# Tests and Surveys

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The use of online assessment is a powerful method to engage students, encourage learning, and test student understanding of subject content. The LMS offers a wide variety of features to support assessment of students. Staff can offer both subjective and objective assessments using tests, surveys, and assignments.

**Tests record answers from individuals** and can contribute to that individual’s grade for a subject. **Surveys are anonymous.** They record answers, but permit teaching staff only to see which students have responded to the survey, not what their specific answers were.

### Test Authoring Process

The test authoring processes you choose will be influenced by many factors, including your workflow preferences, the preferences of your co-authors, and the numbers of tests and questions to be created and managed. Questions can be created directly within a test, or added to a test from other sources. It is efficient to create questions within question pools for use in various combinations across multiple tests but this is not essential.

1. **Create questions.** This can be done directly into the pool or using your preferred method e.g. Respondus or an existing text file.
2. **Store the questions in pools** (if not created there directly).
3. **Create a test using questions from the pools.**
4. **Add the test to a content area.**
5. **Make the link to the test available to students.**
Question Pools

Tests and surveys may contain questions drawn at random from question pools, enabling a single test to be delivered multiple times to students throughout a semester, with students receiving different questions each time they attempt the test.

Pools are only available to staff and are not presented to students. Questions may be created in the pool; found and copied from other tests, pools or surveys within the subject; or uploaded from a file. Questions must be added to a test or survey before they are available to students. Note: While questions in a survey are available to be copied to other surveys, they are not easily able to be copied to tests or pools. If you require this functionality, please contact us: http://www.lms.unimelb.edu.au/support/helpdesk/

Create a question pool
1. From the Control Panel select Subject Tools >> Tests, Surveys and Pools >> Pools.
2. Click Build Pool.
3. On the Pool Information page, enter the name, description and instructions for the pool.
4. Click Submit.
5. On the Pool Canvas page, add questions using the Create Question, Find Questions or Upload Questions options.

Create Question
1. From Create Question select a question type – there are seventeen to choose from.
2. Enter the question title, text and options as required.
3. Click Submit.

For detailed information see Question Types on page 18.

Find Question
1. Click Find Questions.
2. On the left, select Browse Criteria to display a subset of questions on the right.
3. Click the check box to the left of the required question(s).
4. Click Submit.

**Upload Question**

1. Click Upload Questions.
2. Click Browse and locate the file containing the questions on your computer.
3. Click Open.
4. Set the default number of points per question (optional and may be altered via question settings later).
5. Click Submit.

**Create a Question Pool (continued)…**

1. Questions added or created using the options above will be displayed in the lower half of the Pool Canvas screen.

2. Put the cursor on a question – a down pointing arrow appears.
3. Click the downward arrow to see options to Edit, Copy or Delete the question.
4. Default points may be altered for a single question by clicking the Default Points box (to the right of the question), entering a new value and clicking the green arrow to accept the change. Default points may be altered for multiple questions by selecting the check box (to the left of each question), entering a value in the Points box (top and bottom of the list of questions), and then clicking Update.
5. If more options are required e.g. feedback for individual answers, images/links to be added to questions or answers, click Question Settings on the top right, and select options as required and Submit. Additional options are then available when creating/modifying questions.
6. Click OK when you have finished editing the pool to return to the Pools page.
Export a Pool

Once a pool has been created it may be exported for use in other subjects, or at other institutions using Blackboard (copyright permitting).

1. From the Control Panel select Subject Tools, Tests, Surveys and Pools.
2. Click Pools.
3. Put the cursor on a pool – a down pointing arrow appears. Click the arrow to see options.
4. Select Export to Local Computer to save a .zip file to your own computer, or Export to Content Collection to select a content collection folder to save the file.

Import a pool

Questions can be created using a text file and then imported. The file must be an export of another pool, or in a particular format. Details of the format required for each question type can be found by clicking the More Help link within Upload Questions.

