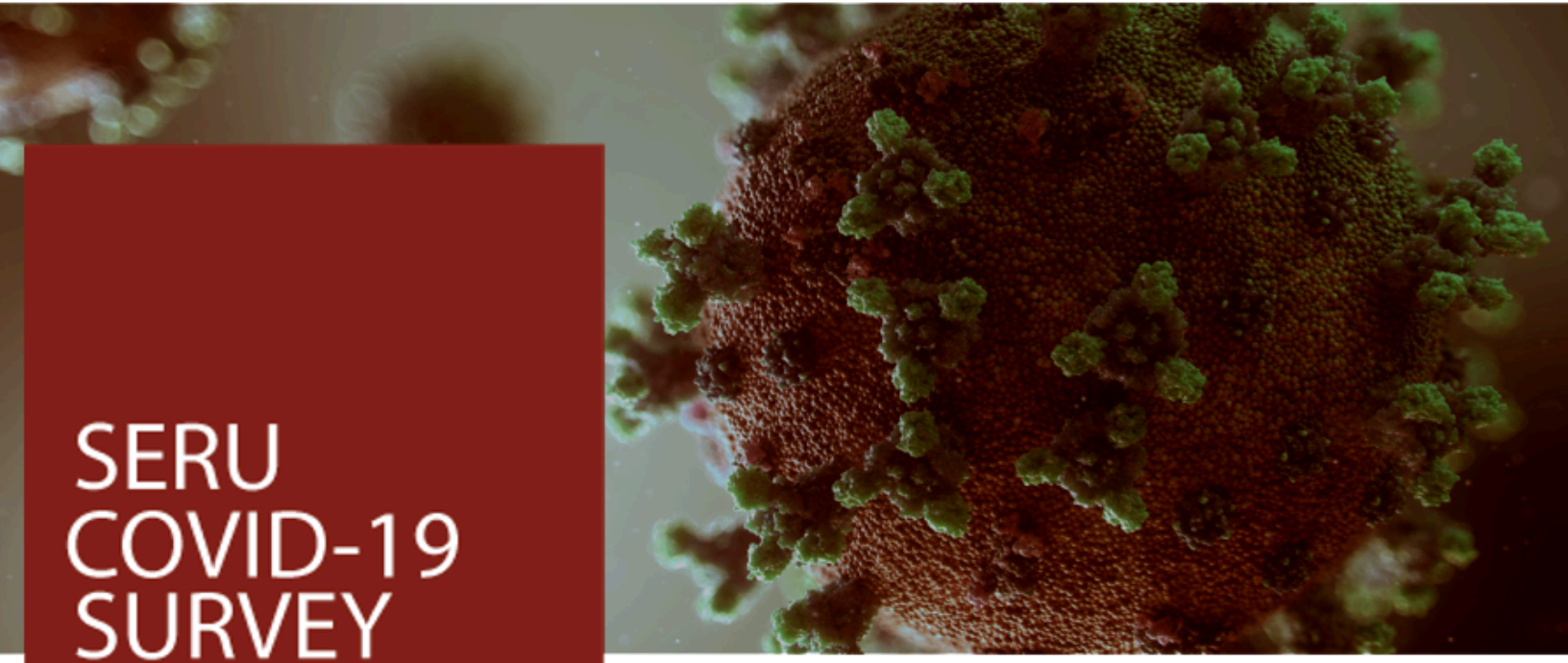

SERU COVID-19 SURVEY

The Obstacles to Remote Learning for Undergraduate, Graduate, and Professional Students

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The vast majority of students at research universities—96% of undergraduate students and 88% of graduate students—experienced at least one obstacle in their transition to remote learning, according to the recent Student Experience in the Research University (SERU) Consortium survey of 22,519 undergraduate students and 7,690 graduate and professional students at five public research universities. **The biggest obstacle among undergraduate, graduate, and professional students was the lack of motivation for remote learning during the pandemic.** Other common obstacles included lack of interaction with other students, inability to learn effectively in an online format, and distracting home environments or lack of access to appropriate study spaces. The obstacles vary by students' social class background and major/program.

Preliminary analyses of the SERU COVID-19 survey suggest that both undergraduate and graduate students at research universities experienced similar challenges in their transition to remote learning during the pandemic (Figure 1).

