

ICLICKER & STUDENT ENGAGEMENT FOR REMOTE LEARNING

ONLINE ENGAGEMENT IS MORE CRITICAL THAN EVER. The swiftness and urgency of campus closures this spring semester left institutions across the country scrambling for the best ways to support instructors transitioning to online learning. While there were many challenges, one was cited the most as a remote learning challenge—student engagement. The <u>study of 187 college presidents and chancellors</u> conducted by Inside Higher Ed this April found more than three quarters (78%) of respondents cited student engagement as somewhat or very challenging, surpassing challenges like instructor training (68%), student access to technology (69%), and ensuring academic standards remain high (47%.)

Numerous studies have revealed the importance of engagement, with one from the National Institute of Education claiming that student learning is proportional to the quality and quantity of student involvement in that program. The kind of engagement leading to lasting learning is even more essential when students are not in the same physical space as instructors and classmates. While the hybrid and wholly digital environment offers challenges, active learning and engagement tools like iClicker better support students' sense of support and collaboration, helping them to be successful and remain invested in learning.

Institutions are planning to address digital challenges like engagement, with more than three-quarters of college presidents indicating that they are likely to invest in new, online learning resources in the future (76%). It's no wonder why—attrition is a multi-million dollar problem for most colleges. As far back as 2016, conservative estimates pin the cost of losing students at around \$50-60 million at four-year institutions. Student-centered approaches to online learning with technologies like iClicker help engage students and reduce the risk of them dropping out.

How iClicker can help

iClicker engages students in the learning process, which increases their attention and focus, motivates them to practice higher-level critical thinking skills, and promotes meaningful learning experiences. In fact, **student engagement more than doubles with the use of iClicker.**

At a time when students might feel insecure or unsure about the college experience, and where it can be easy to just passively watch videos or click through information, iClicker promotes active learning and participation. iClicker helps facilitate class interaction (i.e. asking opinions, taking live quizzes soliciting feedback)—all things that are associated with better engagement and student performance. These are all activities that can be done in-person or, importantly, remotely. In fact, in March and April more than 2,000 courses relied on iClicker to support remote classroom engagement.

iClicker was designed for use in both physical classroom and online instruction through the use of physical "clickers" and web/mobile student applications. Instructors are using iClicker's remote learning tools to take attendance and engage with their students. That means that iClicker can work just as well whether you are meeting in-person, digitally, or plan to use a combination of both.

Why iClicker?

iClicker is the most researched student response system on the market, and is proven to increase motivation and help students <u>earn higher grades</u>. Findings from a 700+ student, five campus IRB-approved study found a <u>positive relationship between using iClicker Reef and student learning</u>, that instructors and students find iClicker Reef easy to use, effective in helping students stay engaged, and promotes active learning in the classroom. A different IRB-approved study also found that using <u>iClicker is even more impactful</u> for the students you're trying to reach the most—those with a lower baseline level of motivation. These are examples of just some of the many studies we've conducted.

SEAMLESS FOR INSTRUCTORS AND STUDENTS



iClicker works seamlessly with any virtual meeting software and allows instructors to connect with every student, making instruction feel more like an in-person classroom. The active learning that was happening in the classroom can still continue online in the virtual classroom with the help of the iClicker mobile application.

SUPPORTS TEACHING AND LEARNING



iClicker gives instructors immediate feedback from their students and helps them decide if everyone is understanding the concepts they're teaching. Importantly, it ensures that students attend the entire session while allowing them to give feedback at the end. The iClicker Cloud instructor's software can automatically score students for correct answers or for participation in polls and quizzes, as well as gather anonymous feedback. iClicker offers a place for students to give feedback and communicate their needs, and for instructors to simulate the environment in which they're used to teaching.

GREAT VALUE



Student-centered approaches to online learning with technologies like iClicker help engage students, and reduce the risk of them dropping out. A minimal investment in iClicker now can save a significant amount of money down the line by reducing the number of students that drop out, which can eventually cost millions. It helps them feel connected to their education and facilitates the type of engagement that is critical to both learning and retention.

