Test Security: Using Random Blocks and Test Pools

Test Pools and Question Randomization are tools instructors can use to reduce academic misconduct in their online exams. The following section describes these techniques.

Random Blocks
Random Blocks are assessments created from large set of questions pulled at random for each student’s exam. Random blocks select questions at random from a question pool so each student’s exam is unique. Random blocks can be created from one or more pools of questions.

Test Pools
Pools are a collection of questions that you can classify by topic or skill level and include in tests and surveys. Pools allow instructors to organize questions and manually add them to each test or survey. When selecting which questions to include in a pool, Blackboard presents a list of all course questions. Instructors can use check boxes to select individual questions or all questions. Instructors also have the ability to edit or delete each question in a pool and change the default point values for each assigned question. When instructors select pool questions for a test, links are created between the test and the pool questions. When changes to linked questions occur, Blackboard will produce a warning message that any changes made in the pool will take effect anywhere the question appears.

How to Build a Pool
To begin building a Pool in Blackboard, follow the steps below:

Step 1. On the Control Panel, expand the Course Tools section and click the Tests, Surveys, and Pools option;

Step 2. On the Tests, Surveys, and Pools page, click Pools;

Step 3. On the Pools page, click Build Pool on the action bar;

Step 4. Complete the Pool Information page and click Submit;
**Step 5.** Add questions to the pool. To add questions, instructors can *Create Questions, Upload Questions, or Find Questions* in other tests, surveys, and pools;

![Create, Find or Upload Questions for the Pool](image)

**Step 6.** Click **OK** to return to the *Pools* page.

**How to Edit Existing Pools**

To edit existing Pools, use the steps below:

**Step 1.** On the *Pools* page, access the Pool's contextual menu and click *Edit*.

**Step 2.** Add questions, delete questions, or change the default point values.

**Step 3.** Click **OK** to return to the *Pools* page.

**How to Edit Questions in a Pool**

After students begin taking a test, instructors should **NOT** make changes to pool questions deployed in the test. If instructors edit a pool question after students have submitted a test that includes the edited question, students will view the new modified question when they view their grades and feedback. They will not view the original question.

Linked questions are indicated by a globe icon. Changes to linked questions produce a warning message that the changes take effect everywhere the question appears.

If a question has attempts, changing it will require any submitted attempts to be re-graded and may affect test scores. If this happens, affected instructors and students are notified.

To edit a question in a Pool, use the steps below:

**Step 1.** On the *Pools* page, access a pool’s contextual menu and click *Edit*.

**Step 2.** On the *Pool Canvas*, instructors can filter the list of questions by making selections in the *Browse Criteria* panel.

**Step 3.** Access a question’s contextual menu and click *Edit* to make the changes.
Step 4. Click Submit to commit the changes in all tests where that question appears. Alternatively, instructors can Save as New to create a new question, which does not require re-grading of existing attempts.

**How to Implement Questions Pools in Tests**

When creating a test, instructors can use Random Blocks to be sure that each student receives a different version of the test. A random block is a set of questions retrieved at random from one or more question pools to be presented each time the test is taken.

When instructors add questions to a test using the random block feature, each question is linked, not copied. Therefore, if the instructor changes the original question, the revised version of the question appears.

**Step 1.** Click Tests, Surveys, and Pools on the Course Tools menu and then select Tests on the following page;

**Step 2.** On the Tests page, click the Build Test button or alternatively Edit an already existing test.

**Step 2.** On the Test Canvas, mouse over to the Reuse Question drop-down and click Create Random Block to begin searching for questions.

**Step 3.** In the Create Random Block pop-up window, select the check boxes for one or more pools.

**Step 4.** Select the check box for at least one question type to include in the test. All questions that meet the criteria appear in the right side of the pop-up window.
Step 5. Click Submit. The Test Canvas appears and displays a success message. The random block of questions is added to the test.

Step 6. Click the Number of Questions to display field to access the pop-up box and type the number of questions to display to students. Use a number less than the total number of questions to be sure that different questions are presented each time the test is accessed. Click Submit.

Step 7. Click the Points per question field to access the pop-up box. Type a point value per question. This point value is assigned to each question in the random block. Instructors cannot assign separate point values for individual questions in the same random block. Therefore only include questions of approximately the same difficulty.

Step 8. Click Preview questions that match selected criteria to expand or collapse the list of questions. Instructors can view and edit individual questions.

Important Note: Instructors cannot delete questions within a random block. If there is a question that needs to be excluded from the Random Block, remove the question from the Pool prior to launching the exam.