IDIT Blackboard Upgrade Report
April 2011

Overview
In May 2010 UNC moved to Blackboard 9.0 from 7.3. This upgrade was well communicated and well received by faculty members. At the time we moved to 9.0, version 9.1 had already been released. Many industry people view 8.0 and 9.0 as stepping stones to some of the revisions and features that Blackboard has introduced in version 9.1. While the move from 7.3 to 9.0 had significant user interface changes, the move from 9.0 to 9.1 has minor user interface changes, yet provides several new, important features. The recommendation to upgrade from Blackboard 9.0 to Blackboard 9.1 facilitates the LMS Task Force “It is important from a support standpoint for UNC to try and stay no more than one version behind the current major release of Blackboard.”

Recommendation
After testing version 9.1 and considering the progress that has been made to remedy technical issues regarding Blackboard 9.0, the IDIT team would like to recommend that UNC upgrade to Blackboard 9.1 in December 2011 prior to the spring session. This recommendation includes a phased approach which addresses some of the stability/performance issues while moving us toward adopting the new version.

This approach includes:

- **Database Export/Import** May 2011
  This will reorganize the database so that files and information from all the deleted courses will be purged from the system, saving storage space. This will require approximately 20 hours of down time.

- **Install Service Pack 5 into Blackboard 9.0 production** August 2011
  This service pack contains fixes to some of the known issues. This will require approximately 20 hours of down time.

- **Upgrade to Blackboard 9.1** December 2011
  This will be an “in place” upgrade, similar to the upgrade from 7.3 so that all existing 9.0 courses will automatically be available in version 9.1.

Summary of Upgrade Rationale

- New features and fixes will be beneficial to faculty and students.
- Keeping as current as possible minimizes the down time actually required for the upgrade. This is the reason behind the phased approach for database cleanup, service pack installation and upgrade.
- Current environment needs to be stabilized prior to considering upgrading to a new version. This can be accomplished via continued work with Blackboard and Service Pack 5 installation.
- A December upgrade provides time in the Fall to communicate with faculty and provide training.
- While the timing for Winter interim courses is tight, very few courses are impacted by the upgrade, and there will be several weeks to test the Spring 2012 courses before students access the system.
Upgrade Criteria

According to the LMS Task Force Report published in 2009, the following items are critical in UNC’s decision to upgrade to a new version of Blackboard.

- Reliability, Stability, and Performance
  During the Spring Semester 2011, there have been some reported and known issues with Blackboard Version 9.0 as outlined in the LMS Survey results and review of 9.0. The survey shows concern by faculty with the latency problems in Blackboard, most specifically related to the Grade Center. Technical issues at the Blackboard hosted site were found to be the cause of system latency and recent updates by Blackboard and the latest Service Pack installation appear to have rectified some of the issues. The next Service Pack in Blackboard 9.0 and features in Blackboard 9.1 also address these latency issues.

- Degree of change for faculty / students
  The major user interface change occurred between Blackboard 7 and Blackboard 9. Changes in the user interface from Blackboard 9.0 to Blackboard 9.1 are minimal. Students will probably not notice any changes to the interface, since the changes are very subtle. Changes for faculty relate only to the incorporation of the new features available in Blackboard 9.1.

- Fixes to Known Issues
  Blackboard 9.1 is reported to fix the following issues that we are experiencing in 9.0:
  - Vertical scroll bar does not display in the Grade Center
  - When using the VTBE to edit text, the formatting (particularly "style" and "size") is ignored
  - Entering valid test date with the keyboard (not the date picker) produces: "The end date cannot be earlier than the start date"
  - Attempting to manually modify the dates by typing valid new start and new end dates in the fields results in an incorrect error "The end date cannot be earlier than the start date"
  - Overall Summary Usage and Access by Content Area Tracking Reports display inconsistent results for the same user

