How to support students in virtual learning environments
14 April 2021, by Dan Bernardi

The mass migration to virtual learning that resulted from the COVID-19 pandemic led to a profound change in student learning. While it presented many challenges, it also created opportunities for documenting responses.

Two researchers from the Department of Biology in the College of Arts and Sciences (A&S) gathered student perspectives on the move to remote learning to determine best practices going forward. Eve Humphrey, a recent postdoctoral fellow in the Department of Biology and current assistant professor of biology at Lincoln University, and co-author Jason Wiles, associate professor of biology in A&S, recently published a paper exploring Syracuse University students' experiences, along with a set of recommendations for supporting them in virtual learning environments.

To compile data for the study, Humphrey and Wiles distributed surveys to a group of students in a biological research course during their transition to online learning and again three weeks into virtual instruction. During the transition, students were asked questions, including: How has the pandemic impacted you and how have you responded? How do you plan to approach courses for the rest of the semester? Do you prefer online versus in-person?

Three weeks into virtual learning, students were asked: Do you believe professors have adjusted well to teaching online? Do you believe your level of learning is similar to being on campus? What changes can professors make to improve your learning participation?

According to Wiles, students acknowledged that their instructors had adjusted well to teaching online, but expressed several challenges associated with virtual learning from home.

"While students tried to maintain their regular academic schedules, this was difficult for students who had returned to other countries in vastly different time zones or for students who had conflicting family responsibilities or other unavoidable barriers to meeting synchronously or making deadlines," Wiles says. "With all of the resulting frustrations and with the emotional and other strain brought on by the pandemic, maintaining motivation was a consistent issue for students."

Based on their research, Humphrey and Wiles developed a list of recommendations for instructors to support students in virtual learning environments including:

- Clearly and consistently communicate expectations.
- During pandemic conditions, instructors need to explicitly acknowledge and discuss with students the potential for the health crisis to impact their productivity and mental health. Students need to be made aware of support mechanisms and coping strategies, assured that instructors understand their many stresses and informed about how difficulties in keeping up with class meetings..."
and assignments will be approached.

- Where possible, make more opportunities for student choice in what, when and how they will learn. Allow students to be involved in the decision-making process about discussion topics and readings. The use of learning platform message boards can create a space for students to reflect and interact with classmates and instructors on their time. This will reduce stress and potential scheduling conflicts, while increasing engagement and motivation.
- Allow students ample opportunity to reflect on what they have learned and to make connections with their lived experiences. This allows them to realize the progress they are making and to see the practical relevance of what they are learning.

Their article, "Lessons learned through listening to biology students during a transition to online learning in the wake of the COVID?19 pandemic," published in the journal *Ecology and Evolution*, pays specific attention to disparities faced by students from underserved communities.


Provided by Syracuse University