

Online Tests and Question Pools

Online tests provide many advantages for any type of course (online, classroom, or hybrid):

- Many questions are graded automatically, saving the instructor time otherwise spent on mindless labor
- Students receive immediate, timely feedback with the results of their test
- Useful feedback can be incorporated into the test so that students can read explanations of correct/incorrect answers when they read their test grade
- The instructor can review the student's answers and override scores
- These tests provide a rich range of question types, from True/False and multiple choice to matching questions and essays. Test questions and answers can include images and files
- Test questions can be selected from any number of question banks
- The same test questions can be presented in random order for each student
- Different questions can be pulled from a question bank, so that each student received different questions (also the same student receives different questions if he/she retakes the test)
- Test questions can be easily updated and improved over time, and easily shared between courses, sections, and instructors

One of the things that Blackboard does quite well is test management. You can create multiple tests or question pools, and then create new tests that pull selected (or random blocks of) questions from other tests or pools.

Three steps to create a test

There are three separate steps to develop an online test, the first is optional, but has many advantages:

1. (Optional) Develop a set of test questions as a **question pool** or a series of question pools. You now have set of questions that be incorporated into any of your tests.
2. Develop a **test** for use in your course. You have flexibility to use any combination of sources for your test questions:
 - Create new questions directly in the **test canvas**
 - Import questions selected from any number of other test or question pools
 - Import questions randomly from any number of other test or question pools
 - Upload questions from a Word document or text file
3. Once you have developed your test, you must add the test to your course (usually under **Course Assignments**). You must also modify the test settings to meet the requirements of your course (for example when should the test become available, how long should students have to complete the test, do you want students to complete the course in one sitting, etc.).

1. Creating a question pool

It is useful to create question pools to maintain your questions so that these can then be incorporated into your tests as needed (either by selecting specific questions or choosing a subset of questions randomly). Create separate question pools for different topics (for example Chapter 1, Chapter 2), and also for related groups of questions if you wish to make random selections (for example (Chapter 1 single point questions, and Chapter 1 high-mark questions).

Once you create a question pool you can add questions directly or import these from other tests or question pools, or from carefully formatted Word documents or text files.

To create a Question pool in Blackboard, in the **Control Panel**, choose **Pool Manager** from the **Assessment** panel, and then choose **Add Pool**. Provide a name for your Pool, a description and any instructions (optional). Be sure that your name is short but meaningful so you can easily identify the pool from a list of question pools. Once you submit the pool you will see the **Pool Canvas**. This is where you can add questions to the pool.

Adding questions to question pools

NOTE: if you wish to add images to your questions and/or answers, click **Creation Settings** in the **Pool Canvas** and check the appropriate boxes.

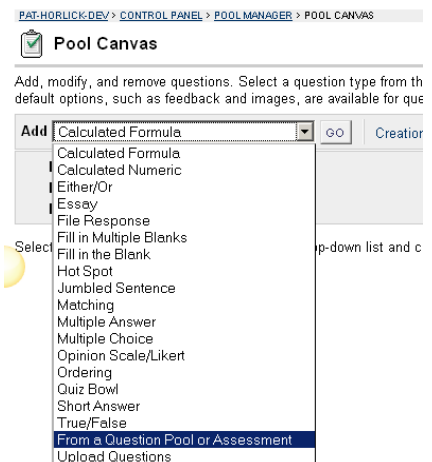
The **Pool Canvas** allows you to add questions to your pool. The drop down list lets you choose a question type, and when you click **Go** you are presented with the appropriate input screen for the specified type. Note that most question types allow you to provide optional feedback for correct and incorrect answers. Some of the more commonly used question types are:

- Multiple Choice (you can specify how many choices for each question)
- Either/Or (you can choose True/False, Agree/Disagree, Yes/no, or Right/Wrong options)
- Matching (see NOTES ON QUESTION TYPES at the end of this document)
- Short Answer
- Essay
- File Response (user must upload a file)
- Hot Spot (see NOTES ON QUESTION TYPES at the end of this document)

Note that some question types will be automatically graded (for example Either/Or and Multiple Choice), while others must be reviewed and graded by the instructor.

Importing questions from another question pool

You can also import questions from other tests or question pools by choosing "**From a Question Pool or Assessment**", then selecting the Pool you want from the list of available pools. Indicate what type of questions you want, and then click **Search**. You can then check all the questions from the pool that you want (or "**Select All**") and click **Submit**. This will bring the selected questions into your question pool. If you prefer, you can repeat this to bring questions from other pools.



Importing questions from a text file

In order to import questions from a text file of your own, you must follow the format prescribed by Blackboard for these files. The following link provides examples and also shows how to create a test in Excel and then save this as a tab-delimited text file for the same purpose:

http://blackboardsupport.calpoly.edu/content/faculty/tips_upload.html

NOTE: Importing question pools associated with a textbook

Often textbooks (or other learning resources) will come with question pools that are provided in Blackboard format. To import a complete question pool, in the Control panel, choose **Pool Manager** from the Assessment panel, and then choose **Import**. Browse to the zip file that contains the question pool and click **Submit**. Assuming the file is in the correct format; the pool will be uploaded and will appear in your list of question pools where it can be used just like any other pool.

2. Creating a TEST

A test can contain any combination of questions that you have created specifically, questions taken from other tests or question pools, or imported from files. To create a Test in Blackboard, in the Control Panel, choose **Test Manager** from the **Assessment** panel, then choose **Add Test**. Provide a name for your test, a description and any instructions (optional). Be sure that your name is short but meaningful so you can easily identify the test from a list of tests. Click **Submit** to begin adding questions on the **Test Canvas**.

