

# research snapshot

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## “Clickers” Give Students a Voice in Large-Sized Classrooms

### What is this research about?

Technology has been a growing tool inside the university classroom. It not only offers students the opportunity to learn material in different ways, but also increase their engagement. Other spaces for learning like libraries have also sought out technology to improve service use and delivery. One tool that has been adapted by some classes is known as the Personal Response System (PRS) or “clickers.” Students can use this hand-held device and select a response to a series of questions posed in class, or create their own. This allows students to see the results collected from their responses, as well as participate in knowledge creation and sharing. But in large classroom settings like that of a university lecture, how effective are “clickers”?

### What did the researchers do?

The researchers sought to integrate research literacy within the goals of a first year, university level course that served as an introduction to business. They worked with two classes that held 200 students each, and used “clickers” to collect responses from students at three points in the school year: the first class session, a session in midterm, and the last class. At each point, the researchers used “clickers” to learn about the students’ experiences with research. The devices were also used frequently for regular class content. Students usually responded to multiple choice or yes/no questions. While the “clickers” noted

### What you need to know:

The PRS technology, or “clickers”, can help extend and observe student participation in large-sized classrooms. It allows for students to engage with course material in different ways, and may also encourage them to address questions or share ideas.

the attendance and participation of students, their responses or voluntary questions inputted through the device were anonymous.

### What did the researchers find?

The researchers found that integrating “clickers” allowed for more active participation and engagement by students. They found this to be useful for large-sized classes, where educators usually experience difficulty in following the progress of all their students. The researchers noted that the use of these devices not only created knowledge and data that could be used later on in the school year, but also it encouraged students to participate verbally as well. It also helped students build a better relationship with their course instructor, as well as seek opportunities outside of class to be further engaged with their studies. This included joining student peer groups and mentorship teams.

The researchers also found that the “clickers” allowed the instructor to respond to students’ needs by

observing their responses on their library use and research. In the beginning of the course, a majority of students responded that they relied on libraries and friends to complete research. But most students had never used the school library, although they wanted more information on how to complete business research. By mid-term, over half of the students had not begun research for an upcoming project due, and about 74 % of students were not using library resources. Many found the process either “very difficult” or “hard but not impossible”. Thus, the course instructor and librarian were able to respond to students’ needs by providing further support for their research.

By the end of the course, a majority of students responded that they used the library’s resources. However, many admitted that they did not seek the direct help of a librarian, relying again on peer support. Most responded that they planned to use the library for research in the future. Librarians and career counsellors also noted the increase in students seeking support than in previous years.

### How can you use this research?

Educators may use this research to gain insight on the learning potential and outcomes that technology like PRS holds. It also provides information on ways to integrate skills or literacy within course content, like that of research. Library and school administrators and policy makers may also find this research helpful in seeking new areas to invest in supporting student success.

### About the Researchers

Jean M. Adams is Special Assistant Professor for the Policy Specialization Department at Schulich School of Business, York University.

[jadams@schulich.yorku.ca](mailto:jadams@schulich.yorku.ca)

Maura Matesic is Librarian for the Reference Department at York University

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### Keywords

Personal Response System, “Clickers”, Education, Students, Research, Literacy

### Knowledge Mobilization at York

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[kmbunit@yorku.ca](mailto:kmbunit@yorku.ca)

[www.researchimpact.ca](http://www.researchimpact.ca)

