SCHOLARS
STRATEGY NETWORK

Online Learning and Implications for Inequality in the Classroom

Jennifer Darling-Aduana, Georgia State University
Carolyn J. Heinrich, Vanderbilt University
Annalee Good, University of Wisconsin-Madison

Student-teacher interactions are integral to student learning opportunities in the classroom. The social identities and cultural backgrounds of both students and teachers influence these interactions. Over the last two decades, online learning has fundamentally changed the ways students experience school, instruction, and interactions with teachers. Three-quarters of U.S. school districts now offer online classes – and many of these are meant to help students recover credits. These credit recovery programs provide students an alternative, often faster, path to high school graduation than through traditional means.

Little is known about how the growth of online courses influence student-teacher interactions and how this change reflects, exacerbates, or mitigates racial and socioeconomic inequities in schools. This lack of knowledge is troubling, given that students from historically marginalized groups are more likely to be assigned to complete online courses.

We conducted a multi-year, mixed methods study on digital learning in a large, Midwestern school district. Our findings are important for understanding how student-teacher interactions contribute to unequal access to quality education. Further, our findings and recommendations have relevance for policy-makers, educators, and all those interested in improving the educational experiences of students enrolled in online courses.

Emerging Patterns in Student-Teacher Interactions

In the credit-recovery classrooms we studied, instruction occurred mostly through direct interactions with software housed in an online course platform. To personalize help with the standardized course content, students had to initiate interactions with the in-person instructor who oversaw the classroom, which was often located in a computer lab. Instead of asking for help, most of the (predominantly low-income and racial minority) students struggled in silence or only looked for assistance from online resources. Those resources, such as a Google searches or tutoring websites, provided information to help students answer assessment questions, but rarely supported deeper learning.

When asked for help, classroom instructors usually focused on assisting students in getting to a correct answer on a quiz or test. Instructors less frequently took account of students' current level of understanding, worked through problems with them, or explained the content in a new way. More of these kinds of learning-focused interactions were found in classrooms with more teachers and with one or more certified teacher.

In addition to finding patterns, we also identified three promising strategies for minimizing barriers to learning in online classrooms:

Build trust – Students more often initiated interactions with teachers in labs where teachers demonstrated respect and interest in their students' lives. Teachers who excelled in this area shared food and engaged in conversations during breaks, helped students process traumatic events, and celebrated students' successes.

Offer assistance – We observed more favorable interactions in classrooms where teachers used digital tools to monitor student engagement and learning. This often allowed teachers to assist students not making adequate course progress. In other classrooms, teachers proactively reached out to each student at regular intervals during the semester to discuss learning, course progress, and goals.

Provide content-specific expertise – Some schools assigned students taking courses in a single subject to a classroom overseen by a teacher certified in that area. In such classrooms, we observed that students more often requested assistance, and we observed a greater focus on instruction versus test completion.

Our research indicates that student-teacher interactions in online courses replicate many of the same inequities found in traditional, face-to-face classrooms. In fact, online courses may exacerbate inequities, because students are expected to direct their own progress. States, districts, and schools looking to expand or improve current online courses should be aware of these possible downsides and take steps to counteract them.

Policy Recommendations for Schools and Districts

Based on our findings, we offer suggestions to improve equitable student access to quality learning opportunities in online classrooms:

- Instructors should outline explicit expectations and actively offer assistance; and they should recognize that students are most likely ask for and accept help if instructors demonstrate trustworthiness and respect.

- The use of technological tools and real-time data can help teachers follow student progress and provide targeted support to those who need it most.

- Low student-teacher ratios in classrooms and the assignment of teachers certified in the specific course material are steps that appear to improve educational quality.

In sum, online credit-recovery programs require appropriate resources and staffing to support student learning and facilitate many advantages expected from individualized digital learning.

To avoid further marginalizing students who have previously struggled in school, online credit-recovery programs require well-qualified instructors who are personally present in the classroom and prepared to reach out to help students build understanding, not just wait for students to ask for assistance. Training teachers and equipping them with tools to monitor student progress helps, and so does ensuring that enough teachers are assigned to classrooms to enable them to build one-on-one trust with all assigned students.

Read more in Jennifer Darling-Aduana, Annalee Good, and Carolyn Heinrich, "Mapping the Inequity Implications of Help-Seeking in High School Online Credit-Recovery Classrooms". *Teachers College Record* 121, no. 11 (forthcoming).