Blackboard Advisory Committee: Status Report, spring 2012
JQ Johnson, 14 May 2012 (for meeting scheduled 29 May 2012)

Committee notes
Sean Sharp has joined the School of Architecture and Allied Arts, with title “Educational Technologist.” I anticipate that he will continue to participate in his new role as an ex officio member of this year’s BAC.

Anne van den Nouweland (Economics), who was unable to serve on the committee this fall and winter while on sabbatical, will be rejoining the committee for the second half of our year.

The spring committee meeting is scheduled for Tuesday, May 29, at 4pm.

Blackboard performance and statistics
As usual, we continue to see growth in blackboard usage. Usage for spring 2012 shows the growth pattern we’ve expected from previous years, with some growth compared to a year ago.1

<table>
<thead>
<tr>
<th></th>
<th>Spr ‘11</th>
<th>Spr ‘12</th>
<th>Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Active CRN coursesites</td>
<td>2043</td>
<td>2205</td>
<td>7.9%</td>
</tr>
<tr>
<td>Student enrollments in active coursesites</td>
<td>86529</td>
<td>90117</td>
<td>4.1%</td>
</tr>
</tbody>
</table>

Tim reports that according to our traffic monitoring we had a new daily usage record on 7 May – 414GB and 1,506,156 pages of traffic.

We collect quite a bit of interesting data on blackboard usage. Tim put together a few tables from our Google Analytics data (April 7-May 7) that I am attaching as an appendix to this document. Most of the data reflects only small changes based on what we’ve seen in the recent past, but one statistic that was striking was that less than half of all blackboard traffic is from on-campus users. Of the off-campus users, the vast majority are using Comcast cable. This may suggest that we need to tune our student support somewhat.

Events of note
We have had no unscheduled downtime since our last meeting, though we did have three external outages that impacted blackboard use. First, scheduled campus wide power outages on 3/27 and 3/28 resulted in scattered loss of network connectivity and in many cases loss of power for on-campus workstations; the blackboard system remained in operation. Second, the Blackboard SafeAssign servers were down (scheduled, but only at the last minute) April 5-6 from 11pm until about 1am. Third, scheduled maintenance on the IS identity management and authentication system on April 12 resulted in unplanned inability to change passwords from Friday night through Sunday morning; a few users whose passwords had expired were unable to log in.

Although we had originally planned 2 days of scheduled downtime during spring break, this downtime proved unnecessary and was not taken. In general, Tim reports that as our hardware architecture and blackboard software are maturing there is less and less need for downtime related to minor upgrades. For example, Tim and IS in late April/early May moved all of the blackboard application servers to the new VMware 5 cluster, converting servers one at a time so there was never user-visible downtime, and

on May 12 moved the database servers to a new and faster storage server. The Blackboard application now has a new patch management utility that allows most software upgrades to be installed on a rolling basis (one server at a time) with little or no downtime. A few patches may require full downtime but those are usually done within an hour. New Blackboard service packs do require significant downtime which we continue to schedule for Saturday mornings.

There have been almost no changes to blackboard functionality over the past 3 months, though Tim did add a new mashup allowing easy incorporation of Twitter feeds in a blackboard site. One additional bit of good news is that IS has been able to allocate more space for blackboard storage. In the short run, IS has expanded our disk quota from 1.8TB to 2.1TB, which is adequate to meet spring requirements. Meanwhile, our disk usage grew from 1.5TB to 1.8TB, so the increased allocation came just in time.

**Schedule and upgrade plans for the rest of the year**

The downtime schedule for the rest of this academic year has become firmer, but does not reflect significant additional scheduled downtime until Winter break:

<table>
<thead>
<tr>
<th>Date</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sat. June 16 (before wk 0)</td>
<td>Upgrade to Blackboard 9.1 SP 8</td>
</tr>
<tr>
<td>July</td>
<td>No downtime scheduled (BbWorld)</td>
</tr>
<tr>
<td>Sat. Aug 18 (after 8 wk summer; before Law Fall)</td>
<td>Database maintenance; possible upgrade date to Blackboard 9.1 SP 9</td>
</tr>
<tr>
<td>Sat. Sept 8</td>
<td>Tentative. Alternate date for SP 9 upgrade</td>
</tr>
<tr>
<td>Sat. Oct 13</td>
<td>Reserved for emergency upgrades only</td>
</tr>
<tr>
<td>Sat. Nov. 10</td>
<td>Reserved for emergency upgrades only</td>
</tr>
<tr>
<td>Thu-Fri, Dec 20-21</td>
<td>Possible upgrade to Blackboard 9.1 SP 10</td>
</tr>
</tbody>
</table>

IS has firmed up their plans for upgrading the Netapp Metrocluster. That upgrade is now scheduled for Saturday morning, June 2. The current expectation is that it will be possible to complete the upgrade without Blackboard downtime. App server upgrades to Red Hat 6.2 were not (as previously scheduled) done over spring break, and instead are now planned for July or August; servers can be upgraded one at a time without Blackboard downtime.

