

# USING CLICKERS AT U-M: RESULTS FROM AN 11-CLASS SURVEY

## Survey Goals

Clickers are wireless, handheld transmitters used in student response systems. Faculty use clickers for various purposes, such as assessing students' prior knowledge, checking students' understanding during lecture, and taking attendance and recording participation. We surveyed students to

- 1) examine whether the use of clickers motivates and engages students,
- 2) find out whether students feel that clickers help them learn, and
- 3) explore effective practices when using clickers.

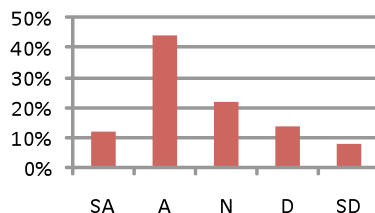
## Survey Population

- 11 classes during Fall 2007 (from chemistry, biology, physics, MCDB, math, statistics, economics, sociology, and psychology)
- 1363 respondents (RR=44%)
- 81% freshman or sophomore
- 50% female and 48% male

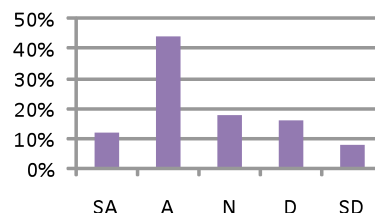


## Survey Results

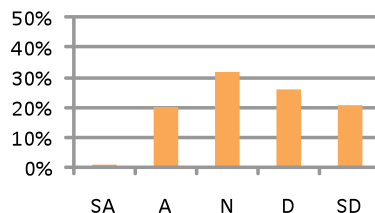
**Using clicker questions during lectures helps me clarify whether I understand course concepts.**



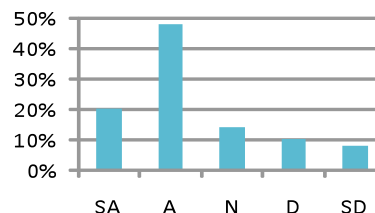
**I think more about the material during lecture when a clicker question is asked compared to questions without clickers.**



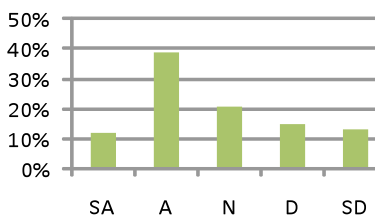
**I would like my instructor to ask more clicker questions.**



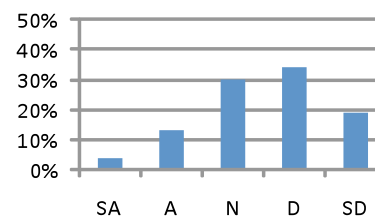
**Using clickers in class is a better approach to getting students to interact.**



**I like using clickers.**



**Using clickers in class increases my interest in the course subject.**



SA=Strongly Agree A=Agree N=Neutral D=Disagree SD=Strongly Agree

## Student Comments

*"Answering questions allows me to see if I actually understand concepts, and [the clicker questions] provide a quick three-minute break in lecture."*

*"I enjoy that our clicker questions were not graded for the correct answer, [they] only checked our attendance. Therefore, we could truly work through what we would do without the pressure of our grade to really learn the material."*

*"[Using clickers] really does help clarify information because it's intimidating to raise your hand in front of 300 students."*

*"They just frustrated me. I'm in class to learn and I get punished for not knowing what I am currently learning by getting Quizdom questions wrong."*

*"The purpose of clickers should be for interactive learning, not for attendance."*

## Conclusions

Students reported that clicker questions increase their level of engagement by encouraging them to come to class prepared and requiring them to pay more attention during lecture. Students also indicated that clickers help clarify whether they understand concepts and compel them to think more about class material. The cost of purchasing the clicker and technical difficulties encountered with their use were commonly cited drawbacks of clickers. In addition, students reported that they do not like simple clicker questions that only record their answers or take attendance.



Survey was developed and administered by Erping Zhu, Ph.D. (CRLT). Special thanks to Crisca Bierwert, Ph.D. (CRLT), and LSA Instructional Support Services.