Blackboard Advisory Committee: Status Report, fall 2007

JQ Johnson, 6 Nov 2007 (for meeting scheduled 6 Nov 07)

Overview

The UO Blackboard course management system is managed by the Libraries’ Center for Educational Technologies, in collaboration with UO Information Services. It provides a central location for online course materials and a tool for implementing online components in UO courses. The UO licenses Blackboard Learning System Enterprise edition from Blackboard, Inc. The system is managed on a day to day basis by Tim Boshart, the CET Blackboard Coordinator. Overall project leader is JQ Johnson. Additional major support includes database management (Stephany Freeman, IS), faculty training (Nargas Oskui, CET), and a wide variety of other support organizations around campus.

To ensure that Blackboard remains responsive to the needs of the faculty and the university community, the Blackboard Advisory Committee meets quarterly and provides policy guidance to the Libraries. Members of the committee for 2007-08 include:

- Deborah Bauer Finance
- Herb Chereck Registrar
- Kassia Dellabough Arts & Administration
- John Fenn English/Music/Arts & Administration
- Pedro Garcia-Caro Romance Languages
- Sandra Gladney Continuation Center
- Michael Hennessy Computer & Info Science
- Mark Horney Educational Studies
- Mary Ann Hyatt Law Library
- JQ Johnson Library (chair)
- Skipper Mcfarlane Art
- Deborah Olson Special Education
- Michael Pangburn Decision Science
- Richard Troxel Human Physiology
- Robert Voelker-Morris Teaching Effectiveness Program
- Tim Boshart Library (ex officio)
- Tim Ketchum Information Services (ex officio)
- Nargas Oskui Library (ex officio)

Blackboard usage, 2006-07

The Blackboard system experienced no major technical problems and continued growth during 2006-07.

In my summer report I predicted that “growth in Blackboard usage will level off during 2007.” I was somewhat surprised at the robust growth in use this term. The total number of students using Blackboard in at least one course has now leveled off at just under 19,000. However, the number of CRN coursesites grew from 1317 a year ago to 1605 this year, a 20% increase. The total number of coursesite student
enrollments in fall courses grew from approximately 55,000 to 64,500, a 17% increase. So although the overall prediction is still valid – that we will eventually reach saturation – we may in fact see continued growth in usage, particularly next fall.

**Some events of note in the past quarter**

Several events since our summer term committee meeting are of particular note:

On August 18, we upgraded the Blackboard system to Blackboard’s new Release 7.3. The UO was one of the major Blackboard customers to adopt the new version, and so far our experience has been that our decision to do so was correct – it fixed lots of bugs, brought new features, and few new problems. The upgrade included numerous changes and improvements, among them:

- Discussion Board improvements, including a choice between tree view and list view, ability to subscribe to email notifications of new discussion board postings, etc.
- Support for right-to left languages
- Early Warning System, an extension to the performance dashboard allowing an instructor to quickly spot at-risk students
- Performance improvements to gradebook and discussion board
- Windows Vista certification
- SafeAssign, an antiplagiarism system

Of these changes, the introduction of the SafeAssign system was perhaps the most significant. Although we are seeing only scattered usage of SafeAssign this term, its use is likely to grow rapidly.

Also on August 18 we installed a new Blackboard feature, Voiceboards, developed by the UO Yamada Language Center. Voiceboards is essentially an audio-enhanced discussion board, particularly useful for foreign language instruction. It is a good example of the successful ongoing collaboration between CET and Yamada Language Center.

On August 25, Information Services finally was able to cut over to its new Identity Management System (which we had previously referred to as “LDAP”). The system includes radical changes in the way users obtain computing accounts at UO. It will certainly have ongoing effects on the Blackboard system. Some of the more obvious short-term effects:

- Users can now log in to Blackboard using their “Duck ID” (username) rather than their full email address.
- Starting this term, new user accounts are created only when the individual requests (“claims”) the ID. This has proven a major problem for departments who traditionally pre-created accounts for new staff. We don’t yet know if it will create issues as new students enroll for winter term.
- During the transition to the new system there were numerous problems of people who had forgotten their IDs or were unable to change their passwords. It is likely that most of these problems are now past.
- Behind the scenes, the criteria for who has access to Blackboard and other services have changed substantially, though we don’t fully understand the ramifications. For example, the change apparently means that people who are scheduled to teach in a future term and are entered into the Banner “instructors” table will no longer automatically get Blackboard access prior to being on payroll, but that the process for authorizing accounts for new faculty has been streamlined once a contract is signed in Johnson Hall. It also means that new faculty can now get Blackboard access at least 2 weeks (and possibly longer) prior to the start date of their appointment.
- Blackboard is still accessing the identity management data using the Radius protocol, but we expect to convert to LDAP access by Christmas break.