1. From the Control Panel select Subject Tools, Tests, Surveys and Pools.
2. Click Pools.
3. Click Import Pool.
4. Browse My Computer or Browse Content Collection to locate the pool to be imported.
5. Click Submit.
Blackboard Tests & Surveys

Tests and surveys may be used to assess the learning occurring in a subject. Tests record answers from individuals and can contribute to that individual's grade for a subject. Surveys permit teaching staff to see which students have responded to the survey but their specific question responses are anonymous.

Blackboard contains 17 question types that may be used in any combination to generate tests and surveys. More information on question types is available on page 18. Grading is automatic for questions with set responses (e.g. multiple choice), while manual grading is required for open-ended questions (e.g. short answer). Question-level and response-level feedback can be provided immediately following submission or at a later date, depending on the pedagogical goals. Information on creating Blackboard mobile app friendly tests is available on page 15.

The procedure for creating both tests and surveys is very similar. The following instructions describe the process from the test perspective. When the equivalent survey command is slightly different, this will be shown in brackets. When the equivalent survey command/process is significantly different, two sets of instructions will be given.

Create a Test / Survey

1. From the Control Panel select Subject Tools, Tests, Surveys and Pools.
2. Click Tests >> Build Test (Surveys >> Build Survey).
3. On the information page, enter the name, description and instructions for the test (survey).
4. Click Submit.
5. On the Test (Survey) Canvas page, add questions using the Create Question, Reuse Questions or Upload Questions options. New questions appear at the bottom of the list of questions by default.

Create Question

1. From Create Question select a question type (details on question types follows on page 18);
   OR
   Put your cursor on an existing question to display a plus sign (+) at the top and bottom of the question (questions must be displayed in full for this option). Click a plus sign to select a question type and add it to this location.

2. Enter the question title and text options as required.
3. Click Submit or Submit and Create Another (to continue making questions of this type).

Reuse Question

From Reuse Question you can Create Question Set, Create Random Block or Find Questions.
Notes: Using Create Question Sets or Create Random Blocks reduces your ability to gather statistics: it uses X of Y questions (and the X may refer to a different set of questions each time). If statistics are important to you, use Find Questions instead, as this always uses the same questions.

Reuse Question will show you questions in the current subject only. You can use Export / Import (page 5) if questions from another subject/community are needed.

Surveys can reuse questions that are in pools, tests and surveys. Tests can reuse questions that are in pools and tests only. It is possible to take questions from a survey and import them into a test, but this is not a straight forward process. If this is required, please contact us via the helpdesk for detailed instructions. http://www.lms.unimelb.edu.au/support/helpdesk/
Create Question Set – Select a set of questions from any of the pools, tests and surveys available within the subject, according to question type, category, topic, difficulty, or keyword. You can have a set number of these questions randomly display to students e.g. from a 10 question set, 2 questions may be randomly selected to display to each student.

1. From Reuse Question select Create Question Set.
2. Select criteria on the left to display the list of related questions on the right. Criteria may be selected from tests, question types, categories, topics, levels of difficulty and keywords.
3. Click the check box to the left of any item to be included in the set.
4. Click Submit.

5. You will be prompted for the Number of Questions to display and Points per question on the right hand side.

A Question Set placeholder appears in the test, indicating the number of questions in the set, the number that will be used, the points per question. The Questions in the Set link at the bottom may be used to view questions that match the selected criteria and remove questions if desired.

Create Random Block – Select a block of questions from any one pool by question type. Have a block of questions randomly display to students e.g. from a block of 10 true/false questions, 2 questions may be randomly selected to display to each student.

1. From Reuse Question select Create Random Block.
2. Select the name of the pool(s) and question types to use. The screen will update.
3. Click Submit.
4. Select the Number of Questions to display to students and Submit.

Find Question – Find a question(s) from subject test, surveys and pools and reuse in this test.

1. From Reuse Question select Find Questions.
2. On the left, select options under Browsing Criteria to display a subset of questions on the right. Criteria may be selected from tests, question types, categories, topics, levels of difficulty and keywords.
3. Select whether you want to Copy or Link to the questions.
   Copy with give you an independent copy of the question. If Link is selected and the original question is altered, your linked version will also display the changes.
   If you use Find Question again, your first selection will appear by default, but this can be changed at the top of the Find Question dialog. Click Continue.
4. Click the check box to the left of the required question(s).
5. Click **Submit**.

