

Center for Instructional Development and Research

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Using “Clickers” To Promote Student Learning

Portable response systems, also known as “clickers,” are used to facilitate interactive learning in the classroom. This technology allows students to use an individual remote control to respond to questions posed by an instructor in lecture. The answers can then be automatically aggregated on the instructor’s computer and immediately displayed to the class. Instructors and students find this tool particularly helpful in large classes because it creates opportunities for more students to actively participate in answering instructor questions and to receive feedback on their understanding of the material or their contributions to class.

ACQUISITION AND USE OF “CLICKERS”

There are two clicker systems in common use at UW today, TurningPoint and H-ITT. The basic equipment for both is similar – a receiver that plugs into a USB port on the instructor’s laptop, software, and clickers (which can be ordered for students to purchase at the UW Book Store).

Instructors use clicker software to insert questions into their lecture presentations. Students then use clickers to respond to questions as they appear in the presentation. Responses appear immediately on the instructor’s computer and can be displayed to students in the form of a graph that shows the percentages of students who chose each answer.

If students register their clickers with the instructor, then the instructor has the option of tracking student responses and assigning students credit for participation.

INSTRUCTIONAL VALUE OF USING CLICKERS

Instructors find clickers useful for a variety of reasons:

- Clicker use provides immediate, mid-lecture feedback to both students and faculty on how well students understand the material.
- Periodic quick questions break up the lecture and help focus students’ attention.
- Clickers enable all students, even less vocal ones, to contribute to the class in substantive ways.
- All students can participate in responding, rather than only a few, so participation for all students increases.
- Most students find active participation and immediate feedback to be both motivating and engaging.

Information for People who Teach
at the University of Washington

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IDEAS FOR USING CLICKERS

Clickers are used for a wide range of instructional purposes:

- Collect student background information to give faculty and students a better sense of who is in the class.
- Ask questions at the beginning of class to see how well students have understood the homework.
- Survey student opinions or experiences to form a basis for discussion.
- Ask questions that identify common assumptions or misconceptions about a topic that you are about to teach.
- Ask a question, then poll with clickers. Ask students to pair up and discuss any apparent discrepancies in the results, then poll students again on the same question.
- Have students predict the outcome of a demonstration experiment, then perform the experiment in class so that students see what actually happens.
- Before lecturing on a research finding, survey students with the same research question, and then discuss how student results compare with those of the original study.
- Ask review questions to prepare for exams or remind students of earlier material that new material is based on.

TIPS FOR EFFECTIVE CLICKER USE

UW instructors have learned they get the most benefit from clickers if they:

- Communicate to students the goals for using clickers.
- Allow time for students to think about the question and respond, and allow time to discuss responses afterwards.
- Use clickers two to four times during a 50-minute class period (unless reviewing for a test). Too much use can unduly disrupt the flow of a lecture.
- Give students some credit simply for participating, and give additional credit for right answers.
- Become familiar with the software and alternate low-tech discussion strategies so that unexpected technology problems don't side-track the class.

HOW CAN CIDR HELP?

To consult with CIDR on designing questions or activities for use with clickers, call 543-6588 or write to info@cidr.washington.edu.



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CIDR promotes excellence in teaching and learning at the University of Washington through its work with individual faculty and TAs, departments, campus-wide initiatives, and University leaders. CIDR staff are available year-round to collaborate on the design, implementation, and assessment of ways to advance teaching and learning for all students in the diverse UW community. Consultations are confidential and offered at no charge to UW faculty, TAs, and departments.

If you have questions about teaching and learning, or you would like to find out more about working with CIDR, you can call us at 543-6588, send a message to cidr@u.washington.edu, or visit our web site:

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