- New Features
  Blackboard 9.1 includes the following new features that will be beneficial for UNC faculty and students:
  - Wikis
  - Graded Blogs, Wikis, Journals
  - Audio and Visual content integration (direct link to YouTube to insert video)
  - Advanced Accessibility Features (Gold Level certified by National Federation for the Blind)
  - File Management (streamline upload of revised course documents)
  - Direct link from control panel to items that Need Grading.
  - Learning Modules and Lesson Plans

- Testing Results
  - The IDIT team has been testing BB 9.1 since the start of 2011.
  - An invitation to participate in testing was sent to all members of the LMSAG along with a checklist of 60 features to test.
  - Five faculty members tested BB 9.1 and sent in completed checklists with comments.
  - Only four issues were identified, two of which have been resolved.
Positive comments were included about several of the new features.

Faculty testers were also invited to send free form comments on BB 9.1.

- Bug Reports from other University Blackboard installations
  IDIT has been researching bug reports from other institutions who have upgraded to version 9.1. A full assessment of these reports will be made during the summer to identify any major issues with 9.1 that might change the upgrade recommendation. The following is a summary of bugs from other schools.
  - Cape Fear Community College (on 9.1 SP4)
    [http://cfcc.edu/dl/Faculty_Resources/documents/sp4_issues_2-11-2011.pdf](http://cfcc.edu/dl/Faculty_Resources/documents/sp4_issues_2-11-2011.pdf)
    - Problems with Locked Tests
    - Menu Items in Unavailable Courses
    - Calendar/Due Date display incorrectly
  - California State University - Fresno (on 9.1 SP3)
    - Extra Credit Grade - Not Calculating in the Grade Center
    - Visual Text Box Editor - Invalid HTML Errors
    - Interactive Tools - Attachments - Unable to Open
    - Course Content - Broken links to Tools area created in a course content area
  - University of North Florida (on 9.1 SP4)
    [http://www.unf.edu/cirt/bb/support/Known_Issues.aspx](http://www.unf.edu/cirt/bb/support/Known_Issues.aspx)
    - Grades entered on assignments with multiple attempts are not included in Total score calculations in the Grade Center.
    - Some Calculated Formula question types are not working correctly in assessments; instructors get an error when adding formulas to questions.
    - When selecting to edit or delete announcements (created another instructor) an error message is displayed: The specified object was not found.
    - Files Added to an Assignment Cannot be Viewed by Students if a Link Title is Applied to the File When Creating the Assignment

Training Plan and Implementation Plan
The training plan for Blackboard 9.1 will be modeled after the plan that was successful in the Blackboard 9.0 implementation. This includes the following key elements:

- Communication with faculty via alternate channels – email, UNC Today, phone.
- Presentations at Faculty Meetings
- Blackboard 9.1 What’s New workshops
- Self-help documents and tutorials available on the Blackboard Support site.
- Online faculty orientation course

In addition, all instructors teaching Winter Interim courses will be personally contacted by the IDIT team and their courses will be tested by the IDIT team immediately after the upgrade, prior to the start of the session to ensure that the courses are ready for students. Spring 2012 courses will be tested over the Winter break.
LMSAG
April 25th, 2011

Agenda

Introductions
LMS Survey
  Bb 9.0
  Bb 9.1
  Wimba
Comments/Suggestions
LMS Survey

- Delivered 2/25/2011
  - Available via web
  - Included on close of TSC Support Requests
- Respondent Demographics
  - 34 total participants
- Average Number of Courses: 5
  - Average Technology Enhanced: 4
  - Average Online Only: 3
  - Average Independent Study Courses: 1
  - Average Other: 1

Please rate our current Learning Management System (Blackboard) on the following:
Support Resources Summary

- **Blackboard Resources**
  - [http://help.unco.edu](http://help.unco.edu)
  - [http://www.unco.edu/blackboard](http://www.unco.edu/blackboard)