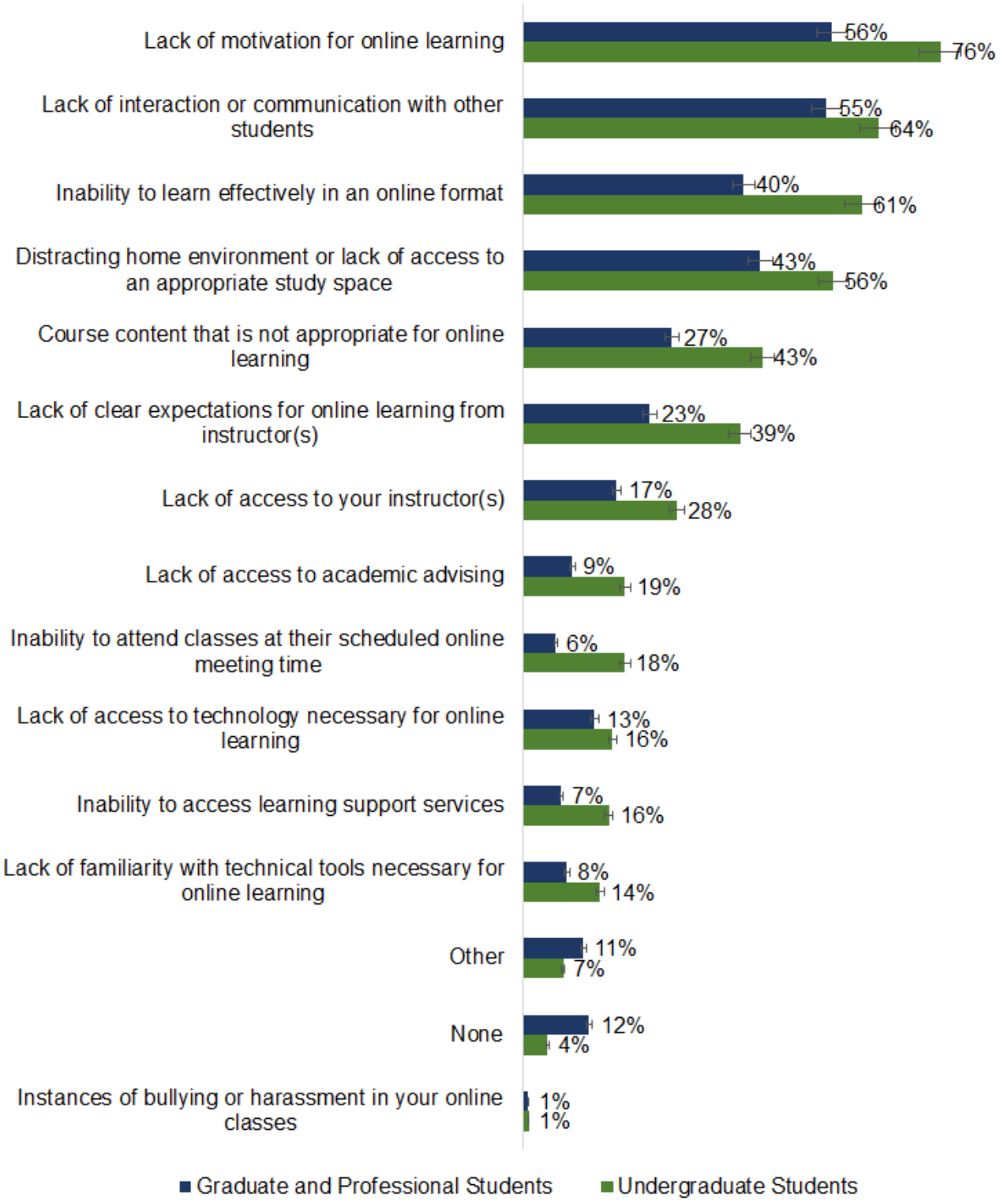

Figure 1. Undergraduate, graduate, and professional students' obstacles to transitioning to online learning.

The obstacles encountered by undergraduate, graduate, and professional students can be grouped into two broad categories: adaptive and technical. According to Heifetz (2009), adaptive problems are complex; require changes in beliefs, roles, and approaches to solve problems; cross organizational boundaries (thus requiring systems thinking); and are often difficult to identify and easy to deny. Technical problems, on the other hand, are easy to identify, can be solved by authorities and experts, and often lend themselves to quick and concrete solutions that are generally acceptable by others. While most of the barriers students encountered while transitioning to online courses are adaptive, there are a few lingering technical problems that could be more easily addressed by institutional leaders (e.g., expanding access to learning support services or expanding training for technical tools).