Each question you select is now added to the test and displayed in full. If it is a linked question (step 2) the icon to the left of the question will show a chain. If the original question changes, so will the linked version.

**Upload Questions**

Questions can be created using a text file and then imported. The text file must be in a particular format. Details of the format required for each question type can be found by clicking the **More Help** link (top of page) within **Upload Questions**.

1. Click **Upload Questions**.
2. Click **Browse** and locate the file containing the questions on your computer.
3. Click **Open**.
4. Set the number of points per question (optional and may be altered via question settings later).
5. Click **Submit**.
Create a test/survey continued...

1. Questions added or created using the options above will be displayed in the lower half of the screen. To save space, click the **Hide Question Details** button to show the question title only.

2. Put your cursor on a question to have a downward arrow appear to the right. Click the arrow to see options to Edit, Copy or Delete the question.

3. Drag the double headed arrow to the left of a question to reorder the questions

4. Default points for an existing question may be altered by clicking the current points and entering a new value. Click **Submit** to the accept change.
   Notes: To change the default points for all new questions, click **Question Settings** at the top of the Test Canvas. From **Scoring** enter the new default value of questions and click **Submit**. To change to points for multiple existing questions click the check box to the left of each question to be changed, type the number of points in the **Points** box (top or bottom of the list of questions) and **Update**.

5. If more options are required e.g. feedback for individual answers, click **Question Settings** and select options as required and **Submit**. Additional options are then available when creating/modifying questions.

6. Click **OK** when finished editing the test (survey) to return to the Tests (Surveys) page.

**Make a test / survey available to students**

1. Navigate to the page where you wish to create a link to the test (survey).

2. Ensure **Edit Mode** is **ON**.

3. Click **Assessments**, **Test (Survey)**.

4. Select the relevant test (survey) from the list; **OR**
   Click **Create** to make a new test (survey).

5. Click **Submit**.

6. Select settings as required. Options are explained in the section following.
   If the test (survey) is to be immediately available to students ensure you select **Yes** for **Make the link available**.

7. Click **Submit**.
Test / Survey options

Show Test Description / Show Instructions – Select these options to have the description and instructions visible to students before they start the test.

Open Test in New Window – You may wish to choose this option if it is an ‘open book’ test where you want students to be able to access their LMS subject at the same time.

Make the Link Available – Select Yes to allow students to access the test. Even if date/time restrictions are set on the test, Make the Link Available needs to be set to Yes for students to be able to see the test.

Add a New Announcement for this Test – A system generated announcement notifying all subject members that the test has been made available will be sent.

Multiple Attempts – Select this if more than one attempt at the test is to be allowed. Can be unlimited or a set number.

   Score attempts using – If multiple attempts are allowed, you can choose which attempt will be used to determine the score from: first, last, highest, lowest and average.

Force Completion – Requires the student to complete the test in one sitting. The test cannot be saved and completed at a later date.

Set Timer – Displays a timer counting down from the allocated time to complete the test.

   Auto-submit – If the timer is used, Auto-submit becomes an option. When turned ON, this will automatically submit the test after the time set has elapsed.

Display After/Until – Allows staff to select the date and time range that the test will be available.

Password – Requires that a password be entered before the test can be started.

Test Availability Exceptions – Allows you to select groups or individuals who will have different test conditions to the standard ones. Differences can include: number of attempts, time allowed (if timing set for the test), visibility and force completion options.

Due Date – Set a date for completion of the test. Test may either be marked as late if completed after this date, or students can be prevented from taking the test.

Self-assessment Options (tests only) – Choices to include this item in the grade centre (default), or hide completely from the instructor (not recommended unless staff never want to be able to interrogate the test statistics to see if the questions are fair).

Show Test Results and Feedback to Students – Select the degree of feedback that students will be able to view and when this will be visible. Different conditions may apply after submission, after due date, after availability end date and after grading.

