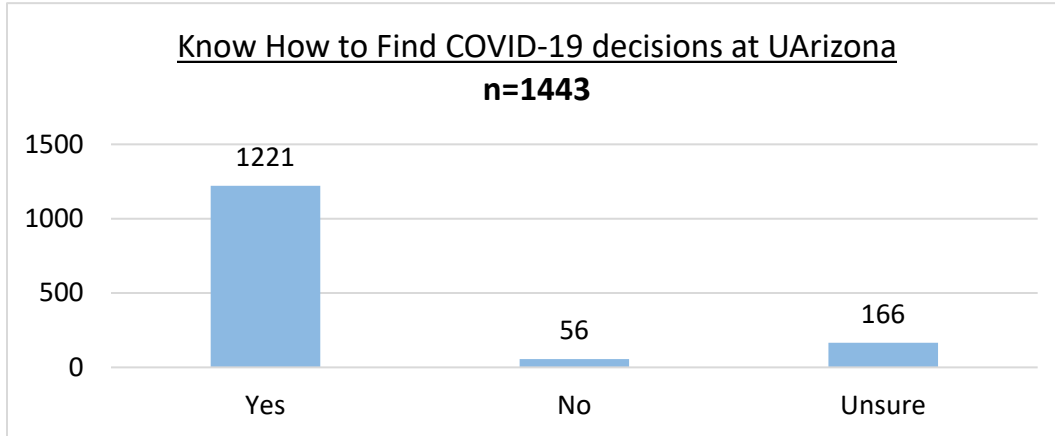
Figure 12. Since remote learning and stay-at-home orders began, how often have you personally experienced exclusionary, intimidating, offensive, and/or hostile conduct from members of this university? (1-Extremely Often to 5 – Never)



The overall mean for experiencing exclusionary conduct by a member of the university is 4.66 with a standard deviation of 0.69.

SECTION 4: INFORMATION AND LEADERSHIP

Figure 13. Do you know how to find updated information about COVID-19 decisions at the University of Arizona?



What resources/units on campus have helped you the most during the COVID-19 response, and how?

Frequent themes: (Underlined themes are those that arose significantly in student surveys).

- Frequent/daily communications from departments
- IT/24/7 help
- Colleagues

Figure 14. Which of the following could leadership do that would be most helpful for you in carrying out your work? (Participants selected all that applied).