The biggest obstacles encountered by undergraduate, graduate, and professional students when transitioning to remote learning were adaptive, rather than technical, in nature. These obstacles involved students' lack of motivation, lack of interpersonal connections with classmates, learning difficulties in online formats, and lack of appropriate study spaces amid distracting home environments (Figure 1). Although many institutional leaders scrambled to quickly resolve problems—such as renting or purchasing laptops, textbooks, or other resources for students or moving academic support and library services online—our data suggests that the majority of obstacles encountered by students were adaptive in nature.

Additionally, some of the largest differences between undergraduate, graduate, and professional students' obstacles to online learning included students' beliefs about their inability to learn effectively in an online format. More undergraduate students (61%) than graduate and professional students (41%) believed they were unable to learn effectively in an online format. Undergraduate students were also 16% more likely than graduate and professional students to believe that the course content was not appropriate for online learning (43% compared to 27%) and that they experienced a lack of clear expectations for online learning from their instructor(s) (39% compared to 23%) (Figure 1).

While most of the barriers students encountered while transitioning to online courses are adaptive, there are a few lingering technical problems that could be more easily addressed by institutional leaders (e.g., expanding access to learning support services or expanding training for technical tools). Despite institutional concerns about students' lack of technology and the implications it would have on remote learning, only 16% of undergraduate students and 13% of graduate and professional students cited the lack of technology necessary for online learning as a significant obstacle as they transitioned to online learning (Figure 1). Students were more likely to cite the lack of clear expectations for online learning from instructors and lack of access to their instructors as obstacles impeding their transition to remote learning.

Graduate and professional students were also more likely than undergraduates to indicate that they experienced "other" obstacles to their ability to transition to online classes. Some of those obstacles included:

- challenges serving as a caretaker to family members and lack of childcare
- lack of access to on-campus resources (such as printers or lab equipment), research materials, and library resources/materials
- inconsistent teaching styles and increased workload expectations from faculty
- faculty's poor integration of technology in their classes and lack of flexibility
- poor mental health, difficulty concentrating, and increased stress, anxiety, and fatigue

Social Class Differences

Students from low-income and working-class backgrounds experienced more barriers in their adjustment to online learning compared to students from middle/upper-class backgrounds. For instance, almost one-third of undergraduate students from low-income families reported the lack of access to technology for remote learning as an obstacle compared to 11% of students from upper-middle class and wealthy families. Similarly, distracting home environments and the lack of access to an appropriate study space was an obstacle for 66% of low-income students compared to 50% of upper-middles class and wealthy students. More low-income students also experienced inability to access learning support services (22% compared to 14% among upper-middle class students) and inability to attend classes at their scheduled online meeting time (26% compared to 15% among upper-middle class students).

Similarly, among graduate and professional students, 47-48% of low-income and working-class students experienced a lack of access to an appropriate study space and distracting home environment compared to 39-40% of middle/upper-class students. Twenty percent of low-income graduate and professional students experienced a lack of access to technology compared to 8% of wealthy students. Furthermore, low-income graduate and professional students were twice as likely as wealthy students to indicate that they were unable to attend their classes at the scheduled online meeting time (9% compared to 4.5%).

Academic Discipline Differences

Our data also suggests that students enrolled in different academic programs experienced obstacles to online learning in unique ways. Undergraduate students majoring in architecture, visual and performing arts, and education more frequently reported that their course content was not appropriate for remote learning (59%-62% compared to an average of 43%). Both area, ethnic, cultural, gender, and group studies students and family and consumer sciences students reported the lack of motivation to remote learning as a common obstacle (84% compared to 76% on average). Conversely, only 62% of students majoring in security and protective services and public administration cited lack of motivation as an obstacle. Lack of access to technology necessary for online learning was more likely an obstacle to architecture students (33% compared to an average of 16%). Lack of access to an appropriate study space or distracting home environment were more likely obstacles for students majoring in family and consumer sciences; area, ethnic, cultural, gender, and group studies; and biology (62% compared to 56% on average).