- **Blogspot**

- **Communications**
  - Email
  - System Announcements
  - UNC Today

What areas of the Learning Management System would you like to know more about:
General Feedback

- GradeCenter Features
- System Latency
- Discussion Board
- SafeAssign Functionality
- File Management / Upload
- Creation/Use of “test” student accounts

Blackboard 9.0

Current Status
Managed Hosting
Known Issues
Improvements
Current Status

- **Upgrade to version 9.0 from 7.3**
  - Completed May 14th, 2010
- **Patch to version 9.0 sp4**
  - Completed November 24th, 2010
- **Spring Course Details**
  - Available Courses: 2811
    - Online-only: 145
  - Support Requests Submitted: 714
    - Access/Usage: 650
    - Technical: 64
    - Managed Hosting: 30
- **GradeCenter**
  - Patch applied on March 24th, 2011
- **SafeAssign**
  - Researching options. All are at an additional cost
  - Maintenance and resources are taking place on a continuous basis
- **Discussion Board Post** (invalid text/truncation)
  - Corrected in version 9.1
- **Embedded Code**
  - Mixed results of copy and paste from word
  - Reviewing Building Blocks for 9.0. Corrected in 9.1

Known Issues

- **GradeCenter**
  - Patch applied on March 24th, 2011
- **SafeAssign**
  - Researching options. All are at an additional cost
  - Maintenance and resources are taking place on a continuous basis
- **Discussion Board Post** (invalid text/truncation)
  - Corrected in version 9.1
- **Embedded Code**
  - Mixed results of copy and paste from word
  - Reviewing Building Blocks for 9.0. Corrected in 9.1
**Improvements**

- **Database Export/Import**
  - May 11th, 5pm MST
  - 20 hours of downtime

- **Bb 9.0 Service Pack 5**
  - August 12th, 12am MST
  - 15–20 hours of downtime
  - Staging environment

---

**Blackboard 9.1**

- Overview
- Testing, Implementation, Training
- Recommendation
- Questions
Upgrade Criteria

- Reliability, Scalability, Performance
- Fixes to Known Issues
- Degree of Change for Faculty, Students
- New Features
- Bug Reports
- Testing Results

Rationale

- BB 9.1 was released in May of 2010
- Less impactful upgrade than 7.3 to 9.0
- Fewer tool and screen changes
- Upgrades to features that presently have a work-around in place
- Enhancements to the tools used to design course content and to ease of grading
### Testing

<table>
<thead>
<tr>
<th>Jan</th>
<th>Feb</th>
<th>Mar</th>
<th>Apr</th>
<th>May</th>
<th>Jun</th>
</tr>
</thead>
<tbody>
<tr>
<td>• IDD Testing BB 9.1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• LMSAG Pilot Testing BB 9.1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Managed Hosting 9.1 Cohort</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Pilot Expansion</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• CourseSites</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Implementation Plan

- Communications via UNC Today
- Faculty presentations and training sessions will be scheduled before and after the upgrade.
- Planning and preparing technical and instructional support prior, during and after the upgrade.
- Upgrade to Blackboard 9.1 – December 2011
Training Events

<table>
<thead>
<tr>
<th></th>
<th>Sept</th>
<th>Oct</th>
<th>Nov</th>
<th>Dec</th>
<th>Jan</th>
<th>Feb</th>
</tr>
</thead>
<tbody>
<tr>
<td>BB 9.1 Info Sessions</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Resources Page</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>What’s New Workshops</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Upgrade to BB 9.1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BB 9.1 Workshops</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Support &amp; Documentation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Phased Approach
- Continuous review of usability, functionality, stability
- Database Export/Import – May
- Patch version 9.0 to service pack 5 – August
- Continue and Expand Pilot
- Develop Support and Documentation

Rationale for December Timeframe:
- Communication with faculty
- Accessibility of training sessions
- Fewer Interim courses and students
- Time to test Spring 2012 course in 9.1
LMS Usage and Utilization Report  
Fall 2011 | August 20 – September 9

Courses
- Online-only: 295
- Courses Available within Blackboard: 2425
- Total Student Enrollments: 10789

Support
Approximately 406 requests for support were initiated to the Technical Support Center regarding Blackboard access or usage. 44% of these requests were identified, addressed and resolved by the IDIT as usage questions within the Blackboard system. Additionally, of the 406 requests submitted, 4 were escalated to Blackboard’s Managed Hosting team for support.

