Blackboard Advisory Committee: Status Report, spring 2008

JQ Johnson, 5 May 2008

Overview
This note is an update on Blackboard status written for the Blackboard Advisory Committee meeting of 7 May 08.

Organizational change
The Library reorganized internal departmental structure in April, resulting in a change in the name of the unit that provides Blackboard. The new department is “Scholarly Communications and Instructional Support.” The department includes several pieces of what used to be CET, including consulting and Blackboard support, and in addition is responsible for library initiatives in the area of scholarly communications and faculty publishing support. The media production portion of the old CET (CET Interactive Media) has been re-integrated with Media Services. We expect that Media Services will also have a name change, probably to “Center for Media and Educational Technologies.” The Blackboard system will continue to be managed by the library in collaboration with UO Information Services.

Blackboard usage this term
Blackboard overall usage for spring term is consistent with previous patterns. As of 5 May:

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<tr>
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<th>200603</th>
<th>200703</th>
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<tbody>
<tr>
<td>Active spring-term coursesites</td>
<td>1277</td>
<td>1545</td>
</tr>
<tr>
<td>Students in at least one active coursesite</td>
<td>16498</td>
<td>17184</td>
</tr>
<tr>
<td>Total student coursesite enrollments</td>
<td>47108</td>
<td>56473</td>
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</table>

Overall, the number of coursesites using Blackboard continues to grow year over year; for example the number of coursesites showed 16% annual growth. We have a ceiling effect in number of students, though, suggesting that continued growth is mostly in small courses, sections, graduate seminars, etc.

In addition, the total number of non-course coursesites is also growing. We had a total of:

- 18 active “ORG” departmental sites
- 20 active “MAJOR” sites for undergraduate majors
- 327 other non-course (non-major, not-org) coursesites

Of the 327 other coursesites, about half are used by an individual faculty member for testing and development, and about 90 are actively used by departmentally-sponsored groups ranging from academic programs that don’t correspond neatly to an ORG code (e.g. CODAC, AFRICANSTUDIES, NTTIF-Hub) to student groups (e.g. overseas-study, GoldenKeyHub).

Regularly scheduled and unscheduled downtime
We’ve been sticking closely to our schedule of regular downtime since the last Advisory Committee meeting. As scheduled, there was scheduled downtime on March 28 during spring break, though the total downtime was much less than we had originally anticipated, about 4 hours in all.

We experienced one 10 minute unscheduled downtime on 1 April.
Other winter events of note

The UO Blackboard contract has been renewed for an additional year. The total cost of our Blackboard license went up by 5% this year.

A task force on classroom “clickers” conducted evaluations of a variety of clicker systems and generated a recommendation to Deborah Carver. Under that recommendation, the UO will significantly expand its support for classroom "clickers" for fall 2008. For the 2008-09 academic year, Media Services and the Duck Store (UO Bookstore) are recommending that faculty who are interested in using audience response systems in their classes adopt i>Clicker clickers. See http://www.iclicker.com for information. Faculty will treat the clickers much like textbooks, having the students buy units through the Duck Store or another source. Students can expect to pay about $32 for a new clicker, and will likely be able to use the same clicker for multiple courses and to resell used clickers for half that. Media Services will provide support, faculty training, and loans of instructor base stations. Our new clicker vendor has a different Blackboard interface from the old one, but offers good facilities for uploading clicker grades into the Blackboard gradebook.

Georgia State was sued by a consortium of publishers for its electronic reserve practices. The publishers essentially claim that the GA State library is providing course packs for students without having secured permission or paid license fees. The case is getting quite high national visibility, and is expected to shape the behavior of academic libraries in the future.

Upcoming Changes to the System

Our current plans for upgrades are fairly firm for summer 2008, and otherwise quite tentative:

<table>
<thead>
<tr>
<th>Date</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 May 2008</td>
<td>Install (deactivated) Blackboard Sync building block</td>
</tr>
<tr>
<td>14 June 2008</td>
<td>Possible date for Blackboard 7.3 security hotfix</td>
</tr>
<tr>
<td>summer 2008</td>
<td>Blackboard 8.0 Possible date for Blackboard 7.3 security hotfix</td>
</tr>
<tr>
<td>Winter Break 2007</td>
<td>tentative application file server upgrades Additional software upgrades from vendor as needed</td>
</tr>
<tr>
<td>Spring Break 2009</td>
<td>alternate date for pending major upgrades</td>
</tr>
</tbody>
</table>

Our major upgrade is planned for Aug 16.

