Online Tests
In Blackboard Learn
Blackboard Learn has extensive support for the creation, deployment, grading, and evaluation of online quizzes and tests. Here we'll take a brief look at general test capabilities, creating test questions, taking a test, and follow-up after a test has been taken.
Blackboard Learn allows instructors to create, import, or reuse test questions. About 17 different types of questions are supported, many of which can be graded automatically by Blackboard. After a test is taken, the relative difficulty and discrimination of each question can be analyzed.
Instructors can specify a variety of options that determine how a test behaves when it is taken by a student. The order of questions can be fixed or randomized. The test can be available to students at any time or restricted to specific date-and-time windows. A time limit can be specified and automatically enforced. Students can be allowed to start a test then exit and return, or can be required to complete a test in a single session. Students can be shown all questions at once, or only one question at a time, and can be allowed to go back to change answers in previous questions or prohibited from doing so. The instructor can specify different availability times and time limits for different students.
Creating test questions can require time and effort. The instructor must consider a question’s relationship to course materials and desired learning outcomes, and its relative weighting or point value. Questions must be worded carefully, and for question types that support automatic grading, the correct answers must be accurately specified. Questions must be carefully edited, and often must be re-evaluated after a test is taken.
It is not always necessary for an instructor to write test questions from scratch. Within a course, questions that already exist on an online test or in a question pool can be reused on other tests. Tests and pools of questions can be exported from one course and imported into another. In addition, many textbook publishers provide tests or question pools as computer files that can be imported into a Blackboard course.
Blackboard can NOT automatically take a test that exists on paper or as a word processing file and turn it into an online test or online question pool. A test in these forms will have to be re-typed, or at least cut and pasted, into Blackboard.
Among the types of questions Blackboard supports are Essay and Short Answer, each requiring the student to type text into the computer. Essay and Short Answer questions have to be graded online by the instructor, after students have submitted their answers. Fill-in-the-Blank and Fill-in-Multiple-Blanks questions require students to type individual words or very short phrases into blanks on the screen. Correct answers can be specified in advance by the instructor, allowing automatic grading. But since it is difficult to anticipate all possible variations in phrasing or spelling, the instructor usually has to check and sometimes change the automatic grading.
Among the most common types of test questions are Multiple Choice and Multiple Answer. Multiple Choice questions allow only one right answer, while Multiple Answer questions allow more than one right answer. True-and-False and Either-Or questions are just two different ways of phrasing the same kind of question, with only one right answer out of a choice of two. All of these allow the instructor to specify the correct answers and are graded automatically.
Matching questions allow students to relate an entry in one column to an entry in another column. Ordering questions ask students to place a set of items in a particular order. These are very common question types and can be graded automatically. They have to be written carefully though, to ensure that there is only one right answer.
### Some Question Types

#### Calculated Numeric and Calculated Formula
- Automatically graded
- Calculated Numeric requires a numeric answer
  - Valid answers can be one number or a range
- Calculated Formula questions require the solution of a formula
  - Numbers in question can vary each time used

Numeric questions ask the student to enter a specific number or a number within a specified range of values. The Calculated Formula question asks the student to solve an equation. The instructor can create the question with several different values for variables in that equation, and Blackboard can then present different students with different versions of the question, each with a different correct answer.
As of April of 2018, The Ultra Experience, a newer version of Blackboard Learn, is not yet available for any courses at Loyola. In the foreseeable future, the Ultra Experience might become available on a course-by-course basis. Be aware, though, that the Ultra Experience does not yet support all of the types of questions just described. The variety of supported question types is expected to increase over time. If you’re considering migrating a course from the Original Experience to the Ultra Experience, and you use online tests, you should check what Ultra can and cannot support at that particular time.
An individual question can be part of a test. But a question can also exist outside of any one test, in what is called a pool. A pool is just a set of questions that can be used and reused in tests. A question in a pool, or a group of questions in a pool, can be linked into a test, but a pool itself never becomes a test, directly.
Inside a test, it is possible to include groups of questions from other tests or question pools. In both of these, the instructor identifies a group of questions from which to draw, and how many questions are to be drawn from that group each time the test is taken. For example, the instructor might specify taking 5 questions from a group of 25 questions that all relate to chapter 1 of the textbook. Each time a student takes the test, Blackboard randomly selects 5 questions out of the group of 25, so each student will have a test with at least some different questions on it. Such random groups of questions are called Random Blocks and Question Sets. The main difference between the two is that Random Blocks can pull only from question pools, while Question Sets can pull from both question pools and other tests.
Defining a test is a matter of developing the questions to be included. Deploying a test is a separate process that makes a test available to students. To deploy a test, the instructor creates an entry point into the test within some part of the content of a Blackboard Course, and sets test options, such as availability schedule, time limits, backtracking control, and the like.
In order to take a test online, a student must know when the test is due, and where to find the entry point for the test in the content of the course. Students should also be informed of basic test options, especially the time limit if there is one, and whether they’ll be able to leave a test and go back to it later or must complete a test in one session. Students can take a test using the Blackboard App installable on some mobile devices, or using a compatible web browser, such as Firefox or Google Chrome, on a computer. Students should be aware that they need a stable, high-quality internet connection to be able to take an online test.
After a test is taken, the instructor has at least three tasks to complete. If the test includes types of questions that require manual grading, the instructor will have to grade them. It is advisable, in addition, for the instructor to spot-check the automatic grading done by Blackboard for other question types, especially if test questions are relatively new. In particular, fill-in-the-blank and fill-in-multiple-blank questions might not be graded by Blackboard in the exactly the same way the instructor would grade them. For newer tests it is a good idea to go the Grade Center column containing the results and request an Item Analysis. This will show the Discrimination and Difficulty scores for each question, and can help identify questions that might need revision.