

Classroom Response Discovery Overview: *Internal Campus Use*
April 2009

Executive Summary and Recommendation

Over the past two years, Media Tech has been involved in a project to identify a powerful but easy to use classroom response system. To that end, we have: canvassed faculty members, researched various technologies/vendors, and engaged faculty and students in pilot studies. Based on our discovery process, we are now prepared to demonstrate and gain faculty input on our two finalists: iClicker and Turning Point.

Discovery Highlights

In 2006, classroom response systems were installed into 26 classrooms. The technology was found to be difficult to use, support and troubleshoot. A moratorium was instituted, and a discovery process launched to investigate the status of the technology. In February 2008, a review of the findings led to a decision to allow the technology to mature and let the jockeying of vendor positions, acquisitions, mergers, etc., settle.

In the meantime, to mitigate the use of the existing installed technology (H-ITT infrared system), enhanced support documentation was produced, the vendor was called in to hold a training overview of the product, and one-on-one sessions were presented upon request. This provided significant insight into faculty and student needs and requirements for the technology and industry. Additionally, with the participation of faculty volunteers, a pilot of newer technologies and different products was conducted.

MediaTech learned that the critical areas for getting started and using classroom response systems are the same for each faculty member, regardless of the method or technology they choose to use for feedback (e.g., PowerPoint, document camera). To support a variety of feedback methods and teaching styles, the product selected must meet the following requirements:

- Intuitive interface; requires minimal acclimation time
- Reliability
- Ability to automate administrative tasks (e.g., building rosters and grading)
- Readily available training and support (on-site, vendor web site, web demos, phone, etc.)

By October 2008, MediaTech updated our requirements list which became the basis for our vendor/product RFI (Request for Information). In December 2008, five vendors responded to our RFI; one failed to meet basic requirements. Of the remaining four, follow-ups were conducted and contacts were made with their respective higher education references (i.e., Cornell, Penn State, John Hopkins, Clemson, USC, Emory, and U FL). We also reviewed implementations of these products at schools such as UC Berkeley, UC San Diego, MIT and SFSU.

Although many institutions have resorted to supporting multiple systems on their campus, the advantages to support a single system are significant: faculty and students need only learn one system, faculty can easily share best practices, and the system is more supportable. A single system also reduces costs to students in that they only need one type of remote device.

An additional classroom response system pilot was conducted and, as permitted by faculty, MediaTech staff observed classes with the technology in use. Based on weighted requirements and features of their respective products, two vendors came out clearly ahead: iClicker and Turning Point. A comparison of these findings is included here.

	H-ITT	iClicker	Turning Point
Intuitive Interface/Acclimation Time			
Vendor Claim	1 week	2-3 days	1-2 weeks
Faculty Experience	3 weeks	Less than one week	NA
Reliability			
IR - Infrared	CON Line of Sight Req'd CON Poor latency w/ courses 100+ students	NA	NA
Software	PRO Student responses can be displayed as IDs instantly PRO Floating toolbar feature allowing for use over other applications or document camera. PRO Supports Mac, Windows and Linux CON Bug found and reported each term (Mac support behind, feature functions not working) CON Grid that displays device responses uses a lot of screen real estate CON H-ITT Show application is Windows only	PRO no issues reported during two one semester pilots PRO Floating toolbar feature allowing for use over other applications or document camera. PRO Minimal difference between Windows and Mac use	PRO Broad feature support includes remotes, web-polling and iPhone/Blackberry devices PRO Floating toolbar feature allowing for use over other applications or document camera (Turning Point Anywhere) PRO Able to restrict responses only from registered students, ideal for rooms in close proximity and overlapping freq CON Mac support isn't current nor complete (up to Office 2004) for Turning Point application CON Variety of software tools and applications to become familiar with
Hardware (RF)	PRO Remotes use 2 AAA batteries CON Remotes require small screwdriver to access battery. CON Remote buttons are easy to hit in book bags and drain battery, no on/off switch CON 1-3 remotes have problems per use (out of 100) CON Remotes have known issues when used with cell phones within 8 ft (documented by U FL)	PRO Remotes use 2 AAA batteries PRO Remotes have an on/off switch PRO ADA remotes available PRO no issues reported during two one semester pilots PRO known use in a 1500 seat lecture hall, no latency (Cornell)	PRO ADA remotes available PRO Receiver has small footprint, size of a USB drive CON Remotes require 2 coin batteries CON Remotes require small screwdriver to access batteries.
Automate Administrative Tasks			
	PRO Import/export CSV PRO Has its own gradebook feature Note: Can view results via separate application, Analyzer	PRO Import/Export CSV PRO Has its own gradebook feature Note: Can view results via HTML	PRO Import/Export CSV PRO Has its own gradebook feature Note: Can view results using a variety of Excel reporting templates
Training and Support			
Vendor Technical	PRO direct support with programmer		
Vendor Sales	PRO dedicated regional rep	PRO Dedicated customer rep	PRO Dedicated customer rep
Vendor User Support	PRO On-site available upon request Note: Documentation on their website	PRO Faculty advocate available PRO On-site available upon request PRO Web videos available PRO Weekly webinars available	PRO On-site available upon request (up to 8 hrs per year – negotiable with campus-wide adoption) PRO Web videos available PRO Weekly webinars available