Apropos of criteria for faculty Blackboard accounts, the Provost released what I believe is the final draft of the new NTTF policies on 21 September. Pending final Senate ratification, this document reifies a
distinction between fixed short term adjunct faculty and “career” NTT instructors. Over time, this may provide a policy framework for modifying the Identity Management System to ensure that career NTT instructors have permanent Blackboard access.

During September, we purged all Blackboard coursesites more than 3 years old from our active systems. Instructors who need to retain their sites for longer than 3 years can export copies of their sites using the Blackboard “Export Course” tool. They can import their courses into our or another Blackboard instance, or can use the beFree tool to create a traditional website containing most of the static aspects of the course content. A new version of beFree was also released in September.

During September we also brought up a test system running Sakai, one of the two open source competitors to Blackboard (the other is Moodle). The Sakai system is being used for an ePortfolio pilot project in the Lundquist College of Business (Ron Bramhall is PI), and to give CET hands on experience with the software. Our reaction to date has been that Sakai would be an interesting Blackboard alternative only if the UO could afford 3 or 4 full time software developers to tune it to our local needs and would require substantial retraining costs for faculty if we were to adopt it.

On October 19, the UO hosted the 2nd annual Washington/Pacific Northwest Blackboard Users Group conference. Tim Boshart was conference co-chair and coordinator. The event was a major success, drawing together nearly 150 participants from around the region including 50 UO people, a range of Blackboard-related software vendors, and a stellar collection of speakers. The organization has renamed itself the “Northwest eLearning Community.” It should continue to grow as an important regional organization bringing together faculty and support people to support distance learning and the use of course management tools like Blackboard.

At Educause 2007 (week of Oct 22), Blackboard Inc. announced a road map and first look at features for their next major software release, which is now called “Blackboard 8.0.” No version 7.4 is now planned. We expect 8.0 to be released to the public around the first of the year. The most significant feature is a completely re-implemented grading system, replacing the “gradebook” with a new “grade center.” Given the magnitude of the changes, we plan to defer installation at UO until August 2008.

Tim Boshart was also appointed to the executive council of BUGLUG, a new users group of leaders of regional blackboard users groups.

On Nov 4 we experienced our first substantial unscheduled outage of 2007. Bb was unavailable – users were unable to log in – for approximately 2 hours due to corruption in a database index.

**Downtime and upgrade plans**

We currently have a few fairly definite upgrade commitments, with others in various stages of planning:

<table>
<thead>
<tr>
<th>Nov 10, 2007 (Sat, 8am-noon)</th>
<th>database patches and upgrades</th>
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<tbody>
<tr>
<td>Winter Break 2007 (dates not yet definite, but tentatively all day Dec 20-22)</td>
<td>install latest Blackboard hotfix (minimal user-visible change) convert from Radius to LDAP authentication install additional building blocks, including support for TurningPoint clickers possible but unlikely: install new database hardware and upgrade database to Oracle 10g</td>
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<tr>
<td>Winter term TBA (possibly Feb 9)</td>
<td>alternate date for database upgrades</td>
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<tr>
<td>Spring Break 2008 (dates not yet definite, but tentatively all day Mar 26-27)</td>
<td>alternate date for database upgrades tentative: implement load balanced front end system install Bb 7.3 service pack</td>
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We currently anticipate additional downtime as usual each Friday evening 10pm-midnight, and additional downtime occasional Saturdays: Our most recently announced downtime schedule is available on-line at http://libweb.uoregon.edu/cet/blackboard/schedule.html. We do not yet know whether the changes to the database architecture in Information Services will allow a reduction in the amount of Friday evening scheduled downtime during 2008.

