

# **Designing for Scalability: Blackboard Tests and Assignments**

by Chris Jennings

Blackboard provides two useful tools for assessing student performance: the Testing engine and the Assignments tool. The Testing engine allows instructors to create tests using a variety of questions that can post directly to the grade book. The Assignments tool outlines particular assignments, provides a file exchange area for instructors and students, and also posts to the Grade book once the instructor has evaluated the completed assignment. Let's look at when instructors might appropriately use these tools in online courses.

## **Testing**

Testing remains one of the easiest and most traditional ways of assessing student performance. Blackboard tests allow instructors to create multiple choice, true/false, multiple answer, ordering, matching, fill-in-the-blank, and essay questions that students can answer at a designated time. One of the greatest benefits of using the online testing engine includes Blackboard's ability to automatically grade non-objective questions (such as fill-in-the-blank or essay questions). For instructors potentially teaching large classes, this assessment method requires little time and maintenance, as Blackboard grades the questions, applies an instructor-determined grading rubric, and automatically posts to the grade book.

However, while convenient, we caution instructors not to depend too heavily on these kinds of tests to evaluate student performance. For one, because Blackboard automatically grades only select-answer type questions, this kind of test becomes inherently less rigorous than tests that include essay or fill-in-the-blank questions requiring manual grading. Also, students taking online tests run the risk of losing their Internet connection and having to log back on to finish or having the instructor reset the test.

The potential opportunity to cheat represents another drawback of online testing, but instructors can deter cheating by managing the test settings accordingly. Blackboard allows instructors to set a number of testing parameters including: availability, display dates, whether to allow multiple attempts or force completion, time limit, display dates, password, feedback, and presentation (all at once, one at a time, or random). In order to discourage cheating, instructors may wish to offer a timed test whereby students would conceivably be so pressed for time, that they would not have the opportunity to reference prohibited materials. Randomizing the order of the questions could also ensure that students can't communicate correct answers to each other via phone or instant message during the test. Also, instructors may wish to show only one question at a time in conjunction with a time limit, providing students with less time to print out test

questions (or at least compromising their time and, ultimately, their grades if they did so).

Keep in mind, there are plusses and minuses for showing questions individually vs. all at once. On the one hand, showing questions one at a time saves students' work each time they complete a test question and makes it harder to print off when timed, but, on the other hand, it takes students more time to submit questions and represents a more unfamiliar test-taking format than the traditional face-to-face test. Conversely, showing questions all at once replicates the more traditional face-to-face type of test, but allows students to print off the tests easier and doesn't save student work until they submit the entire test for review. This means that if a student loses their Internet connection during an extensive test with all the questions shown at once, they might conceivably lose their work and have to start over.

We also suggest NOT setting a test to Force Completion (meaning the first time the student takes the test he or she must finish) because, again, a student could lose his or her connection and have to start over. Instead, set a time limit for the test and if Force Completion is not checked, the student can immediately log back in and Blackboard will resume where the student left off with all previously submitted answers saved.

But the bottom line is that, much like a live course, if a student has the will to cheat, he or she will find a way. There is really nothing to stop students from printing out test screens, taking screen shots, copying and pasting text, or bringing in outside notes except a time limit and threat of serious punishment. That's why we encourage instructors not to depend solely on tests to determine student performance, but instead incorporate tests into a more extensive rubric that includes discussion board postings and graded assignments or projects, as well.

## **Assignments Tool**

The Assignments tool provides an easy way for instructors to post assignments with associated files, allow students to download and complete the assignments, and then upload their work. The instructor can then go to the grade book, download all of the student assignments from a single package file, grade the assignments, make comments, and then re-upload the graded assignments with additional comments for student retrieval. The instructor then enters a grade into the assignment area which automatically posts to the grade book. Let's explore this in more detail:

1. In the content area, the instructor creates an assignment from the right-hand pull-down menu. The assignment includes fields for assignment name, instructions, availability dates, and an area to upload pertinent files.