System Login and Support Requests

Browser Usage

Active Courses
An active course is identified within Blackboard as one in which course page hits have been registered, not by its presence within the system by course code.
Wimba Classroom
Utilization and Feedback

During the May 3rd, 2010 LMSAG meeting, Wimba Classroom was established as a centrally funded resource to supplement the LMS. Per the request of the committee, both quantitative and qualitative data has been gathered from May 3rd to April 21st. In the time since the original request was made, Blackboard acquired Wimba Classroom and Eluminate, and combined features from both platforms to create “Gemini”, which is one component of the Blackboard Collaborate suite. Wimba use at the University of Northern Colorado has continued to expand beyond the LMS. Wimba classroom has been used to market several online programs, host national meetings, conduct vocational and teacher education training sessions, bring guest speakers in to face-to-face courses, capture science presentations, and remotely observe pre-service teachers. Substantial travel costs were saved as a result of the expanded use of the tool. Over 800 instructors, students and guests have interacted within approximately 750 unique rooms, logging over 4200 hours of usage. Audio content use is significant, and has helped address student learning preferences and needs.

<table>
<thead>
<tr>
<th>Summary Data (Classroom and Voice Tools)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Wimba Classroom Utilization Summary</strong></td>
</tr>
<tr>
<td>*Includes LMS data Total</td>
</tr>
<tr>
<td>Instructors, Students, Guests</td>
</tr>
<tr>
<td>Unique Rooms</td>
</tr>
<tr>
<td>Hours</td>
</tr>
<tr>
<td>Average Hours per User</td>
</tr>
<tr>
<td><strong>Wimba Voice Utilization Summary</strong></td>
</tr>
<tr>
<td>Voice Boards</td>
</tr>
<tr>
<td>Voice Authorings</td>
</tr>
<tr>
<td>Voice Emails</td>
</tr>
<tr>
<td>Voice Direct</td>
</tr>
<tr>
<td><strong>LMS Utilization Summary</strong></td>
</tr>
<tr>
<td>Students</td>
</tr>
<tr>
<td>Instances</td>
</tr>
<tr>
<td>Courses</td>
</tr>
<tr>
<td>Instructors</td>
</tr>
</tbody>
</table>

Summary of Wimba Classroom Qualitative Data
Initial Questions:
1. Has Wimba Classroom augmented or improved your teaching? How?
   - Students have been able to collaborate more freely and access archives of materials that would not have been available otherwise in online courses
   - Instructors have been able to easily deliver pre-prepared content to students that could not have been delivered in times of instructor absence

2. Can you share any student comments or anecdotes about how Wimba Classroom has impacted their learning?
   - Students have been happy with increased social presence in pure online courses
   - Students have been happy with Wimba Classroom as a space for collaboration on class-related projects

3. Have you used Wimba Classroom for non-instructional purposes (meetings, open discussion areas, marketing, etc)? If so, how did the use of Wimba benefit those involved?
   - Virtual office hours, collaboration spaces for students, national meetings and planning sessions, delivery of institutional recommendations, monthly Doctoral Research Colloquium Webinars
   - Faculty, staff, students and potential students benefited by their access to meetings and information in a clear and concise format

4. Do you have any concerns to share about the continued use of Wimba at UNC?
   - Some technical issues (occasional echo or audio/video drops)
   - Only one speaker at a time can deliver their video
   - Accessibility for special needs users
   - Some network firewall configurations will not allow Wimba Classroom to pass through