We do not have firm dates for several other planned Blackboard upgrades, including implementation of load balanced front ends and integration of Blackboard support with the new campus trouble ticketing system.

**Outstanding Issues from 2006-07**

During 2006-07, the committee identified two major issues. Several other issues were also

**Database hardware upgrades**

There was serious concern that our hardware and software systems supporting the Oracle database backend (on which Blackboard depends) was becoming old and risked catastrophic failure. This spring the Educational Technology Committee agreed to recommend to the provost a $151,000 upgrade to that system component. and funding was allocated. Planning for the upgrade has been occurring in Information Services in conjunction with plans for Banner hardware upgrades.

Information Services reports that the administrative SAN has been ordered, but that “We have not configured anything yet and we certainly have NOT ordered any software or hardware specifically for Blackboard.” We hope that they will be able to do so soon, and that the upgrade can occur over Christmas break. Information Services is working on a schedule.

**User accounts and access to the Blackboard system**

I am still unable to report much progress on the goal of opening up the Blackboard system to larger groups of users including guest lecturers. As noted in my summer report, that goal was mostly on hold waiting for the identity management system. Now that the IdM is in place we are starting to understand it and get a feeling for how it will change Blackboard access. One concern I have is that it is not clear whether there is any policy framework at Information Services for obtaining guidance from appropriate faculty groups about outstanding issues connected with identity and access questions.

One interesting change of note is that Network Services is moving towards providing more flexible access to uwwireless for short-term visitors and for faculty and students at other OUS institutions with whom we have negotiated reciprocal access privileges. For example, it is now possible to request temporary network IDs for individual attendees at a UO event such at our Blackboard conference. The Network Services access is transport-only, and is designed not to provide access to UO licensed online resources (UO email, Blackboard, licensed software and databases, etc.). However, since it is free and based on a notion of departmental sponsorship it might in the future provide a model for sponsored blackboard accounts.

**Other Issues**

**Software upgrade rates:** As we have discussed, there is a delicate balance between aggressive upgrade schedules that provide the latest and greatest software version and stability for users and system administrators. We were quite aggressive in adopting Blackboard 7.3, but we now anticipate somewhat more leisurely adoption of the next major version. One important goal is to avoid major user-visible software changes during a term or semester. Another goal is to minimize the total amount of downtime.
Clickers: An ongoing concern has been Blackboard integration with software used to support classroom audience response systems, or “clickers.” Depending on how clickers are used, faculty need to load a roster for the class into the clicker software, synchronize it with the particular clickers used by each student, upload results (grades, etc.) gathered by the clicker software into the Blackboard gradebook, and share question pools between clicker software and the Blackboard test manager. As a campus, we had been moving towards standardization on a particular vendor, Turning Point, but could not integrate with Blackboard until we had LDAP authentication.

The Library is now reassessing our overall strategy for clickers, with the hope of having a campus strategy that will encourage widespread clicker use by fall 2008. In the short run, a small committee (Johnson, Hall, Voelker-Morris, Chinn, Lundy, Patnode) is meeting regularly and soliciting faculty input. We may stay with Turning Point, or standardize on a different vendor, and will likely recommend moving to a mode where faculty using clickers will require that their students buy clickers from the Bookstore for use in their course. We hope to have our recommendations ready this term.

Anti-Plagiarism software: So far, the decision to adopt SafeAssign seems to be working. Faced with the new competitive pressure from Blackboard’s licensing and bundling of SafeAssign, Turnitin will need to innovate if it is going to survive, and there is some evidence that they are doing so. My inclination is to encourage faculty to adopt SafeAssign, but to leave open the possibility that we might want to take a second look at Turnitin during spring 2008.

Instructors and Instructors of Record: Problems continue with the distinction between various meanings of the “instructor” for a course. The Banner system has a single field for each CRN, which does not allow for modeling much subtlety, e.g. distinctions between the person who conducts face to face classes, the person who sets the curriculum and oversees the course, the person who assigns or enters grades, etc. A particular issue is that in many cases (sections of lecture courses, intro foreign language courses, many distance ed courses) there is an individual who should not be the Banner “instructor of record” but should have privileged access to the corresponding Blackboard site. We have no way to automate such assignments.

