
USING TECHNOLOGIES THAT STUDENTS ARE COMFORTABLE WITH TO IMPROVE INTERACTIVITY IN ONLINE LEARNING

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The rapid move to online teaching during the COVID-19 pandemic demonstrated that universities and schools were unprepared for large-scale online teaching. Poor internet capabilities and lack of interactive online opportunities meant that lectures and laboratory practicals were replaced with videos and online assignments, decreasing student interaction and hands-on learning opportunities. In this seminar, I discuss how we used technologies that students already use in their daily lives (YouTube Live, Twitch, Discord, Mobile devices) to engage them in authentic experiential online learning where students felt part of a community of learners. In our university classes, lecture attendance grew from 13% for face-to-face lectures to 59% in online lectures. We also saw a 10-fold increase in online interactivity during live online lectures. We saw similar results for our science outreach with primary and high school students using Arludo apps—video games designed to teach scientific concepts through scenario-based experiences. All students stated this form of teaching helped them feel like part of a scientific community. Our combination of a social online learning management system with a real-time chat interface and mobile games to engage in scientific thinking and data collection provides an inexpensive and exciting way forward to teach online.

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