Tim Boshart and Nargas Oskui are planning to attend BbWorld, the Blackboard users conference scheduled for July 10-12 in New Orleans. If you or any of your colleagues are interested in attending, see [http://www.blackboard.com/BbWorld/Home.aspx](http://www.blackboard.com/BbWorld/Home.aspx). Nargas reported on last year’s BbWorld at a TEP session last week; the presentation and additional materials will be available on the TEP blog at [http://tepblog.uoregon.edu/blog/](http://tepblog.uoregon.edu/blog/). In preparation for this year’s BbWorld, Nargas would like to gauge BAC member interest in the range of topics that will be presented so she can tailor her attendance to UO faculty needs.

**Ongoing projects**

**SP 8**

Tim has made good progress on preparing for the Blackboard SP 8 upgrade scheduled for June 16. We now have a version of the software installed on our test server in near-final form, and have observed that SP 8 fixes many miscellaneous bugs that instructors have reported in the past month or two.

The next step is that we need assistance in testing. BAC members who would be willing to put an hour or two into exploring the new version, performing some typical tasks such as copying an old course, and providing feedback both on their experience and on areas where documentation needs to be improved.
In order to get access we need to submit a request to IS to authorize the individual on the IS test LDAP server, so if you are willing to help please let JQ know immediately. We will then need feedback as soon as possible, particularly if you identify problems that could be serious impediments to upgrading the production servers on June 16.

**Increasing disk space**

As we discussed in February, blackboard faces at least two significant disk space issues. The first is a slow but steady growth in demand for disk space fueled primarily by “business as usual” usage of the system. We anticipate this growth to average in the range of 5% per term, or perhaps 20% per year (i.e. a 4 year doubling time). It seems likely that IS will be able to expand the blackboard allocation on the SAN enough to meet this increased demand, increasing the allocation in small increments as we push 90% utilization. However, we also anticipate increased demand from faculty who want to teach in new ways, and in particular to make much heavier use of video in their courses, with a growth in demand that is much closer to Moore’s Law (18 month doubling time). We do not currently have a viable plan for meeting that need. Some of the demand may be met by more aggressively encouraging faculty to use non-blackboard servers to host media, where such resources might include youtube, the IS media server (accessed perhaps via the UO Channel or iTunes U), the new Edublogs system being deployed by IS, or some other resource. One nagging issue is how to handle student work; blackboard has good facilities for accepting and managing student homework, including managing student privacy, and there are at least some types of assignment that would not be appropriate if student work were required to be posted on the open web (e.g. on youtube).

**iTunesU**

CMET is currently working to add public content, for example video from the UO Channel, to iTunes U. Once there is a sufficient body of video, we will have the UO site added to iTunes U in the iTunes store. CMET is also working on developing workflows for adding new content, which will allow schools and colleges to contribute public content. At least initially, the units will be responsible for creating playlists, encoding the video to proper format, and providing hosting for the video.

Unfortunately, the Blackboard building block we have been evaluating for managing access to instructional content has not yet been updated for Blackboard 9.1 SP8, and so we were forced to abort testing when we upgraded bbtest to the new release. A new building block version is expected soon, and if it materializes we hope to begin testing in early summer. Early indications are that it provides only limited additional management functionality.

**Google Apps for Education**

We completed a preliminary evaluation of the GAfE building block during winter term, and concluded that although it seems to work adequately we are not sure how best to proceed. One concern is whether to pursue an implementation that is completely blackboard-specific – where each UO blackboard user receives a google id such as “jane@blackboard.uoregon.edu”, where google authentication is handled by a callback to the blackboard system, and where all access to Google Apps must occur through blackboard. This model offers several advantages since it could be managed as part of blackboard without additional resources and makes it easy to have GAfE groups corresponding to individual classes. However, it would not integrate well into broader campus solutions. An alternative would be to work towards a GAfE implementation managed by Information Services to provide service for the campus as a whole. However, IS has indicated that although they have lots of interest they aren’t prepared to make it an active project at this time. At a minimum this is definitely not on the table until they replace their current identity manager software (that drives DuckID and LDAP systems), a project that should be complete around the end of 2012.
**CourseLife**

As recommended by the committee at our last meeting, Tim hopes to implement a building block developed by Northwestern University called “CourseLife” that would allow easier management of backups. Time permitting, he wants to experiment with the tool this summer and start copying old courses to it as of end of summer term, but probably not pruning online course copies until the end of fall term at the earliest. We will probably move gradually to a 2 year default online retention period. At the end of 2 years most courses would be automatically exported (without student data) to backup media, and the online copy deleted. However, the tool would provide an automated system that would allow the instructor to postpone archival to deal with special case needs such as a grade challenge (which occur very very rarely), and to temporarily recover an exported course without staff assistance.

**New Questions**

**Faculty nicknames?**

A recurring problem for a small number of UO faculty is that our current Blackboard system does not support nicknames, but always lists faculty by first and last name as recorded in Banner. Some faculty members have recorded preferred names in Banner which are displayed in various contexts including the UO directory. For example, one professor in Education, whose official name is “Donald M. Pavel” tries to be uniformly known as “CHiXapkaid Pavel.” Blackboard, since it doesn't have a nickname field in the database schema, simply uses the Banner firstname field as the blackboard firstname, and so his students see him as “Donald Pavel.” By comparison, the UO directory lists him as “Donald "CHiXapkaid" M Pavel.” We’ve had a dozen or more similar cases over the years.