Graduate and professional students in health sciences and industry, manufacturing, and construction were more likely than students in other academic disciplines to indicate that the course content was not appropriate for online learning—38% and 36% respectively, compared to an average of 23% among the other groups (excluding health sciences and industry, manufacturing, and construction students). Education students were most likely to cite a lack of clear expectations from instructors compared to other students (28% compared to 21%, the average of other groups) while 70% of industry/manufacturing/construction students cited a lack of interaction/communication with classmates as an obstacle compared to 52% of their peers. Distracting home environments and the lack of adequate study spaces were more likely to be obstacles for students in public safety programs (51%) compared to their peers (40%).

Conclusions

While students reported both adaptive and technical challenges in response to the COVID-19 pandemic, institutional leaders should attempt to resolve the more complex adaptive challenges encountered by students as they look to the fall 2020 semester given the predominance of adaptive challenges encountered by students. For instance, institutional leaders and faculty should seek ways to motivate students in online classes by offering students' meaningful and relevant course content that connects to their present lived experiences, developing personalized learning opportunities, and creating opportunities for students to connect (virtually) with their classmates. It is evident from the data that students value learning from—and with—their classmates, and that the absence of those connections is a perceived obstacle to their learning. Therefore, faculty should consider offering opportunities like synchronous discussions in video conferencing, asynchronous discussion boards or videos (e.g., via flipgrid), group activities, or class assignments in which students deliver course content to each other and highlight their expertise (e.g., through presentations).

Leaders and faculty should also be considerate of the experiences of undergraduate, graduate, and professional students from low-income backgrounds. Low-income and working-class students were more likely to struggle with having access to technology, experienced challenges due to distracting home environments, and experienced challenges accessing learning support services and attending online classes during their scheduled times. We encourage leaders and faculty to proactively reach out to students from low-income and working-class backgrounds to help them procure technology, expand learning support services hours and resources, and offer additional accommodations to students who have caretaking responsibilities.

Additionally, it is important for faculty and academic deans to examine some of the discipline-specific differences in students' experiences transitioning to online learning—and for administrators to acknowledge that the obstacles encountered by students during the pandemic are not homogenous across all academic disciplines. It will continue to be important for faculty and academic deans to advocate for the unique needs of their students during the pandemic and to convince institutional leaders that efforts to reduce students' obstacles to online learning may not be appropriate for students across all academic disciplines. Furthermore, we advocate for more innovative, discipline-specific approaches to online learning and to help students who are experiencing discipline-specific obstacles to online learning.

Institutional leaders and faculty should also be mindful of students' experiences as virtual learners in home environments that were not designed to support learning and working from home and consider that a large number of students are also responsible for taking care of others during the pandemic. In our sample, 10% of undergraduates and 14% of graduate/professional students were responsible for taking care of children during the pandemic. Additionally, 15% of undergraduates and 18% of graduate and professional students were responsible for taking care of other adults during the pandemic. Faculty should provide accommodations for students who have significant caretaking responsibilities and institutions should consider expanding their daycare alternatives for students, especially if K-12 schools continue with online education in the fall 2020 semester. Institutional leaders may also want to share adult caregiver-related resources with students, including strategies to avoid caregiver burnout, financial or legal advice or resources, and counseling and mental health support.

About the SERU COVID-19 Survey

The Student Experience in the Research University (SERU) Consortium is currently administering a special survey on the impact of COVID-19 on student experience at 10 U.S. public research universities. The SERU COVID-19 Survey assesses five areas to better understand undergraduates, graduates, and professional students' experiences during the global pandemic: 1) students' transition to remote instruction, 2) the financial impact of COVID-19 for students, 3) students' health and wellbeing during the pandemic, 4) students' belonging and engagement, and 5) students' future plans.

Sample

The survey was a census survey administered to graduate and professional students at five large, public research universities. The data collection started in May and is still ongoing at most universities. The report uses data from 22,519 undergraduate students and 7,690 graduate and professional students who completed the survey as of June 11, 2020. The response rate as of June 11, 2020 was 7-22% at the respective institutions.

About the SERU Consortium

The Student Experience in the Research University (SERU) Consortium is an academic and policy research collaboration based at Center for Studies in Higher Education at the University of California – Berkeley (CSHE) working in partnership with the University of Minnesota and partner institutions. More information about the SERU survey is available at https://cshe.berkeley.edu/seru

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References

Heifetz, R. A. (2009). *The practice of adaptive leadership: Tools and tactics for changing your organization and the world*. Harvard Business Press.