

Student Response System Evaluation (6-7-2018)

Summary

Though Turning Technologies (TT) clicker system is currently the one officially supported by IS/Academic Technology, usage of Top Hat (TH) at Oregon State equals or exceeds it. The out-of-pocket cost of clickers for students is not insignificant, with a collective spend of over \$460K for the academic year. Furthermore, thousands of students have been required to purchase both systems because of course requirements. An immediate goal is to help guide the community to a single solution, while at the same time maximizing (as much as is practically possible) savings for students.

Based on a combination of current trends in student purchases, surveys to students and faculty, faculty focus group results, and support tickets, Academic Technology has recommended switching to Top Hat in time for Fall 2018 as the one centrally supported SRS, knowing that some use of Turning will continue though decline over time. Implementing Top Hat with a subsidized enterprise agreement will further decrease cost to students.

Top Hat offers a forward-thinking roadmap, provides access to our own data through the Unizin Data Platform, and supports a variety of teaching and learning modalities.

This presents a major shift from a separate clicker device to utilizing the students' personal devices. The sizeable current use of Top Hat shows this is feasible.

Top Hat also offers significant training and transition services to faculty, as well as student clicker rebate, with an exclusive agreement in which Top Hat is the centrally-supported product.

The recommendation to switch to Top Hat for classroom engagement has been reviewed by several groups (Learn@OregonState advisory committee; IT Instructional Governance Committee; Faculty Senate Executive Committee); ASOSU pending June 11 meeting.

Impact of Top Hat/Unizin agreement

- With an exclusive agreement and subsidy provided by funds from Academic Technology, Top Hat student pricing in AY 2018-19 will reflect a minimum 25-35% savings over Turning, pending finalization of contractual terms.
- Further reducing the impact of change on students:
 - A one-term rebate on old Turning device (a common vendor practice)
 - Encouraging faculty who continue to use Turning to use the version that doesn't require a device, but only a license (which is significantly cheaper).

In short, Top Hat purchases have already exceeded purchases of Turning bundles; that is likely to increase. Switching to Top Hat now as the centrally supported SRS aligns with strategic goals of reducing costs for students and increasing opportunities for student engagement in the classroom. At the same time, it leverages our involvement in the Unizin consortium, which has negotiated special pricing.

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Input from OSU Students and Faculty on Student Response Systems

Through recent surveys and analysis of support tickets, Academic Technology has identified the following needs:

- Students
 - Intuitive to use
 - Ability to see grades/points
 - Ability to use personal mobile device or laptop
- Instructors
 - Ability to engage students and facilitate active learning
 - Ability to measure student participation, gauge understanding, and take attendance
 - Ability to associate polling questions with PowerPoint slides
 - Ability to poll students independently from PowerPoint slides
 - Ability to import SRS results to LMS gradebook
 - Effective balance between simplicity of use and features that support a variety of teaching and assessment needs
- Students and instructors
 - Low or (ideally) no cost to students: Students *and* instructors commented overwhelmingly on the high cost of clickers, with many secondary requests to avoid having multiple student response systems on campus.
 - Reliable service
 - Clickers should enhance, not detract from, in-class learning

It is also important to note that while this evaluation report focuses on academic use of student response systems, there is considerable adoption of response systems for non-curricular use, e.g., Extension outreach, conferences, research, workshops, recruiting, surveying, faculty senate and similar events. Non-curricular needs are addressed in a separate evaluation document.

Survey Results

A survey was sent out in early spring term. Out of 5,000 faculty, nearly 300 responded. Out of 25,000 students, nearly 500 responded.

Among the findings:

Faculty:

- 78% of responding faculty don't use a SRS, but of those who don't over 50% would be interested in using one.
- OF the 64 faculty respondents who have used a SRS, roughly 70% have used TT; only 5% of respondents reported having used TH. Faculty users of clickers overwhelmingly agree that they are beneficial for students' learning and increase student engagement in courses.
- All faculty respondents were asked to rate factors as very important for choosing a SRS; results include:
 - 88% chose reliability
 - 69% chose cost to students

Students:

- Of the student responding, 85% have used one or more student response systems at Oregon State. Of those, 92% have used TT, 27% Top Hat, 26% Learning Catalytics, 12% Poll Everywhere, 6% unsure of the brand.
- Overall, nearly 90% of students who have used clickers found clickers easy to use and nearly 60% felt clickers are useful for their learning.

- Of students who have used TT, 77% of students are dissatisfied or very dissatisfied with the of cost. This is their biggest complaint while being reasonably satisfied with the registration process, the ability to see points, and with the reliability of the TT device. Students are evenly split on their opinion of the TT mobile app.
- Of the 87 students who reported using both Top Hat and Turning, 60% ranked Top Hat higher than Turning.

Comparative Factors that were considered in the recommendation

Description	Turning	Top Hat
Product roadmap	TT roadmap references new functionality that would benefit higher ed customers, but timeline and details are TBD, no Hot Spot question type listed	Well-defined product roadmap with several services already available to meet higher education teaching and learning priorities
Access to response data	Can provide data; upon request. TT can also provide access to Tableau were OSU to create its own reports	Optimized to Caliper standard; Will be available in the Unizin Data Platform
Vendor relations/reliability	Frequent turnover of TT staff; Not clear that the higher education market is a top priority	TBD, but other Unizin schools indicate reasonable satisfaction with Top Hat as a partner
Non-curricular use of clickers	TT support well-established	TH solution will require testing, and, if adopted, transition support
WiFi availability	TT receiver eliminates dependency on wireless/cellular availability (when clicker device is used)	Required for TH use; offline mode is an option; Larger classrooms now on new core network; Troubleshooting in departmental classrooms may be needed
Question/Pedagogical variety	Requires instructor to be creative and repurpose limited question types. Hot spot question type not supported, but desired by faculty	Many question types that relate to multiple disciplines
Pedagogical/training support for handling distraction of mobile devices	TT provides on-campus pedagogical training, webinars..., but do emphasize physical clickers are best to avoid distraction in class	Will be needed; some instructors do not currently allow mobile devices or laptops in their classrooms
Student access to personal devices/smart phones	N/A. TT supports mobile devices, but instructors may require students to use clicker device	Instructors at OSU and partner Unizin institutions report students access to personal devices is not an issue.

Timing considerations

Transitioning to a new student response system introduces a very significant workload for faculty, akin to adopting a different textbook, and/or redesigning a course. Transitioning to a new student response system must be done in time for fall term so that incoming students avoid purchases that will be obsolete within the school year.