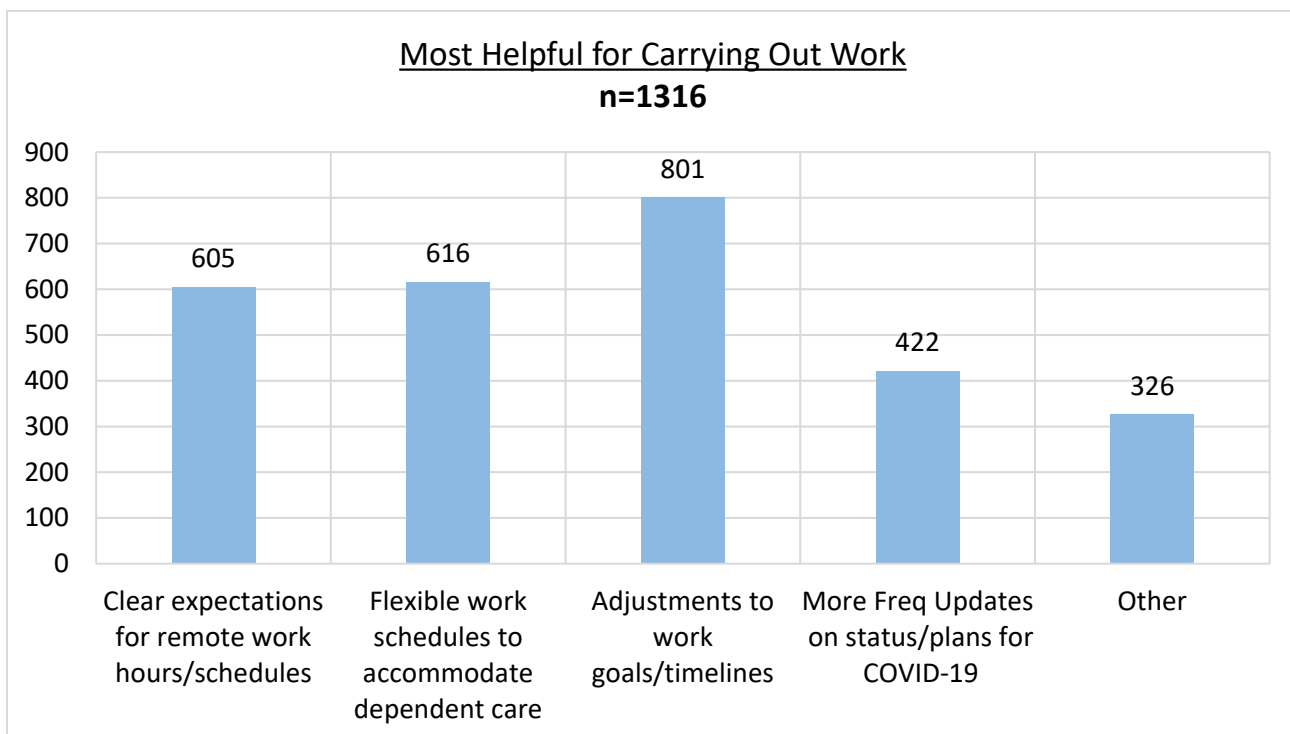


Table 17. Other:

	Clear, consistent, and concise communications, policies and guidance	Transparency in decision making	Revise/Rethink Furlough Plan (More equitable)	Inclusion of faculty/ staff in decision making	Workload Reduction/Adjustment for Instructors	Adjustments to evaluations (P&T, Annual Reviews, Performance reviews)
Total	52	50	46	38	33	9

KEY SURVEY FINDINGS

1. How many faculty members and instructors participated in the survey and what is the overall learning we should take from it?

- a. There was a high level of participation among faculty and instructors with a total of 1,885 respondents. 39% of all faculty participated in the survey, and approximately 55% of all tenure-track faculty participated.
- b. The survey was completed at the end of April. It was conducted in order to learn more about how the global pandemic and working from home impacted faculty teaching, stress, perception of equity, and to gather information about how the university could best support faculty going forward into re-entry and teaching in Fall 2020.
- c. This was a Likert type survey, based on existing survey questions. We also offered open-ended responses for each set of questions. We provide means and frequencies, as well as thematic analysis of qualitative responses with quotes as examples of the themes that were identified by two researchers.

2. Our faculty and instructors had to switch to new teaching strategies very quickly. Which strategies were considered successful and which presented the most challenges?

- a. From the instructor point of view, the best strategy was to communicate one to one with their students in real time. Having that focused time was a much better experience than providing students with a video or other resource to study on their own. Both instructors and students really value interaction. This is exemplified in these quotes from instructors”

“I know that a small but significant number of students just find remote instruction too difficult. The reasons are varied: limited tech at home; the pressures of family life in isolation; but especially the lack of direct contact with both classmates and me, the instructor.”

“Online teaching can approximate face-to-face teaching, but it cannot replicate the best of face-to-face teaching. It just can't.”

- b. Compared to other remote teaching strategies, faculty and instructors felt that instructor 1-1 meeting with students were the most effective teaching strategies, followed by teaching team feedback to students on their coursework. Quotes provide more details, such as:

“Every student has a different comfort level, a different ability to participate, and a different enthusiasm for online learning. None of them signed up for this and they make that point clear. They appreciate my accommodations and flexibility but would MUCH rather be meeting in person.

“It was also easier to transition to online because I already knew the students and their abilities from the first half of the semester.”

- c. The most challenging aspect was the lack of access to reliable internet for many students.

“(I learned) how many of my students are struggling with internet access and taking all their courses online while coping with illness and/or economic insecurity.”

3. What were the greatest concerns of faculty and instructors as we planned for our return to campus?

- a. Our faculty and instructors care deeply about students and the University. Health and well-being of students was faculty and instructors' #1 concern, as well as the student's ability to access the resources they need to be successful in their studies.
 - a. Faculty and instructors were most worried about the **health and well-being of their students** compared to any other issues of their own health, well-being, job, or finances.
 - b. Faculty and instructors felt that **student lack of access to reliable internet** was the most challenging part of transitioning to remote learning. They cared deeply for student's welfare and engagement in classroom content.
 - c. **Faculty and instructors workload was overwhelming** having to adapt their syllabus in the middle of the semester, especially those dealing with heavier teaching loads and supervising multiple sections of classes with graduate student teaching assistants.
 - d. Faculty were very concerned about how the changes due to the global pandemic would impact **promotion and tenure and also the evaluation of their teaching effectiveness**.
 - e. An example of their caring and empathy for students is demonstrated by these quotes:
"(I learned) how many of my students are struggling with 1) internet access and 2) taking all their courses online while coping with illness and/or economic insecurity."