2. Once the instructor fills out these fields and makes the assignment available, students will access it by clicking on the View/Complete link associated with the assignment in the content area. They can then read the instructions and download any attached files. Once they have completed the work, students will revisit the Assignment area by clicking on the View/Complete link again and must then upload their completed assignment file with comments by the due date. At this point, an exclamation mark will appear in the grade book next to the student's name under the assignment indicating that the assignment needs grading.
3. When students have turned in their assignments, the instructor can download them all at once by going to the grade book and clicking on the assignment name, then Item Download. These file names will automatically contain the assignment name, the student's user name, and the name of the file (as named by the student, so you may wish to have students name their files uniformly to avoid any confusion).
4. Some software such as Word or Adobe Acrobat utilizes built-in editing tools, some of which allow the instructor to track changes as they're made to the document. If the instructor needs to send corrections back to the student, he or she can click on the student's exclamation mark in the grade book under the assignment, re-upload the corrected file back to the assignments area, and write instructor comments to the student, as well as personal instructor notes about that student's assignment. When the student clicks on the assignment again or clicks on the grade in the grade book, he or she will be able to download the instructor's corrections.

While the Assignments tool can be very handy to grade individual assignments, such manual grading could become time consuming with large classes if you don't have teaching assistants to shoulder the load. Instead, instructors may want to consider dividing the class into sections and having them work on group projects (see the paper titled "Using Blackboard Groups to Address Scalability Needs). In this setting, the Digital Drop Box tool (an area in which students and instructors can exchange files) might be a more appropriate way for students to peer review each other's work and submit work to the instructor. Unlike the Assignments tool, however, the Drop box does not post grades to the grade book or allow for instructor and student comments. It simply provides a shared file space for users.

Now that we've addressed the differences between Blackboard Tests and Assignments, let's break down some of their benefits and drawbacks:

<b>Testing</b>	
<ul style="list-style-type: none"> <li>• auto-graded questions highly scalable</li> <li>• resembles face-to-face assessment</li> </ul>	<ul style="list-style-type: none"> <li>• manually-graded objective questions less scalable</li> <li>• risk for student cheating</li> <li>• risk of losing online connection</li> </ul>

<b>Assignments</b>	
<ul style="list-style-type: none"> <li>• resembles face-to-face assignments</li> <li>• more rigorous than standardized testing</li> <li>• easy to track, download, and grade</li> </ul>	<ul style="list-style-type: none"> <li>• manual grading makes less scalable</li> </ul>

### **Further Tricks of the Testing Trade**

If you have multiple courses or multiple versions of a course that might use some, but not all, of the same test questions, consider setting up question pools instead of test-specific questions. When you set up a test with specific questions, you have basically created a complete set of questions that you can only delete or add to manually. While you can copy a set of questions from one course to another, you cannot easily pick which questions you wish to keep and which to throw out. Setting up a question pool, however, allows you to draw from a separate repository of questions for each course. In other words, you could create 500 test questions and pick different combinations of those questions for the various iterations of your course. This deters students from successfully printing out questions during a given semester and passing them on to future classes. Using question pools, you can also choose Random Blocks of questions that will further deter cheating.

Also, you should configure your test settings to minimize your amount of work during the semester. For instance, why manually turn tests on and off throughout the semester when you can configure their availability automatically? Here are some suggestions for test settings:

1. Make the color of the test name which links to the test a shade of blue so students will recognize it as a traditional web link. The Blackboard default is black, thus making the link to a conceivably important exam look just like underlined straight text.
  
2. Decide whether to open the test in a new window by clicking “Launch Item in External Window.” Depending on the content, sometimes it’s a good idea to open tests in an outside window because when a student finishes the test, he or she can simply close out the window when finished and resume where they left off in the course content. Keep in mind, however,

that the external window seems to extend beyond the screen area (at certain resolutions), but this should not affect students' ability to complete the test.

3. Creating an Announcement for the Quiz posts an announcement immediately, not at some pre-designated time before the test begins. Decide if this is appropriate for you.
4. Click "Make the link visible," but control the availability of the test with the Display After and Display Until dates. That way, you can set tests to appear and disappear at specific times without having to manually turn them on throughout the semester. Keep in mind that currently the Blackboard default for Display Until date is 10 minutes ahead of the Display After date, which defaults to the current date and time. Thus, if you don't change the date or if you uncheck Display Until, Blackboard will still make that test unavailable in ten minutes! Instead, you need to actually select a Display Until date far enough in the future so that the test stays open for students.

Using the testing engine and assignments tool in Blackboard can assist instructors in evaluating students, but knowing how and when to use these features can make all of the difference. You will have to design your courses for scalability and use these resources to help manage students accordingly.