Adding questions to tests

There are a number of ways to use the Test Canvas to add questions to your test:

- You can type in questions directly into your test by using the Test Canvas in the same way that you add questions to a question pool (see **Adding Questions to Question Pools** above).
- You can import questions from a Word document or text file in the same way that you do this with a question pool except that you must now also indicate the point value for each question (see **Adding Questions to Question Pools** above).
- You can import questions from other tests or question pools, selecting the same questions for each student or importing random questions for each student

Importing selected questions (students receive the same questions)

If you just want to select a consistent set of questions from a pool for all students, for the question type, choose "**From a Question Pool or Assessment**" from the drop down list, then select the pool you want from the list of available pools, indicate what type of questions you want, and the point value for each one. Then click **Search**. You can then check all the questions from the pool that you want (or "**Select All**") and click **Submit**. This will bring the selected questions into your test. If you want you can repeat this to bring questions from other pools, or even other questions from the same pool if you want to assign different point values.

Importing randomly selected questions (students receive different questions)

If you want each student to get a different (random) set of questions from the pool, for the question type, choose "**Random Block**" from the drop down list, then choose the pool from the list, and wait for the page to reload. Now click the questions types you want, enter the number of questions you want to be randomly selected, and the points per question, then click "import". The random block will be added to your test. You can repeat this for other pools if you want (for example in an exam you might wish to import a number of questions randomly from various chapter pools.)

3. Adding a Test to Your Course

Even though you have created a test, it does not become part of your course until you add the test to a content area such as **Assignments**. Once the test has been added you can modify the test environment to meet your requirements.

To add a test to the course, in **Control Panel**, choose **Assignments** from the **Content Areas** panel (or choose any Content Area that will display your test). Now click the **Test** icon in the top menu bar of your content area. Select the test you want from the list that is displayed. The test will be added to your content page and **will also be added to your Gradebook**. You will then see a "**Modify Test**" page. The "**Modify the Test**" link allows you to modify the actual questions in your test if you need to do this. The "**Modify the Test Options**" link allows you to add instructions to customize your test for your requirements.

Modify the Test Options

Here is list of modifications that you can make to your test environment:

- **Instructions:** Be sure to provide clear instructions for your students.
- **Open Test in New Window:** If the test is ion a new window it is easier for the student to return to the previous window and browse without leaving the test, however multiple windows can be confusing for some students.
- **Make the link available:** Until the test is made available, students will not see it (even if you have set dates for the test).
- **Add a New Announcement for This Test:** If you want a new announcement added to your announcements list.
- **Multiple Attempts:** Leave this unchecked unless you want to allow multiple attempts.
- **Force Completion:** Check this if you don't want students to be able to save and return to the test at a later time.
- **Set Timer:** Be sure to check the box **AND** set the time if you want this option. Also note that Blackboard does not actually prevent the student from going over time. Instead the Gradebook will show an exclamation mark instead of the grade, and when you **View** the test, you will see the time taken by the student at the top of the test. You can then apply any penalties based on your own policy.
- **Display dates/times:** If these are left blank the test will be displayed as long as the link is **Available** (see above)
- **Password:** not usually needed. Use this only if you need to restrict the test to one or more students (these students must all use the same password to take the test).

- **Gradebook Settings:** Usually a test will be part of the grade but you can uncheck this. Similarly you can hide the test results from the Gradebook if you need to do that.
- **Test Feedback:** once a student submits a test, he or she can obtain feedback by clicking their test grade. What they see is determined by the checked boxes in this section.

For more about managing your test and the Gradebook, see the **Managing Your Online Gradebook** tutorial. You can change the order in which your tests and assignments on the **Assignments** page are displayed — just go to **Control Panel** and choose **Assignments** and reassign the order numbers for each item.

The test is now ready — be sure it is set to be **Available!** If you want to change this later (or make any other modifications), you can just go to **Assessments** from the **Control Panel** and choose the **Modify** button next to the test.

NOTES ON QUESTION TYPES

Question Type: Matching Answer questions

These questions provide a list of terms and definitions and require students to match them. When presenting these, Blackboard simply lists the terms on the left and definitions on the right. These two lists do not always line up because doing that would create problems with the user interface. For example if some questions/statements require many lines of text, while the terms are very short, the list of terms would be separated by large amounts of white space which would confuse students.

Question Type: Hot Spot questions

One interesting question type is the Hot **Spot**. This allows you to provide an image, ask a question, and have the student click some part of the image to answer the question. So for example "Which bird in the image is a Kingfisher?"

In order to create a hot spot question, you should have your image ready on your disk. When you choose **HotSpot**, you will be asked to enter the text for your question and the point value, and you will be asked to browse to the image location. When you click **Next** you will then see the image that was uploaded. You must then point to the top left corner of the area you want to generate a **Correct Answer** and drag the mouse to the bottom right of this area. When you release, a rectangle will appear surrounding this area. If you want to redo this, click the **Clear** button below the image and start again. When you're done, type in any comments for correct and incorrect answers, and click **Submit**.

The student taking the quiz must click the image. This will leave an indicator mark on the image. When the test is graded, the student will receive a correct score if the mark is within the area you indicated, incorrect otherwise.

NOTE: Blackboard depends on your screen resolution setting! If you have trouble with this feature, try a higher resolution setting for your monitor.