"I need to trust that my students tell me the truth when it comes to their lives, and I don't ask any questions regarding late work. You need an extension, here it is."

"I know that a small but significant number of students just find remote instruction too difficult. The reasons are varied: limited tech at home; the pressures of family life in isolation; but especially the lack of direct contact with both classmates and me, the instructor."

4. What challenges did the faculty and instructors face working from home versus teaching in classrooms?

- a. 56% of faculty and instructors felt it was somewhat easy or extremely easy to work from home; however, the other 44% felt it was more difficult. We asked how much of their day is devoted to caring for others in their home such that they cannot attend to job responsibilities. 45% said none; yet 55% felt that two or more hours during their regular workday was impacted. The following quotes provide more insight.

"(The most stressful thing is that . . .) my husband and I are both faculty and we have 3 kids under the age of 5 at home full-time with us during the quarantine."

"Home schooling my daughter with no reduction in work duties"

- b. The second most challenging factor for faculty and instructors working from home was technology and having to create a workspace. The quotes here provide more specifics.
"Technology: My laptop has crashed multiple times during synchronous class activities. It was not built to handle this kind of heavy workload."

"My workspace at home is cobbled together with adjustable bar stools, pillows, and stacks of books to prop up equipment"

- c. A theme in open-ended responses was with frustration with on-line teaching.
“Knowing that this will be used as an excuse in the future to save the university money, capture my intellectual property, and destroy the idea that “learning” can be done in any way other than “watching” videos on the internet.”

5. What can we, as leaders, do to help and support our faculty as we prepare for the Fall semester?

- a. There are a few key areas that would have helped our faculty and instructors as we worked on the re-entry plan, they included more clear communication about how decisions were made, fewer furlough days, more support for teaching and better tools to work from home, more testing and tracing information about anti-body testing and building precautions into on-campus interactions.
- b. Faculty identified department heads/chairs/directors as some of their greatest resources who helped with regular communication, support, resources and more. They were very grateful for the support and resources from the Office of Instructional Assessment and IT support and facilities management.

“Thank you for working with health insurance and increasing access to mental health services.”

“Thank you for sending updates on protocol.”

“Thank you for supporting faculty and saying it's ok if classes are a bit off. Thank you for telling students classes will be a bit off.”

c. Specific tangible recommendations were also provided, such as the following:

- a. Equity in financial decisions and recruitment.
- b. Providing faculty opportunities to have a voice in shaping their work environment
- c. Given faculty the right tools/resources for their job – updated laptops, workstations, document cameras).
- d. Clear expectations for remote work schedules with flexibility to accommodate for caregiving and allowing for adjustments to work goals/timelines without retaliation.
- e. More frequent, clear and consistent updates on status and plans.
- f. More information on testing and tracing of COVID-19.
- g. Furloughs are having a serious impact on faculty, especially early career faculty – and those who are caring for children and elders.
- h. They are asking for firm assurance that faculty, staff, and students at high risk or living with high risk will not be expected back on campus until a vaccine or herd immunity is achieved.
- i. Can the university provide masks and instructions?
- j. Faculty could use more support for concerns:

“Not a need, just an on-going, general sense of fear and dread regarding the future of our university and worry about my UA students.”

“My mental health is precarious, frankly. I have put a lot of attention into supporting students, both grad and undergrad. But I feel I am slipping.”

“Thank you for working with health insurance and increasing access to mental health services.”

“Thank you for sending updates on protocol.”

“Thank you for supporting faculty and saying it's ok if classes are a bit off.”

“Thank you for telling students classes will be a bit off.”



Acknowledgements

This survey and report were a joint project of the Office of Instructional Assessment and Faculty Affairs through the Office of the Provost. Dr. Andrea Romero and Dr. Lisa Elfring co-led the report.

Michelle Rascon-Cañales and Rebecca Perez coded and analyzed the qualitative results. Rebecca Perez conducted analysis of quantitative data.