What instructors are saying

Here are some of the many quotes from faculty who moved their spring 2020 course online in response to COVID-19 and are now using iClicker to facilitate student engagement. All quotes are used with permission.

Robert Paul Malchow, Ph.D., Associate Professor, Biological Sciences & Ophthalmology & Visual Sciences, University of Illinois at Chicago

"Just a note to let you know that I taught remotely via [Blackboard] Collaborate today to the ~150 students in my Animal Physiology Class, using the [iClicker] Reef system for all the students. It worked very nicely indeed, and made the remotely-presented lecture nicely interactive. Thanks very much for your help with this and to iClicker for being so generous to let us use the system in this way—very much appreciated!"

Sergei Savikhin, Professor of Physics and Astronomy, Purdue University

"I am using iClicker mobile now for the second week (4 lectures total) along with webex online real-time lectures and they work flawlessly. While webex has [a] built-in polling option and we also have been suggested to use Hotseat at Purdue, these two are no match for iClicker. Both webex and hotseat do not allow changing answers during discussion and take a lot of clicking to start every test, iClickers don't take time and allow monitoring changing answers as I give hints to students, i.e. iClickers can actively engage students in learning new material, while hotseat and webex polling are only good for quiz. And [the] best part is that Reef works the same way as hardware iClickers, I did not have to change anything, and students (mostly biology majors) had no issues installing and running [the] app."

Dr. Kelly Marville, Lecturer, Dept of Chemistry at University of Illinois

"[Web/mobile] clickers really assisted my online discussion sessions this summer. Attendance was consistently good every Tuesday and Thursday and during reviews and my TAs got to actually teach in the online classroom. Clicker [questions] asked were consistent with exam level standards and the grades we saw indicated that students would struggle on exams and they did. Students who we saw struggle never reached out, even when repeatedly asked to do so verbally and via email. Students that were actively engaged in the discussion have been doing well ... as expected.

My TAs and I have been spreading out our clicker questions over the 2 hour period twice a week by asking one clicker every half an hour and we have students stay for the full 2 hours due to this. In doing so, they are now being exposed to the very valuable worksheet problems that are done between these clicker problems and have been asking great questions. Some students are also assisting others in the chat rooms ..."

Yilan Xu, Associate Professor, Agricultural & Consumer Economics, University of Illinois

"I have been using iClicker for my class for years and ... tested it with my students before they left the campus amid COVID-19. I am so thankful that we can still use it and I believe it is a great way to engage students in the online classes. I have a combination of poll question sections and quiz question sections over the semester. The poll question sections are entirely participation-based, through which I ask about their baseline knowledge and opinions. The quiz question sections are both performance-based and participation-based. For instance, for a quiz section of three points, I would give one point for submitting at least one answer whether correct or not and one point for each correct answer. I give them three questions but cap the total performance points at two so that they may miss one question but still get full points for the section."

See it for yourself

The following videos provide examples of iClicker in use for online learning.

- Using iClicker with Zoom: Quick Start Guide to Using iClicker for Remote Instruction
- Webinar on using iClicker for online courses: Going Virtual: Using iClicker to Keep Students Engaged

In Sum

iClicker helps to solve one of higher education's greatest problems in our post-COVID-19 reality: student engagement. It can do this simply and effectively both in-person and virtual classes; we know this because thousands of instructors moved their courses online and began using iClicker for student engagement. A small investment in iClicker now pays off later with better student engagement that could lead to reduced attrition.

About Macmillan Learning

Macmillan Learning is a privately-held, family-owned company that improves lives through learning. By linking research to learning practice, we develop pioneering products and learning materials for students that are highly effective and drive improved outcomes. Our engaging content is developed in partnership with the world's best researchers, educators, administrators, and developers.

Have Questions?

We're here to help! find more information at www.iclicker.com.