Note: Even if Score is not selected, students will be able to see the total score for the test when they submit and again via My Grades. To prevent this, manually hide the test column in the grade centre from students.
Test Presentation – Select the presentation of questions from all at once or one at a time (option to prohibit backtracking) and choose if the order is to be randomized. Note: The randomise option should not be used if the test is to be taken via the Blackboard app on a mobile device as the two are incompatible.

Edit Test / Survey

1. Navigate to the content page where the test (survey) exists.
2. Put the cursor on the test to see down pointing arrow appear to the right of the title.
3. Click the downward pointing arrow and select Edit the Test (Edit the Survey).

Note: If you select Edit the Test (survey) once it has been accessed by students, a warning message will appear. You will also be notified if any students are currently taking the test.

Changes such as correction of spelling mistakes and selection of the correct answer may be made. If you do this, you will be prompted to Submit and Update Attempts (Submit and Regrade appears if changing the point value of a question). This means tests that have already been taken will be marked according to the new answers specified.

If a major change such as removing a question is required then you will be prompted to Delete and Regrade the test. Alteration of test results should be carefully planned. It is advisable to download a complete set of test results from the Grade Centre before embarking on any changes to a test.

It is not possible to add a question to a test (survey) that is already deployed. Instead you should delete the test (survey) from the content page where it appears (this will not delete it from the LMS). You can then edit the test (survey) and reinsert it into the appropriate content page. You could also create a second test with just the one question in it. Further note: if students have submitted a test (survey) that is subsequently deleted, you will be given the option to preserve the scores in the Grade Centre.

If you want to edit the test description or instructions, edit the test/survey (as described above), click the down pointing arrow next to the name and choose Edit.

Download test results

Test results are available via the Grade Centre, so long as the ‘self-assessment, hide’ option was not selected.

Surveys results are accessed in a different manner. For information see page 13.

1. Open the subject that contains the test.
2. From Control Panel select Full Grade Centre (to see everything) or Tests (to see tests only).
3. A column representing the test will be listed.

Note: You may need to scroll right to view the desired column.
4. Students who have attempted the test will have a score; OR
   an exclamation mark 🚨 will be displayed indicating that the test needs marking (certain question types cannot be automatically marked e.g. short answer or essay questions).
5. Click the down pointing arrow in the grade centre column heading.
6. Select Download Results.
7. Select options as desired (for example Comma for text file, Tab for Excel file).
8. **Click to download results.**

9. Open the downloaded file (for example with Excel) and analyse as required.  
   Note: Tests may also be analysed using Item Analysis (see page 15).

**View, mark and give feedback on tests**

This method requires each student’s results to be manually edited. This allows you to enter individual feedback.

1. Open the subject that contains the test.
2. From Control Panel select **Full Grade Centre** (to see everything) or **Tests** (to see tests only).
3. A column representing the test will be listed. Note: you may need to scroll right to view the relevant column.
4. Students who have attempted the test will have a score; OR
   an exclamation mark 🔄 will be displayed indicating the test needs marking (certain question types cannot be automatically marked).
5. Click the down pointing arrow in the grade centre column heading.
6. Click **Grade Attempts** or **Grade Anonymously** (if you prefer not to see students’ names attached to their submissions).
7. The student submission will be displayed along with automatic marking and feedback (depending on preferences selected and question type).
8. Where manual marking of a question is required, the question and student answer will be displayed along with a feedback field. Enter feedback as desired. 
   Note: Students can view this feedback when they revisit the test if you have set **Test Options** to allow this.
9. Additional feedback may be added in the **Feedback to User** text box towards the bottom of the screen. Comments to other staff can be added in **Grading Notes**.
10. Click **Save and Exit** to finish grading; **Save and Next** to continue grading.

**Grade Questions**

If there is a question that requires manual marking, or if a question was released to a test with a mistake in it e.g. poorly worded or not enough points given, staff can collect all submissions for that specific question together to mark it or to make the necessary alterations.  
Note: A deployed test may also be edited (locate test on content page>>Edit) to change the correct answer. If this is done, the already submitted tests are recalculated.

