UBlearns Update

Perspectives

To Click or Not To Click

by ***Clyde (Kipp) Herreid****, Professor, Department of Biological Sciences and Director, Honors College*

"Clickers" have taken the educational world by storm. These handheld devices that look like a TV remote control have invaded the K-16 classrooms across the country. Even my grandchildren are using them in elementary school. Something is clearly going on.

About 15 years ago NSF sponsored the development of a computer-based commercial system called "Crosstalk." This was a system where a classroom was hardwired so that students could respond to questions that a teacher would ask using a pushbutton system; the results could be collected and displayed on a computer screen. The idea was that a teacher could get feedback from a class immediately and engage the students in an interactive way. Indeed, even quizzes could be administered this way and the data immediately analyzed.

Several years later this morphed into the use of infrared clicker systems that *did* work like a TV remote. Although this did away with the necessity of every student's "clicker" being hardwired into the room, it still required the installation of receivers. The students had to directly aim their clickers at the receivers and reception problems were rampant, especially when many clickers were used. In the last couple of years we have reached a new era; clickers now send their information via radio frequency into a small receiver attached to the teacher's computer. Glitches are few and far between. The Golden Age of Clickers is here.

I was sold on the clicker approach immediately. Each fall I teach a mega class of 450 students in the introductory biology course, Evolutionary Biology. My classroom amphitheater, Knox 20, is not a place where students are likely to ask a question or engage in a discussion. It is hard to hear anyone without a microphone and the whole situation is really quite intimidating. Students are likely to feel alienated by the whole set up, listening to lecture after lecture without anyone seeming to care if they exist. For students in the back of the room the noises from paper rustling

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UB*learns* System Update

UB*learns* Performance Issues Update

by ***Lisa Stephens****, Senior Strategist for Learning Technologies and* ***Bethany Gladkowski****, Senior Programmer/Analyst*

A number of UB*learns* performance concerns were reported this past semester, particularly with accessing the Gradebook in large lecture courses. The UB*learns* support team regularly monitors several national faculty and support listservs in addition to working directly with Blackboard Technical Support. This issue was plaguing several campuses.

The performance of any application can be affected by many components, from hardware to network bandwidth, to efficiency of the coding in the application itself. There is a complex structure of programs, servers and systems sitting behind the UB*learns* application in order to provide the best possible user experience. UB*learns* actually runs on multiple servers that "talk" to other servers containing information for authentication, data services, web presentation and other related services. The team regularly monitors all of these factors and functions for early indications of performance issues.

The support team addressed two major areas over the semester break that may be impacting the overall UB*learns* performance:

- All of the hardware running UB*learns* was upgraded anew. The new servers have increased memory and processing power which increases the speed of handling application requests and can manage more concurrent users.
- The application itself was updated on the new hardware, which Blackboard indicates should help address some of the reported Gradebook issues. The support team will be actively tuning these capabilities as the semester progresses.

Feedback about how the system functions is very helpful to the support team. Sometimes faculty reports precede the technical alerts we receive from Blackboard, so please email *ublearns@buffalo.edu* with your observations and concerns. ■

How to get help

Software and technical support:
ublearns@buffalo.edu or 645-2803

Course consultation and instruction:
ubtlc@buffalo.edu or 645-7700

Advisory or Building Block development server information:
ubetc.org/ublearnsadvisory or 645-6522 ■

Student-View of UBlearns Now Available

Faculty can now request a "student view" account to see how students interact with tests/quizzes, assignments, adaptive release rules, gradebook, etc. For details, go to the main UB*learns* login page and follow: UB*learns* Help > Faculty > Manage Your Course > Requesting a Student-View Account and fill out the electronic request form.

UB*learns* System Update

Spring 2008 Blackboard Application Upgrade

by ***Mary Soom****, Senior Assistant Librarian and* ***Susan Michel-Giolando****, Assistant Administrator for UBlearns*

Blackboard on UB*learns* has undergone a software and hardware upgrade for the spring semester. The Blackboard application has migrated to the current 7.2 release package. Application servers were replaced with new hardware. Service outages were scheduled prior to the spring 2008 semester to complete the upgrades.

Why upgrade?

Upgrades are part of every software program, and are intended to provide new functionality based on instructor and student feedback. Upgrades also offer solutions to current issues and problems with the software.