Major changes on Aug 16 include installation of Blackboard 8.0, released December 2007 and scheduled to be widely deployed at other Blackboard customer sites this summer. Among the features:

- Completely reworked gradebook, now “Grade Center”
- Self and Peer Assessment Tool for active learning
- Blackboard Sync (Facebook integration)
- Better integration of existing features, e.g. Performance Dashboard, Early Warning System
- Two “Bb Beyond” features now standard:
  - SafeAssign (antiplagiarism)
  - Blackboard Scholar (social bookmarking)
- Minimal change in other areas
We are anticipating additional downtime for various upgrades. Blackboard has released a building block that will eventually allow synchronization of Blackboard with Facebook. Although we do not plan to activate this service until August, we want to install the building block prior to then to allow testing. A Blackboard security hot fix was released late last month. However, the hotfix has been temporarily withdrawn so we are not at this point sure whether we install it before August.

Coursesites from 2004-05 will be removed from the system during the week of Sept 8-13.

**Current Policy Issues**

Several issues have come up this term for which input from the Blackboard committee would be particularly valuable.

**Funding**

With the retirement of the Ed Tech fee, Blackboard funding will move from an Ed Tech budget to general fund support. This is part of the general transition to what is commonly being called the “new budget model.” We don’t yet know what effect this will have on overall levels of funding for the system, though the general expectation is that the change should be budget-neutral. In the short run it decreases our budget flexibility, and in particular comes at a time when we expect to see overall annual shortfalls in the Blackboard budget, with necessary recurring expenses exceeding budget by up to $50,000 per year. Deborah Carver has expressed this concern to Frances Dyke, but we don’t currently have a resolution. One effect of the new budget model and the library’s reorganization is that it makes it somewhat harder to shift budget from other CET activities to cover Blackboard.

Longer term, the new budget model assumes that general fund money flows to colleges and schools, and then is taxed to pay for central services such as Blackboard. It is quite possible that this new model will imply a change in the expectations for service levels from the individual colleges and schools, and could even influence central service providers to cut services for those units that do not pay this “tax.”

**Non-CRN Blackboard Usage**

We generally allow use of Blackboard for a variety of activities beyond CRN courses, as long as such uses don’t significantly impact use for CRN courses and provide obvious value to the university as a whole. For example, we have since the very beginning of blackboard use at UO had significant usage for AEI courses and blackboard accounts for pre-matriculated AEI students. This usage was in the past at least partially justified by the observation that AEI students paid the tech fee and so should get ed tech funded services. We need to revisit this and similar questions about blackboard usage.

Current procedure is that we automatically create blackboard sites for all undergraduate majors and departmental ORGN codes. We will also create a blackboard site at the request of any faculty member or department, with several constraints. The most significant constraints are that we do not automatically enroll students in these sites (so the owner of the site must do it by hand), and that only UO staff are allowed to be “instructors” or “teaching assistants” (to minimize FERPA concerns).

Unlike some Blackboard customers, we license only the “learning system,” which is primarily designed to support courses. Blackboard Inc. also has a “community system” add-on with some additional features to support use of Blackboard by departments, organizations, etc. Many
customers such as Oregon State license that version of Blackboard, but we have never been able to justify the hefty (about $30K/year) additional expense given only small functional enhancements.

A currently important question is whether we should create blackboard sites for some central support units that want to use them to communicate with very large numbers of students, and more generally what support we should provide to make this feasible. For example, the Career Center requested a blackboard site that would enroll every student at the UO. After discussion, we concluded that this was not technically feasible, notably for performance reasons. The technical constraints are becoming less salient. Is this a service that we should be supporting?

If a Career Center site is authorized, what about other campus units that want to use Blackboard to communicate with very large groups? We could easily imagine setting up sites for colleges, majors, etc. Perhaps most interestingly, a representative of the ASUO has recently proposed that the Office of Student Affairs create a blackboard site that would enroll all UO students and be used by the ASUO for a wide variety of communications activities.

**System announcements**

Blackboard has a feature that allows system-wide announcements that appear in all coursesites. We currently avoid using them. Should we create a policy that allows their use, and if so what should the criteria be to avoid overuse? Who should be able to submit system announcements to Tim for posting?