1. Open the subject that contains the test.
2. From Control Panel select **Full Grade Centre** (to see everything) or **Tests** (to see tests only).
3. A column representing the test will be listed. Note: you may need to scroll to view the column.
4. Students who have attempted the test will have a score; OR
   An exclamation mark 🔄 will be displayed indicating the test needs marking (certain question types cannot be automatically marked).
5. Click the down pointing arrow in the grade centre column heading.
6. Click **Grade Questions**.
7. Click the number displayed in the **Responses** column next to the question to be graded. This number reflects the number of responses submitted for that specific question.
8. Student answers are displayed along with their score for this question.
9. Click **Edit** and change the score or grade the question as required.
10. Click **Submit**.
11. Click **Back to Questions** to continue grading other questions.
12. Click **OK** when finished to return to the grade centre.

**View and download survey results**

All Survey results are available via the Grade Centre.

1. Open the subject that contains the survey.
2. From **Control Panel** select **Full Grade Centre**.
3. A column representing the survey will be listed.
   - Note: You may need to scroll right to view the relevant column.
4. Students who have attempted the survey will have a tick ✓ in that column.
   - Note: This will let you know that a student has participated in the survey, but not what their answers are as surveys are anonymous.
5. Click the down pointing arrow in the grade centre column heading.
6. Select **Download Results**.
7. Select options as desired (for example **Comma** for text file, **Tab** for Excel file).
8. **Click to download results**.
9. Open the downloaded file (for example with Excel) and analyse as required.

**Warning:** If students have pasted text from Word or any non-plain text source, you may see formatting codes in their submission when you download their results. Students should be encouraged to type directly into the survey or to paste plain text.
View test / survey statistics

Test & Survey statistics are viewed via the Grade Centre. User responses display as a percentage.

1. From Control Panel select Full Grade Centre.
2. A column representing the test/survey will be listed.
   Note: you may need to scroll to view the column.
3. Click the down pointing arrow in the grade centre column heading.
5. The number of attempts will appear at the top of the screen.
   Each question, answer and percentage of respondents selecting that answer will be displayed.

For more information on test statistics see the animated guide http://www.lms.unimelb.edu.au/animations/gc_testsurveystats.htm or Have I used good questions? on page 15.

What if a student experienced access problems while taking a test?

The access log shows a detailed list of every interaction that students engage in when taking a test. If a student started a test that was then interrupted, the log will show the time the test was started. If a network or internet disruption occurred during the test, the log would show an unusual gap in the time. Test Information also includes an option to clear the test attempt.

1. From Control Panel select Full Grade Centre.
2. Navigate to the cell of the student / test you wish to investigate.
3. Click the down pointing arrow and select View Grade Details.
4. Click View Attempts.
5. At the top of the screen, below the name of the student there is an option for Test Information.
   Click Test Information to expand and show details.

6. Click Access Log.
7. Details of the time taken by the student doing the test are displayed.
Clear test / survey attempt

When you define the test settings to allow a single attempt only, it may sometimes be necessary to allow a student to retake a test/survey. To allow this, you can clear that student’s first attempt.

The alternative is to edit Test Availability Exceptions so that this student has an additional attempt (see page 10).

1. From Control Panel select Full Grade Centre.
2. A column representing the test/survey will be listed.
   Note: You may need to scroll right to view the column.

To clear an attempt for an individual student

You can Clear Attempt inside Test Information as per in the section above, else:

1. Students who have attempted the test/survey will have a score, a tick or some other icon indicating there has been activity in that test/survey for that student.
2. Put the cursor on the cell for that student’s attempt. A down pointing arrow appears.
3. Click the arrow and select View Grade Details.
4. Click Clear Attempt from the list of options at the bottom of the screen.
   Note: You may wish to edit Test Availability Exceptions instead to allow this student an additional attempt (see page 10).

To clear an attempt for all students

1. Click the down pointing arrow in the grade centre column heading.
2. Select Clear Attempts for All Users.

Are my tests mobile friendly?

