Professors Kimberly Edwards and Renée Link win AI FAST Challenge award

The award will help Edwards and Link design AI-informed chemistry teaching labs.
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Professors of teaching Kimberly Edwards and Renée Link are at the forefront of understanding what makes for effective and meaningful chemistry education experiences.

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Steve Zylius / UC Irvine

Kimberly Edwards and Renée Link, professors of teaching in the UC Irvine Department of Chemistry, recently received an AI FAST Challenge award – an award given by the California Learning Lab to support teaching development projects in California's higher education system. The award will give Edwards and Link $150,000 to incorporate artificial intelligence-enhanced grading software called Stemble into their teaching workflow. "Stemble is a significant advance over previous systems, which could at best only grade short answers," said Edwards. "T he system is already providing more standardized grading between TAs and significantly better feedback on student assignments, which the TAs simply did not have the time to do. This is incredibly important, as Renée and I each manage around 30 TAs a quarter with over 1200 students." Edwards explained how the funding will help her and Link tackle two key questions: 1) How does instant AI feedback during labs affect student attitudes and learning, and 2) How does the quality of the AI-assisted feedback for students compare to that of TA feedback without AI assistance? The duo is already testing Stemble in classes, and early results reveal that real-time AI feedback is helping students learn from their mistakes in real time, which, Edwards explained, enables students to save higher-order questions for their teaching assistants. "We are surveying student attitudes toward this feedback and looking at grades on subsequent assignments to determine if any change in learning is occurring," Edwards said.

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