



ENGAGE TO ACHIEVE MORE

Using Technology to Improve Equity: An Educator's Perspective

Strategically integrating technology with in-person learning can lead to richer, more equitable engagement.

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Introduction

Educators and students continue to experience the benefits of technology in the classroom as we return to normal. We should strategically integrate technology with in-person learning to foster engagement as a matter of equity.

Engaged students are 1.5 times more likely to graduate and do so one semester sooner than their peers. Additionally, these students are more motivated and have better critical thinking and communication skills.

While these outcomes are encouraging, they are not immediately available to all students. Consider the following possible barriers to equitable learning outcomes for students, and four recommendations to remove those barriers from Professors Ross and Ravenwood.



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First-Generation Students

Because they are the first in their families to go to college, first-generation students often lack a network of family and friends with whom to discuss their college experience. Additionally, these students often have less time for social networking with their college peers since they are more likely to work to pay for college or help support their families. These feelings of isolation can exacerbate a crisis of confidence or imposter syndrome.

Tip: Technology that fosters student engagement while creating safe spaces for less confident students to participate can effectively cultivate confidence for first-generation college students. With iClicker, instructors can allow students to participate anonymously in polls and other learning activities that students may otherwise find intimidating. Students can compare their responses without the risk of embarrassment. The immediate feedback can alleviate anxiety and bolster confidence.

iClicker also helps equity-focused faculty accommodate first-generation students' demanding schedules. Instructors can also use technology for asynchronous activities, allowing students to complete assignments at their leisure before the deadline.



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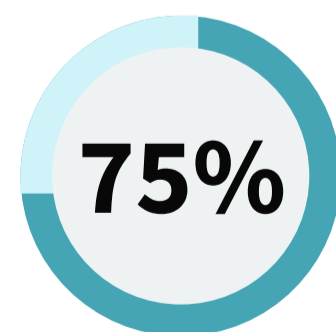


Cultural and Linguistic Differences

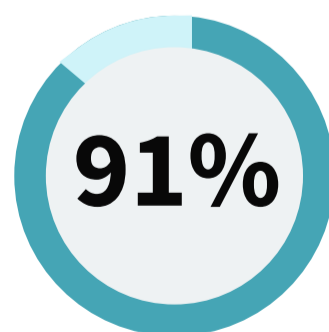
Cultural backgrounds and primary languages influence students' classroom participation. Collectivist cultures prioritize group goals over individual ones. Students from collectivist cultures may feel uncomfortable or boastful when raising their hands to share what they know. Students for whom English is a non-primary language may be insecure about speaking in class. They may not yet possess the vocabulary or fluency necessary to express complex ideas in English. Because of their reticence, instructors may assume students with cultural or linguistic differences are disengaged, unprepared, or do not understand the material.

Instructional technology can help create safe spaces for student participation by allowing them additional time to craft responses. Students can also participate as a group and do not need to speak.

Tip: Instructional technology can help circumvent cultural and linguistic barriers by providing various options for participation. Using iClicker supports active teaching strategies like think-pair-share and group work.



Students report that iClicker helped increase their overall course grade.



Students report that the immediate feedback iClicker provides increases their understanding of concepts.



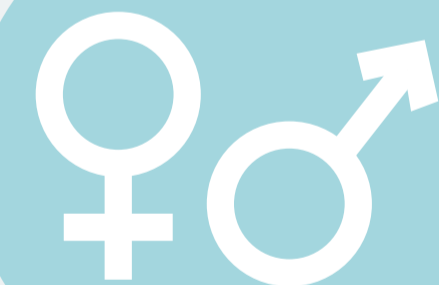
Students confidence increases by using iClicker — students report that they are more confident participating in class and that the anonymity of iClicker makes them more likely to participate.

Gender-Based Participation

According to a recent article in [The Wall Street Journal](#), female-presenting students made up the majority of college students in the 2021 academic year. [Studies](#) show that despite an increasing female student population, they participate less than their male peers. The persistent gender-related gap may be primarily due to gender socialization.

Gender socialization encourages behavior based on biologically-assigned gender. Generally, males are taught to be assertive and competitive, while females are discouraged from these behaviors. Thus male-identifying students are more likely to speak up in class, while female-identifying students underestimate their abilities and withdraw from participation.

Tip: iClicker can eliminate gender-based participation gaps by giving every student a voice regardless of gender identity. Anonymous surveys can help faculty develop strategies for discussing a wide range of topics, some of which may be gender-sensitive. Student engagement improves when faculty is attentive to individual needs.



iClicker has been shown to engage students equally regardless of gender, with no statistically significant difference in participation in iClicker activities.



Introverts and Extroverts

Considering the different learning styles of introverted and extroverted students, faculty may find it challenging to create inclusive assignments. Instructors often create assignments that reflect their own participation style, which typically rewards sharing aloud and rapid responses instead of quiet reflection. When assignments privilege one personality type, student engagement decreases, creating a barrier to equitable learning.

To foster student engagement regardless of learning style, faculty should intentionally design diverse activities that provide independent, small, and large group work opportunities. Nurturing quiet reflection allows students to organize their thoughts before sharing, resulting in more fruitful discussions. Additionally, asynchronous work accommodates various learning styles and promotes critical thinking.



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Conclusion

The intentional inclusion of technology in the classroom can create opportunities for student connection - connections with the course content, with their instructors, and with one another. Active technologies like iClicker make it easy for instructors to create assignments and learning experiences that accommodate students' diverse needs. iClicker's versatility supports individual learning, encourages group participation, and circumvents barriers to engagement. iClicker facilitates inclusive learning and fosters engagement as a matter of equity.



Emily Ravenwood manages instructional support teams for the University of Michigan's College of Literature, Science, and the Arts, working with faculty on pedagogical best practices and new tools that make effective use of technology and teaching spaces.

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If you're looking for intuitive learning support solutions to help you engage all students regardless of level of preparation, wherever instruction happens, look to the breakthrough combination of Macmillan Learning's Achieve platform, and its fully integrated classroom response system, iClicker. Seamlessly integrated into your campus's Learning Management System, Achieve and iClicker deliver powerful media and assessment tools that give every student a voice.

To watch the full recording:

<https://go.macmillanlearning.com/access-211022-engagement-as-a-matter-of-equity.html>

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<https://www.macmillanlearning.com/college/us/rep/find-your-rep-institution>