CLICKER PICKERS

Four Universities' Perspectives on Standardizing on a Classroom Response System

Reasons We Standardized:

- Eliminate pressure on faculty from textbook publishers pushing different clicker brands
- Reduce student costs by eliminating the need to purchase multiple clicker types
- Streamline technical support and training
- Enhance peer-to-peer exchange of technical experiences and pedagogical ideas

Results We've Had:

- Positive response from faculty to clicker choice
- Significant growth in the use of clickers
- Positive feedback from students on contribution of clickers to learning
- Creation of faculty community of practice

Clicker Attributes We Considered:

- Signal type: radio frequency (RF) or infrared (IR)? (We all went with RF which offers significant advantages such as higher signal throughput and receiver portability.)
- Integration with campus learning management system
- Software ease of use and class roster maintenance for faculty
- Does the software run with or without PowerPoint or both?
- PC and Mac compatibility
- Possible answer types: multiple choice, T/F, numeric, short answer, multiple correct, rank order, decimal point, fractions, positive/negative numbers?
- Is a self paced or homework mode available?
- Hardware issues for students: cost, durability, ease of use, confirming indicators, and battery life and maintenance.
- Accessibility issues: Is a Braille overlay available or a software alternative to the clicker that works on laptops or PDAs?
- Costs to the institution and internal tech support required
- Quality and availability of tech support from the manufacturer

Issues We've Seen:

- Faculty learning curve and understanding of time commitment involved
- Early registration glitches and other problems integrating with learning management system
- Bookstore stocking issues as growth occurred
- Student registration/enrollment process not as smooth as desired
- Software with Mac compatibility problems

Our Recommendations for Selection and Deployment:

- Educate senior administrators about clickers and why standardization is important.
- Include students in the selection process but make sure they understand how clickers should benefit them.
- Involve the bookstore as a stakeholder and encourage low markup and the creation of a buyback program for the standard clicker.
- Increase leverage by identifying multiple systems that meet campus needs prior to signing a standardization agreement.
- Increase support for faculty during any pilot phase to observe clicker use and monitor issues.
- If not done automatically, ask the selected manufacturer to provide free receivers for faculty users.
- Develop local Web-based resources which faculty and students can quickly turn to as a starting point for clicker support.
- Acquire a stand-alone system that can be used for demonstration and training purposes.
- Consider starting with a small deployment to focus training and limit the impact of support issues on IT staff.
- Establish records or tracking mechanisms during deployment to facilitate easy updates of software and firmware.
- Provide standard illustrated instructions on registering clickers that can be shown or distributed to students
- Avoid pushing faculty into using clickers, since the selected technology may involve a learning curve. Encourage observation of clicker-using peers and consideration of the pedagogical impact of clickers.
- Use successful clicker faculty to aid diffusion and establish faculty-led support groups.

IOWA STATE UNIVERSITY

Clicker: TurningPoint
Selected June 2006

Selected By: Ad hoc pilot committee convened by the CIO whose members represented central IT, instructional faculty support staff, the university bookstore, classroom facility administration, early adopting faculty and their students.

How: Eight faculty and nearly 2000 students participated in a two-semester pilot program with three different brands of RF clickers.

Why: Better Integration with WebCT Vista

Cost package that minimized impact on students in the pilot program

Product line demonstrated promise of migrating to software-based technologies

Numbers:
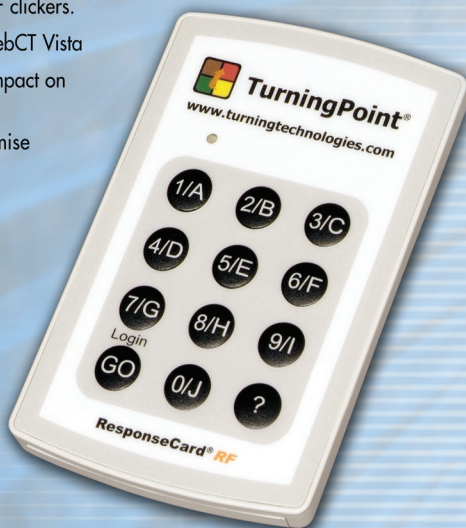Fall 2006
8 instructors, 2000 clickers

Spring 2007
12 instructors, 3700 clickers

Fall 2007
30 instructors, 7500+ clickers

Current Enrollment: 26,160

SAN DIEGO STATE UNIVERSITY

Clicker: eInstruction
Selected Summer 2006

Selected By: Instructional Technology Services (ITS)

How: Input from a faculty committee

On campus demonstrations of two brands attended by faculty, staff, and students

Input from students in four classes to determine final choice

Why: Integration with Blackboard

Student-preferred clicker design

Support for multiple use cases: with or without PowerPoint, Mac or PC, teacher-led or student-managed

Numbers:
Fall 2006
10 faculty/12 courses/2997 course enrollment

Spring 2007
13 faculty/19 courses/4679 course enrollment

Fall 2007
32 faculty/45 courses/9022 course enrollment

Current Enrollment: 35,695

The University of Mississippi

Clicker: Interwrite PRS RF
Selected September 2006

Selected By: Instructional Technology Standing Committee

How: Survey of clicker use on campus

Review of clicker brands in use on campus

Recommendations by instructors, including hands-on demonstrations by a faculty champion using PRS

Why: Positive feedback from faculty using PRS

Company record of providing strong support to UM faculty

Blackboard PRS building block already in place

Recommendation by bookstore and agreement to set up buyback program for PRS
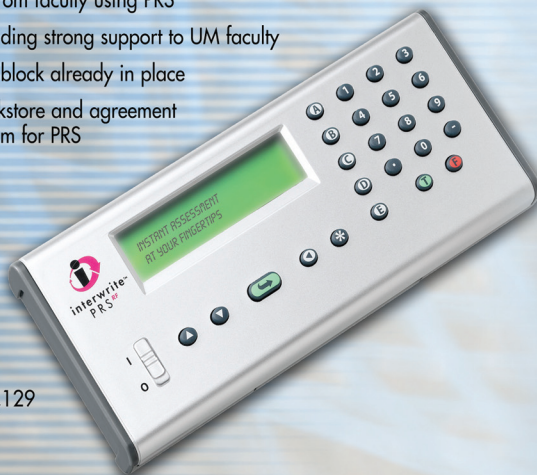
Numbers:
Fall 2006
1139 clickers, 8 sections

Spring 2007
1672 clickers, 19 sections

Fall 2007
2059 clickers, 30 sections

Current Enrollment: 15,129

UNIVERSITY OF TORONTO

Clicker: i>clicker
Selected September 2006

Selected By: Ad hoc committee made up of faculty members and the Director of the Academic Technology division

How: Developed a list of requirements, held demos and conducted tests with the three brands that met all requirements

Why: Can be used with or without PowerPoint

Easy to use, requiring little or no support

Inexpensive for students

Can be used in classes with enrollments of over 1,000 students

Numbers:
8,000 users in 55 courses

Current Enrollment: 70,143