**Blog, wiki, and podcasting support**

There continues to be significant interest on campus in a blog and wiki tool that could be integrated with Blackboard.

Although it is quite feasible to have an externally hosted class wiki and link to it from Blackboard, that approach implies various problems. For example:

**Authentication**: either students need to re-authenticate to the external wiki, or one uses a tool like PBwiki where authentication is passed insecurely as part of the URL (implying that the wiki.

**Archival, Privacy, etc**: there is substantial legal concern about having UO course materials hosted on an external site. Such approaches don’t provide any mechanism for insuring backup or for compliance with UO obligations (FERPA, HPPA, etc.). Although they make it easy to have a web presence that outlasts the particular term and blackboard coursesite, this ease is a mixed blessing especially if it results in old no-longer-maintained websites that are branded as being products of the UO.

Similar issues exist for blogs.

For podcasting, the facilities currently in blackboard seem adequate for many purposes, since they allow both display within a course of an RSS feed and publication of a course-wide RSS feed that can be used for podcasts (and allows students to subscribe to the feed using tools such as iTunes). However, this approach to podcasting does not integrate well with the UO’s streaming audio/video server architecture.

**Hardware upgrades**

Some components of the Blackboard system, notably the Oracle database server managed by IS, are recently upgraded and quite modern. We anticipate upgrading the application servers that actually provide web services and run the main blackboard code this summer, replacing two 5 year old servers with more modern ones and increasing overall capacity to position us for expected
demand over the next 3 to 4 years. The next component of the system that is likely to need replacement is the storage for user files, including all attachments uploaded to the system. Although we have made incremental upgrades to this component of the system, it currently represents the weakest point in our overall ability to recover quickly from hardware failures, and has a storage capacity that we are likely to outstrip in 1 to 3 years. We are currently working on proposals for upgrading the present system, which consists of two linux servers (bbnas and bb5, a primary and a backup server) configured as networked attached storage. Currently, each of these servers provides 1.2TB of file storage, with 715GB in use as of May 2008.

We do not have good projections for expected growth in demand for file storage. A great deal depends on policy. For example, if we were to enforce a hard limit on the size of an individual coursesite this would significantly decrease the rate of growth. We also don’t know what the growth in demand is likely to be over the next two years. Currently, we see a very small number of courses with large (more than 1GB/course) file storage needs. The largest demand comes from courses where the professor places numerous videos of lectures on the site, or where the course includes assignments for the students to produce their own videos and submit them electronically to blackboard. We need to develop a better model for future demand, while at the same time investigating implementation strategies that will make it easy to add file storage inexpensively and incrementally.

We are currently working with Library Systems on a new storage architecture that would provide file storage for both Blackboard and for library digital collections. Tentative plans are for a storage area network architecture with 20TB to 50TB of disk storage, to be implemented in late 2008.

**Accounts for visiting lecturers, etc.**

This continues to be a major issue, but one we haven’t made much progress on. Information Services is aware of the issues, and is in principle willing to work with us on implementations. However, plans for implementing “sponsored accounts” don’t seem to be currently a high priority. We are investigating three other avenues for accomplishing some of these goals:

1. Providing accounts for temporary employees and other individuals who have Banner records but are not allowed Blackboard access. We have Banner-derived entries in the local Blackboard database for temporary employees, and such employees can obtain Duck IDs. We requested that IS authenticate all temporary employees and authorize them in LDAP for Blackboard access, but IS decided that by policy they could not do so. A few special case temporary employees do have Blackboard access, and it appears that IS is willing to grant Blackboard access to others in at least some circumstances.

2. Implementing some ad hoc system for allowing other special case accounts. We continue to investigate possible systems in which we would provide Blackboard-only access, independent of Duck IDs, Banner, and LDAP. Although this is technically feasible, it isn’t clear whether there is a policy mechanism to allow it. From a technical viewpoint, it also has several costs, among them that such special case accounts would not easily transition to “real” accounts if the person’s role changed (i.e. the person would end up with two completely separate accounts), and we don’t have any procedures for providing secure passwords or mechanisms for changing passwords on such accounts.

3. Shibboleth. This is a protocol and architecture for federated identity management that at least in principle offers the possibility of allowing access to a resource like Blackboard based on credentials from a partner organization elsewhere. For example, we might imagine providing Blackboard access to Oregon State students based on their ORST user IDs and passwords.