A number of issues have been addressed with this version upgrade, including:

- Gradebook Performance:
  Gradebook performance during the fall 2007 semester had degraded considerably. Multiple users reported unreasonably long waits for gradebook functions to load and/or complete. The application upgrade will address the performance issue.
- Assessment Timer:
  The Assessment Timer was not appearing if the Web browser was set to block pop-up windows. The Assessment Timer has been moved to the Assessment page and users should no longer experience this issue.
- Email Function:
  Enrolled students will now be sorted by last name when using the email function.
- Announcements:
  Broadcast emails (those sent when adding or modifying an announcement) will now allow use of Non-ASCII characters.
- Course Statistics:
  A redesign of Course Statistics now allows multi-byte and accented characters to be properly displayed.

As always, the TLC (Teaching and Learning Center, formerly *etc*) located at 212 Capen Hall offers workshops and one-on-one instruction for faculty and staff on the effective use of UB*learns* and its new features. ■

UB Teaches and Learns

UBclicks and UB*learns* Combined for a New Campus Standard

by ***Roberta (Robin) Sullivan****, TLC Instructional Designer,* ***Ann Marie Landel****, Systems Analyst, and* ***Allen Gaeddert****, Classroom Technology Specialist*

An evaluation task group comprised of faculty, instructional designers and technology support specialists recommended Turning Technologies™ "ResponseCard XR Clickers" as the new UB enterprise standard. Coupled with specialized software that integrates with UB*learns*, the XR clickers offered the best overall features for the new "UBclicks" initiative.

Faculty can choose to engage students through the use of their personal XR clicker to take attendance, answer questions, and participate in quizzes or surveys. They can elect to have students register their clicker thru UB*learns* which synchronizes the student's clicker id number with all of the student's classes. A tutorial detailing this process is available on the UBclicks website at *ubit.buffalo.edu/ubclicks/students/*.

UB*learns* integration with Turning Technologies™ can generate a class list with clicker id's which can be brought into the classroom and used when gathering the student's responses. A list of technology classrooms which support the clicker technology is available on the UBclicks web site *ubit.buffalo.edu/ubclicks/faculty/*. Once a class is over, faculty can take the clicker responses and upload them into their UB*learns* course grade book or view the results thru various reports offered by the TurningPoint software. Tutorials detailing this process are available on the UBclicks website.

Another option available to faculty is to have their students participate in anonymous polling sessions. This type of session does not require students to register their clickers beforehand, allowing faculty to assure students they will not be identified with any sensitive polling information.

To get started using clicker technology, it is recommended that faculty attend a UBclicks workshop. Workshops are available thru the Teaching and Learning Center and can be found at *ubtlc.buffalo.edu*. Individual consulting sessions on clickers can also be arranged if this is more convenient.

Although the system has proven to be a reliable technology, it is recommended that faculty begin using clickers initially for attendance and participation tracking, and then gradually move toward "higher stakes" testing. Once familiar and comfortable with the clicker software and report functions, many faculty have endorsed clicker use for exams and active student engagement in both large lecture halls and small classes.

For a selection of articles describing clicker resources and the pedagogy of using clickers, refer to the UBclicks faculty page listed above. Questions about implementing clickers in your classroom can be emailed to *ubclicks@buffalo.edu*. ■

Perspectives
To Click or Not To Click

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and whispering is distracting, not to mention the eating, drinking, and playing with iPods that goes on. Not surprisingly, attendance falls off dramatically as the semester wears on, and even outstanding lecturers can find less than 50% of their students present. Freshman students are especially vulnerable. Poor grades result. I have tried many different techniques to hold interest, including dramatic lectures, walking the aisles with microphone in hand posing questions and soliciting answers, and the like. Still the numbers fall and the grades plummet.

With clickers, the game changes. Troy Wood of the chemistry department, who has used several clicker systems over the years, says that his attendance jumped 30% with his use of clickers. This occurred even though he does not give any extra credit to students who use clickers. He just periodically interrupts his lectures with a multiple choice clicker question that focuses upon the material that he has just covered. The students have a minute to read the question and punch in their answers. After the time is up, a graphical display of the students' responses are shown on the screen at the front of the room. Troy has an opportunity to comment on the answers, lead a discussion, or clarify any problems that he sees. This is repeated throughout the period as needed. Aside from the obvious point that the teacher now knows what does or does not need clarification, there is a definite change in the dynamics of the classroom. The class is energized and ready to listen to the lecturer again. No longer is the student merely a passive observer in the teaching/learning process; s/he is an active participant! And that is why students are more likely to come to class. And they say that in their course evaluations.

In my class, attendance is even higher, seldom dipping below 85%. That is because I give points for the correct answer to clicker questions. Clicker points amount to 7% of the final grade. I give an average of five clicker questions each class, and I allow students to consult with one another about the question because this enhances the learning process. Students are overwhelmingly positive about this approach, especially as I ask similar questions on my exams.