Tests can be taken from mobile devices, if the tests use question types and settings which are mobile-compatible.

Some tests can be completed through the app; however tests including particular question types must be completed through a browser. The presentation of tests though the app differs according to the device used and looks very different to the web browser version.

To build a test that can be used through the Blackboard mobile app either:

Create a Test using the standard method (Subject Tools>>Tests, Surveys and Pools>>Tests>>Build Test). Use only True/False, Multiple Choice, Short Answer, Hot Spot, Fill-In-Multiple-Blanks, File Response (image only) or Calculated Numeric question types. Avoid randomising answers within a question, randomising the order of questions, including random question blocks in the test or presenting questions one at a time. OR

Create the test via Assessments >> Mobile Compatible Test. This test creation method is suited to only simple tests, the question, feedback and settings options are very limited.

Conversely, if you don’t want students to complete a test through the mobile app, it is simple to alter your test to include an incompatible question type or option, as listed above.

Have I used good questions?

Item Analysis is a tool used for only tests; it can help you to determine if the questions you are using are suited to purpose.

Item Analysis is available from the drop down next to the test on the content page, the Control Panel >> Tests, Surveys and Pools >> Tests area, else from the drop down in the Grade Centre column.
1. The test name will be displayed in the drop down (another test may be selected if desired).

2. Click Run.

3. An email will be sent when the report is generated, but you may want to wait on the screen as it is usually quite fast.

4. Click the name of the report to open.

5. Information about the test is displayed, including discrimination and difficulty of questions.

6. Questions are displayed at the bottom of the screen. Any that may need reviewing (because they are too easy, too hard etc) will have a pink dot to the left of their name.

7. Click a question name to see more details.
   Note: Not all question types are able to provide details.
8. Use the Information buttons as needed to find more information about a result.

9. Use the *Edit Test* link on the top right of the page if you need to alter the questions in the test. If a student is currently taking the test you will be warned. If you make a change, the default is to save and recalculate and student submissions.
**Question Types**

The LMS contains 17 question types which may be used in any combination to generate tests and surveys. Any time you create a question you will have the option when finished to submit and create another question of that type in the one action.

Notes: These instructions work for Tests, Surveys and Pools, assume you are already editing and are ready to create questions. Options may vary depending on the Creation Settings selected.

Categories and keywords may be useful when automatically generating tests from question pools. Questions may be automatically selected using the categories and keywords entered, e.g. you can choose questions of ‘High Difficulty’ rating, or questions containing the keyword ‘cardiology’.

**Calculated Formula**

Calculated formula questions contain variables that change so that two different people, or a single person doing a test multiple times, will see a different question.

Example question: If a small bag contains 6 apples and large bag contains 15 apples, how many apples do I have in 3 large and 4 small bags?

The variables are the number of apples per bag and the number of bags.

1. From **Create Question** select **Calculated Formula**.
2. Enter **Question Text**, putting square brackets around each variable. 
   Note: Variables must be letters, numbers (0-9), periods, hyphens or underscores. No spaces are allowed in variable names.

3. Enter the formula required to produce the solution. Special characters are available under the buttons at the top of the answer formula area.

4. Options allow you to add a numeric or percentage variation to the answer range. 
   If the answer must be exact, the range should be set to 0.
5. Choose if partial credit will be allowed.
6. If it is important that the units be included in the answer (e.g. Kg, MHz), these may be specified. Including the correct unit may constitute a percentage of the points of the question.
7. Click **Next**.
8. Enter the minimum and maximum values for each of the variables. If decimal points are allowed, enter the number of places.
9. Enter Answer Set Options as required. Choose the number of decimal places / significant figures the question should calculate to. The number of answer sets will determine the number of sets of variables that will be created. The greater the number of sets, the smaller the likelihood of students doing the same question. BUT the longer it will take Blackboard to generate the question.

10. Click Calculate to create the answer sets and move to the next page.

11. Each answer set is displayed for you. You may tweak any set as desired by altering the variable values. Click Calculate (bottom left of sets) to update the answers.