Based on discussions with Registrar and Human Resources in 2010, we concluded that a better way to handle blackboard would be to import the nickname from Banner and to use it to replace the firstname field in the blackboard database (also setting middle name to null in this case). Pavel would then be displayed as “CHiXapkaid Pavel.” If the committee has no objections, we will move forward on implementing this change, which would probably take effect sometime during the summer.

Given the blackboard database schema, we can’t store both true-firstname and nickname in blackboard. Note also that a small number of students also have nicknames in Banner. At this time we would not make the same change for student records, since many instructors prefer to have the Blackboard gradebook reflect the true first and last names of their students. However, blackboard users who are both students and faculty or staff would have nicknames used, which might introduce some confusion in course gradebooks.

**Blackboard Mobile enhancements**

Last month Blackboard released a new version of the mobile building block that will support a new style of mobile testing in the next version of the iPad/iPhone app. The mobile testing feature is currently enabled on bbtest, but disabled on the production servers. We are somewhat loathe to enable the feature for several reasons:

- This new mobile testing feature is not integrated with the existing Blackboard test tool. It uses a different interface to create the test and only supports multiple choice, true/false, calculated numeric, file response, hot spot, fill in multiple blanks and short answer questions. It also will not allow you to modify a test once attempts have been made so if there is a mistake in the test you are not able to correct it without first clearing all attempts. With regular tests you can correct an error in the test and automatically re-grade the affected attempts.
- It also appears that the test relies on the servers at Blackboard. At this point we do not know if the tests and attempts are stored on our server or on theirs; if attempts are stored on Blackboard-managed servers this could raise some data privacy and ownership issues. There is also the concern
that if it requires the Blackboard server that there could be some service interruptions if it becomes popular and the servers become overloaded.

Given the comparatively small number of UO students who presently access Blackboard via mobile device, how should we proceed in evaluating whether this is a feature that we should enable and/or encourage?

**Copyright and acceptable use policy on Blackboard**

Last year several publishers sued Georgia State University arguing that Georgia State’s use of ereserves and their Blackboard system involved flagrant copyright infringement in posting copyrighted portions of books without permission. After almost a year, Judge Evans on Friday released her decision on the case – 350 pages of analysis that for the first time provide a detailed analysis by a judge as to what the boundaries are for educational fair use of portions of book-length works. Since the case was in a different circuit, it isn’t directly precedent in Oregon, but it will surely be important in shaping all judgments of fair use in the future.

For a very preliminary analysis of the decision see Kevin Smith’s “The GSU Decision – not an easy road for anyone” at [http://blogs.library.duke.edu/scholcomm/2012/05/12/the-gsu-decision-not-an-easy-road-for-anyone/](http://blogs.library.duke.edu/scholcomm/2012/05/12/the-gsu-decision-not-an-easy-road-for-anyone/).

It will probably be a few weeks before any consensus in the library or course management community evolves as to what the decision actually implies, here is one data point for BAC members to think about: Judge Evans apparently took a quite simple approach to “amount and substantiality” (the 3rd factor in any fair use determination), and set a standard of 10% of a short work, or a single chapter of books containing 10 or more chapters. This is a new bright line standard, and it is not clear to what extent UO faculty adhere to it. It also does not bode well for faculty members who post the complete PDF text of a journal article on their blackboard sites arguing fair use.

The Georgia State case also turned to some extent on the training program that the institution offered its faculty. It might turn out that an outcome of the case will be a UO requirement that all instructors using blackboard attend a mandatory copyright training session.

**Other events and trends of note**

Although not directly impacting the UO blackboard system, I wanted to call committee member attention to 3 other items of interest:

1. Information Services is in the process of rolling out “EduBlogs,” which will provide WordPress blogs to any UO user who wants one. For more details, see [http://it.uoregon.edu/blogs/firstblog](http://it.uoregon.edu/blogs/firstblog). Based on the experience of the now-finished UO ePortfolio project, we expect that there will be fairly heavy demand for such blogs for instructional purposes, offering what in some ways is an alternative to the blackboard system.

2. The future overall structure of IT management at the UO is somewhat in flux. As many of you know, the UO is presently conducting a national search for a new CIO. Simultaneous with that search, the UO is conducting an IT Program Review designed to provide advice on the future structure and organization of IT support campuswide. The three program reviewers (Steven Corbato, Casey Green, Dan Updegrove) visited campus earlier this month and are in the process of preparing a report and recommendations for the provost.

3. Among other announcements of major educational technology initiatives at other institutions, one that has received significant media attention was this month’s announcement by MIT and Harvard that they have established a joint “edX” project. They plan to spend up to $30 million developing very large online courses and a new generation of open source courseware to support them. The current plan is that these courses will be freely available on the web, and that although they will not award college credit they will offer certificates of completion. One interesting twist is that the
project is largely driven by the goal of having a tool that collects data on student performance to be used for educational research. For more information about edX see http://www.edxonline.org/.