Support for blogs, wikis, and collaborative writing: We in 2005 evaluated Learning Objects Campus Pack, which is a Blackboard building block that provides a suite of collaborative tools within the Blackboard system, including a blog, wiki, podcasting support, and student website creation support. At that time we decided not to pursue obtaining funding for a license, in part because other free alternatives were available and because there was hope that Information Services would support such tools on the main campus web server. Several things have changed since then that may behoove reconsideration

- Collaborative “web 2.0” style uses of web technology have continued to grow in popularity and importance, as anyone who attended the keynote at our Oct 19 conference can attest.
- Information Services has not moved forward with improved web support. Don Harris has indicated that this is an area that needs attention, but it is very unlikely that we’ll see any progress at least until summer.
- Many of our colleagues at other Blackboard sites have adopted Campus Pack and report strong success. For example, in one presentation at the PNWBUG conference, David Wicks (Seattle Pacific University) reported on an experiment comparing Blackboard and Moodle in real courses. He reported that for his institution the availability of Campus Pack was the one significant blackboard feature that made Blackboard dominate Moodle in his ratings.
- Distance Education reports a very strong need for blog and wiki support in their courses, and even a willingness to provide some of the funding needed for a 1 year pilot of Campus Pack.

I believe that we should be seriously exploring a one year trial of the Learning Objects tools.
New Issues

As we look ahead to the next couple of years for the course management system, several significant issues are developing.

First, we have what appears to be a significant budget shortfall in the Blackboard project. The basic problem stems from a large increase in Blackboard license fees in 2005, from an annual fee of $55,000 to a current fee of $76,600, a 30% increase. In addition we have seen some inflation in other aspects of the blackboard budget, especially in the cost of software maintenance. The result is that necessary recurring expenses are at least $30,000/year higher than recurring Ed Tech budget.

For several years we’ve been able to offset these increased costs through frugality and creative decisions on application server hardware upgrades. However, we anticipate that even with carryforwards generated by such decisions we will finish slightly in the red for 2007-08. There is also uncertainty in a number of aspects of the cost picture, notably related to ancillary recurring costs that may be incurred as part of the ebony database upgrade, and no contingency or discretionary money available for new, potentially high-utility, projects such as a Campus Pack pilot. Finally, the hardware for the application and file servers is aging, and will need to be replaced within two years.

Longer term, we need as a campus to actively explore how the course management system should evolve. How should we adapt to recent trends in higher ed instructional technology support and web development, and reassess our strategic directions to make sure they align with actual faculty needs and desires? There are at least 4 threads in that question:

1. Should we be more actively exploring alternatives to Blackboard? There are a few small commercial competitors including Angel and Desire2Learn, 2 significant open source competitors (Sakai and Moodle), and a host of web based systems (e.g. Plone, Drupal) that were designed for other purposes but are sometimes used as a course management system.

2. Should we be exploring any of the additional software modules licensed by Blackboard? Those modules include the Community System (a portal system, but more importantly a tool for easy integration of Blackboard into other campus portals), Content System (which includes a variety of features including storage management, assessment tools, an ePortfolio module, etc.), and others. Each of these has large price tags.

3. What should our balance be between open access to course materials – at the extreme, the Open Courseware approach in which all course content is freely available to the world – and tight control consistent with a model of teaching in which students pay tuition to be allowed to attend and interact within a class, where faculty-provided content is a valuable asset that needs to be protected, where compliance with copyright law requires that many educational resources be made available only to the students in the class, and where much of the benefit of course management is the controlled access by students to FERPA-protected information such as their grades?

4. How can we take maximum advantage of the social computing and participatory aspects of the current Web 2.0 revolution? That question might relate to specific technologies such as wikis or collaborative tagging software. It more fundamentally asks how to leverage the network effect where large numbers of people contribute to building information resources with emergent properties (and perhaps where filtering the junk becomes key to success); think Wikipedia. Closer to home, it perhaps asks how we can reconceptualize our students as being the producers of our course materials rather than the consumers.

How do we translate such broad strategic questions into practical guidance within the Blackboard Committee process?

Finally, and most importantly, what are the issues that the Committee members feel are most important for consideration this year?