Innovative Idea

Incorporating Live Discussion into an Ag Communications Online Course using AI: The Case of Breakout Learning

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Introduction/Need for Innovation

As the age of artificial intelligence (AI) continues to unfold, higher education faces the challenge of adapting and evolving with a new learning landscape. As new tools, software, and platforms emerge, it is imperative that the teaching process guide students to think critically. The Digital Education Council found that 86% of United States college students use AI in their studies (Mulford, 2025), prompting educators to reconsider traditional approaches to teaching and assessment. While generative AI can support learning, concerns remain regarding the extent to which written assignments accurately reflect student knowledge and skill development (Donadel, 2024). Consequently, educators are increasingly encouraged to design authentic assessments that require students to apply, discuss, and defend their understanding in meaningful contexts rather than simply generate written products (Wiggins, 1998) or take multiple choice tests that primarily measure recall and selected-response knowledge (Mueller, 2025). Discussion-based learning environments can assist in achieving authentic assessment by requiring students to exhibit thinking through dialogue, collaboration, and problem solving (Thornhill-Miller et al., 2023); however, discussions can be time and resource intensive. An AI tool called "Breakout Learning," harnesses artificial intelligence to enable both discussion-based learning and the assessment of that learning using an interactive, discussion-centered instructional strategy designed to promote critical thinking, engagement, and deeper application of concepts.

How It Works

Breakout Learning is a tool that uses AI to "revive the lost art of conversation and critical thinking at scale" (https://www.breakoutlearning.com/about-us). We integrated Breakout Learning into an asynchronous online editing course to transform traditionally passive content review into active, discussion-based learning. Following a backward design approach, modules were developed around key course outcomes, including AP Style, grammar, punction, headline writing, and copyediting. Students completed assigned pre-work before participating in structured online discussions with peers centered on authentic editing scenarios and challenges. The implementation consisted of three phases. First, course learning objectives were identified and aligned with Breakout Learning "assignments" designed to create moments of complexity where students could analyze, discuss, and defend editing decisions. Second, students completed pre-work and engaged in peer-led small-group discussions where they applied editing concepts to real world examples. Finally, the Breakout Learning platform used AI-supported evaluation tools to provide immediate feedback on student participation and understanding while generating instructor insights regarding student comprehension and learning gaps. Once we setup the modules, students signed up in groups of 3 to 5 to meet online and complete the assignment in a Breakout Room (live audio/video room). The AI tool records and analyzes the discussion and provides a report to the instructor. This process allowed students to actively practice editing skills while engaging in oral communication, reflection, and critical thinking during the online group discussion.

Results to Date/Implications

Breakout Learning was used for four assignments in a Summer 2026 course with 25 students. Student feedback indicated that the experience was highly educational and created a more comfortable learning environment where they could work through problems collaboratively without the pressure of answering in front of the instructor. Students preferred the discussions to traditional Canvas discussion boards, noting that talking through editing mistakes, asking questions, comparing answers, and explaining concepts improved their understanding of the material. They also appreciated the flexibility of meeting online while still engaging in meaningful peer interaction. Several students reported that hearing different perspectives helped them better understand difficult concepts, while others noted that discussing answers with peers increased their confidence and helped identify misunderstandings before completing assignments. Some groups even continued meeting beyond the required activities and developed friendships. From an instructor perspective, the AI-generated summaries of student discussions provided valuable insight into student learning and highlighted areas where additional instructional support could be added to improve learning. Quiz scores were higher than in previous semesters, and the Breakout Learning activities may have contributed to this improvement. The positive student feedback and instructional insights suggest strong potential for broader implementation. At a time when students increasingly use AI to complete learning tasks, this AI-supported tool promoted deeper learning through peer discussion and engagement.

Future Plans/Advice to Others

The potential use of Breakout Learning is tremendous. Research is clear that oral conversations can improve critical thinking and enhance learning (Stephenson et al., 2025). However, facilitating oral conversations in online classes or in large lecture classes can be challenging. Breakout Learning provides a mechanism to allow oral conversations, discussions, and debate that can encourage critical thinking and learning without creating undue burden on the instructor. Our advice centers on purposeful use of the tool – meaning, don't use the tool as busy work but use the tool as a means to help students engage with aspects of your content that has been found to be hard to understand by previous students. Breakout Learning allowed us to create an environment that used scaffold learning in a way that students appreciated.

Costs/Resources Needed

Breakout Learning is a third-party resource that can work both within and outside of learning management software. We were granted an opportunity to try the Breakout Learning software with four assignment creations. The cost of this use would have been $25-$50 per student. Our trial use of this program was a success, and we have plans to continue using it in the future. The pricing structure is a per student cost based on the number of assignments: 2 assignments - $25; 5 assignments - $50; or 6+ assignments - $99. Payment can be made directly by the students to the company or through the university. Our contact is Riley Davis, and she can be contacted at riley@breakoutlearning.com. Additional resources needed include internet access, the equipment, and ability to join a video call online.

References

Camp, W. G., Broyles, T., & Skelton, N. S. (2002). *The 34th volume of a national study of the supply and demand for teachers of agricultural education 199-2001.* Blacksburg, VA: Virginia Polytechnic Institute and State University. American Association for Agricultural Education.

Donadel, A. (2024, July 2). *Student learning revisited: How these educators empower their assessments with AI the right way*. University Business. https://universitybusiness.com/student-learning-revisited-how-these-educators-empower-their-assessments-with-ai-the-right-way/

Mueller, J. (2005). The authentic assessment toolbox: enhancing student learning through online faculty development. *Journal of Online Learning and Teaching*, *1*(1), 1-7.

Mulford, D. (2025, March 6). *AI in higher education: A meta summary of recent surveys of students and faculty*. Campbell Academic Technology Services. https://sites.campbell.edu/academictechnology/2025/03/06/ai-in-higher-education-a-summary-of-recent-surveys-of-students-and-faculty

Stephenson, Z., Johnson-Glauch, N., & Cruchley, S. (2025). Interventions and facilitators of oral assessment performance in higher education: a systematic review. *Assessment & Evaluation in Higher Education*, *50*(7), 1140-1153. https://doi.org/10.1080/02602938.2025.2504621

Thornhill-Miller, B., Camarda, A., Mercier, M., Burkhardt, J. M., Morisseau, T., Bourgeois-Bougrine, S., ... & Lubart, T. (2023). Creativity, critical thinking, communication, and collaboration: Assessment, certification, and promotion of 21st century skills for the future of work and education. *Journal of Intelligence*, *11*(3), 54. https://doi.org/10.3390/jintelligence11030054

Wiggins, G. (1998). *Educative Assessment: Designing Assessments to Inform and Improve Student Performance*. Jossey-Bass.