



What is Backchanneling?

i "While the concept of backchannel communication began with body language and uttered affirmations and dissents, it has since come to encompass technological communication, as well. This is particularly relevant in large lectures where traditional backchannel communication is difficult to elicit and receive due to the number of students. Mindful integration of backchannel opportunities in the classroom creates options for students who would otherwise avoid interacting during group discussions. It also offers additional avenues for students who struggle to interact during class due to disabilities or other concerns. Finally, it allows students to more actively participate in the lecture, so that information and communication can flow in multiple directions."

(Neustifter, Ruth; Kukkonen, Tuuli; Coulter, Claire; Landry, Samantha. *Canadian Journal of Learning & Technology*, Spring 2016, Vol. 42 Issue 1, p1-22)

Backchanneling Resources

Some sources that may be of interest in helping you explore backchanneling (abstracts by authors):

[Cole, J. S., & Spence, S. W. T. \(2012\). Using continuous assessment to promote student engagement in a large class. *European Journal of Engineering Education*, 37\(5\), 508-525.](#)

The authors have developed a first-year fluids course for a class of around 230 aerospace, civil and mechanical engineering students. This paper aims to show how the teaching and assessment methodology was applied to the challenge of a large class. The lectures featured formal teaching interspersed with active learning elements. Smaller group (about 25–30 students) tutorial classes involved student practice. A 10-minute test occurred in each tutorial during weeks 3–11. Each test was based on the previous week's lecture material and the marks contributed towards 20% of the course mark. A condition for passing the course was that a student must pass at least six of the nine tests. The assessment promoted student involvement with the course – tutorial attendance was greater and more uniform than previously and exam performance improved significantly. Students recognised that the assessment system was useful in encouraging continuous learning over the semester and building confidence.

[Freeman, G. G., & Wash, P. D. . \(2013\). You Can Lead Students to the Classroom, and You Can Make Them Think: Ten Brain-Based Strategies for College Teaching and Learning Success. *Journal on Excellence in College Teaching*, 24\(3\), 99–120.](#)

Teaching in the digital age has become increasingly challenging for college and university faculty. Application, relevance, and active engagement rather than traditional PowerPoint



slide show lectures are what our technology-savvy, socially networked students crave and need to keep their attention and interest levels high. Using a combination of information gathered from brain research and the brain-based teaching and learning literature, direct classroom application of brain-compatible teaching strategies, and student opinion poll data, the authors developed a core of 10 brain-based teaching and learning strategies with real-world examples for college and university level faculty.

[Nel, L. \(2017\). Students as collaborators in creating meaningful learning experiences in technology-enhanced classrooms: An engaged scholarship approach. Br J Educ Technol, 48: 1131-1142.](#)

In dealing with numerous challenges, higher education instructors need to adapt their pedagogical practices to present students with meaningful, engaged learning experiences that are likely to promote student success and adequately prepare students for the world we live in. As part of this pedagogical transformation instructors also need to consider the potential of digital technologies to assist flexible pedagogies, as well as the role that students can play as partners in transforming the learning process (C. Evans, D. Muijs, & M. Tomlinson. Engaged student learning: high-impact strategies to enhance student achievement. York: Higher Education Academy, 2015, p. 9). In this paper the author reflects on her particular engaged scholarship approach and the important role that her students—as collaborators in the pedagogical transformation process—have played in the creation of meaningful technology-enhanced learning experiences. She describes the evolution of her action inquiry approach over more than a decade and uses one particular project to highlight the value that student voice can contribute to pedagogical transformation. She also underscores the value of a “design for partnership” approach that can be incorporated as an underlying pedagogical approach to facilitate the creation of meaningful learning experiences in a technology-enhanced teaching and learning environment.

[Neustifter, R. rneustif@uoguelph. c., Kukkonen, T. kukkonen@uoguelph. c., Coulter, C. ccoulter@uoguelph. c., & Landry, S. slandry@uoguelph. c. \(2016\). Introducing Backchannel Technology into a Large Undergraduate Course. Canadian Journal of Learning & Technology, 42\(1\), 1-22.](#)

Backchannel technology can be used to allow students in large lecture courses to communicate with each other and the instructor during the delivery of lecture content and class discussions. It can also be utilized by instructors to capture, summarize, and integrate student questions, ideas, and needs into course content both immediately and throughout the course. The authors integrated backchannel software in one of two sections of a course, leaving the other section as a control; combined, the two sections contained a total number of 871 students. Data was gathered comparing both groups using online surveys and semester grades; results showed that the section using backchannel software had higher class satisfaction and perception of engagement, used their mobile devices more for accessing class content, felt more comfortable participating in class discussions, and had a higher grade average than the section that did not. The authors also explore their own experiences of finding, integrating, and maintaining backchannel technology.



[Swap, R. J. 1., & Walter, J. A. 1., \(2015\). An approach to engaging students in a large-enrollment, introductory STEM college course. *Journal of the Scholarship of Teaching & Learning*, 15\(5\), 1-21.](#)

While it is clear that engagement between students and instructors positively affects learning outcomes, a number of factors make such engagement difficult to achieve in large-enrollment introductory courses. This has led to pessimism among some education professionals regarding the degree of engagement possible in these courses. In this paper we challenge this pessimistic outlook through a case study involving a large-enrollment introductory, general education, STEM college course. Several pedagogical approaches related to social constructivist theory offer possibilities for increasing student engagement in the learning process, but they may be difficult to implement, particularly in environments yielding little or no reward for classroom innovation. Here, we present an approach to developing an engaging learning environment by hybridizing aspects from a range of pedagogical approaches varying from the didactic (e.g. traditional lecture) to the more constructivist (e.g. peer instruction, project-based learning). We describe the course in question and our pedagogical approach, provide evidence for its effectiveness, and discuss contextual factors affecting the development of our approach and its adoption to other subjects and institutions. We also discuss important remaining challenges regarding the adoption of our approach and similar practices.