This brings me to the issue, what kind of questions can you ask? The easiest questions to create are multiple choice questions that deal with facts—those from the book or from your lecture. But this is hardly an inspiring approach and scarcely qualifies as encouraging learning. Better are questions that require an understanding of the topic. For example, I frequently ask students to predict what they believe will happen when a given experiment is done. Questions can be asked to solicit opinions; such as who will win the democratic presidential nomination? With clickers you can collect data anonymously by having students switch their clickers for the moment. Clicker systems vary, but with some of them such as "Turning Point," the system of choice for UB, it is possible to have students rank items in the order of importance or put a series of animals in the order that they appear in the fossil record. "Turning Point" even permits fill-in-the-blank answers where calculations or words can be entered.

So these are the good things; but there is a dark side to clicker use. It takes time to develop good questions that match your learning objectives. (Some text book companies provide clicker questions as part of their textbook promotion, but these are seldom adequate.) And there is a steep learning curve for the use of the clicker software, especially if you are a teacher from the old school tradition where a piece of chalk is your best friend. But the good news is that the folks at UB*learns* and the Teaching and Learning Center are eager to help.

Don't expect miracles from your clickers. If you start using them, test scores should raise a bit according to the recent research reports, but this won't be dramatic. I currently have an NSF grant to investigate how clickers can be used with case studies in a biology classroom. Fifteen schools across the country are involved, but truth to tell, I don't expect astonishing results. So much of learning depends upon things that are out of a teacher's control. But I do expect this: attendance will rise dramatically and the students' enthusiasm will rise accordingly. And that is half the battle. ■

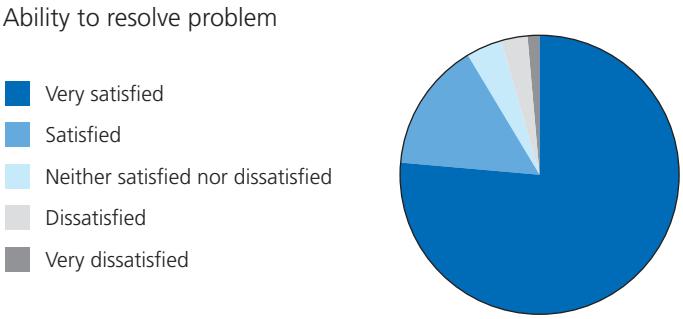
UB*learns* Faculty Advisory Committee

The UB*learns* Faculty Advisory Committee provides guidance on issues, policies and technology that impact the UB*learns* course management service. The committee represents a broad range of academic interests across the campus community.

Current Committee members are Jennifer Austin, John Blyth, Kathleen Boje, Kenneth Ehrenberg, Scott Erdley, Richard Feero, Peter Horvath, Denise Krause, David Murray, Judith Robinson, Thomas Slomka, Lisa Stephens, Athena Tsembelis, Tiffany Walsh, and Jennifer Zirnheld

For more information, please visit the UB*learns* advisory web site at *www.ubetc.org/ublearnsadvisory*. ■

Support Team Feedback



When emailing "UBlearns Help" please take a moment to let the team know if you received the help you needed. Over 75% report that their support issue was diagnosed and resolved in a timely manner. ■

Meet Your Support Staff

Len Swiat

Len joined the University at Buffalo's Unix Support Group (now Enterprise Infrastructure Services - "EIS") in 1999. The following year he became responsible for administering CourseInfo™, the precursor to Blackboard™ on UB*learns*.

Len has been the primary "hands on" administrator of the UB*learns* system hardware since it's rollout as the campus-wide course management system, guiding implementation of each new software version as it has evolved. This includes, on average, a bi-annual major upgrade of services – with countless smaller patches and tweaks as Blackboard™ releases improvements to their core software. In addition to UB*learns*, Len also administers the UBFS file system and is part of the team managing the enterprise authentication and authorization systems for all of UB.

Len is a Western New York native and received two Bachelor Degrees from UB: one in Computer Science, the other in Photography. He worked at the Moore Business Forms Research Center before joining EIS and becoming part of the UB*learns* Support Team.

In his spare time, Len enjoys photography and playing pedal steel guitar. ■

Workshops and Help

To view schedule and register for upcoming UB*learns* workshops, go to *ubtlc.buffalo.edu/workshops.*

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UB*learns* update is a newsletter for faculty and staff to share knowledge about teaching and learning using UB's centrally supported course management environment. UB*learns* Update is a joint publication of the UB*learns* Advisory Group, the UB*learns* Support Team and Computing and Information Technology. To submit articles for consideration, contact Lisa Stephens (*stephens@buffalo.edu*), Senior Strategist for Learning Technologies, Computing and Information Technology.