<table>
<thead>
<tr>
<th></th>
<th>w</th>
<th>x</th>
<th>y</th>
<th>z</th>
<th>Calculated Answer (0 Decimal places)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>6.0</td>
<td>17.0</td>
<td>6.0</td>
<td>5.0</td>
<td>132 ± 0</td>
</tr>
<tr>
<td>2</td>
<td>7.0</td>
<td>15.0</td>
<td>5.0</td>
<td>9.0</td>
<td>117 ± 0</td>
</tr>
<tr>
<td>3</td>
<td>5.0</td>
<td>15.0</td>
<td>5.0</td>
<td>6.0</td>
<td>120 ± 0</td>
</tr>
<tr>
<td>4</td>
<td>5.0</td>
<td>16.0</td>
<td>6.0</td>
<td>7.0</td>
<td>125 ± 0</td>
</tr>
<tr>
<td>5</td>
<td>6.0</td>
<td>19.0</td>
<td>5.0</td>
<td>7.0</td>
<td>137 ± 0</td>
</tr>
<tr>
<td>6</td>
<td>4.0</td>
<td>12.0</td>
<td>5.0</td>
<td>8.0</td>
<td>164 ± 0</td>
</tr>
</tbody>
</table>

12. Click Remove to delete sets that you do not want to use. Note: Clicking calculate will not bring back removed sets.

13. Enter feedback, categories and keywords as appropriate.

14. Enter Instructor Notes if required.

15. Click Submit.

What the calculated formula question will look like to students:

Calculated Numeric

Calculated Numeric questions ask a question that requires a number only answer. An answer range is allowed. The correct answer should not contain alphabetic characters. If alphabetic characters are entered as part of the answer (e.g. 3 cm, 8 litres, 100 buildings) the alphabetic component is disregarded.

Example question: In litres, how much water can an Asian elephant hold in its trunk?

1. From Create Question select Calculated Numeric.
2. Enter the Question Text carefully so that it is clear a numeric answer is required.
3. Enter the correct answer and answer range (if allowed).
4. Enter feedback, categories and keywords as appropriate.
5. Enter Instructor Notes if required.
6. Click Submit.

What the calculated numeric question will look like to students:

In litres, how much water can an Asian elephant hold in its trunk?
Either/Or

One of the simplest question types, Either/Or, asks a question/makes a statement and then allows the student to choose between two default options e.g. Yes/No, Agree/Disagree, Right/Wrong and True/False. Note: There is also a True/False only question type.

1. From Create Question select Either/Or.
2. Enter a short title and the question text or statement.
3. Select the preferred Answer Orientation setting.
4. Select the appropriate Answer Choice e.g. Yes/No, Agree/Disagree, Right/Wrong, True/False.
5. Click the radio button next to the Correct Answer.
6. Enter feedback, categories and keywords as appropriate.
7. Enter Instructor Notes if required.
8. Click Submit.

What the either or question will look like to students:

Essay

Essay questions require text input from the student as their answer. A full array of text formatting tools are provided to the student (see image below). The essay question must be manually marked by teaching staff before results for the entire test will be available to students.

1. From Create Question select Essay.
2. Enter the Question Text.
3. Enter an example Answer (optional) to give students and markers an indication of the style of answer you are after. Note: The example answer will be available to students taking the test. Do not enter the correct answer here.
4. Click Add Rubric if the use of a rubric is required by staff to mark this question. For more information on rubrics see the Blackboard Rubrics guide: http://www.lms.unimelb.edu.au/user_guides/rubrics_guide.pdf
5. Enter feedback, categories and keywords as appropriate.
6. Enter Instructor Notes if required.
7. Click Submit.

What the essay question will look like to students:
File Response

File Response questions will require manual marking by teaching staff. Results for the entire test will not be available to students until the test is marked.

Students will be required to attach a file from either their computer or the content collection that answers the question.

1. From Create Question select File Response.
2. Enter the Question Text.
3. Click Add Rubric if the use of a rubric is required by staff to mark this question. For more information on rubrics see the Blackboard Rubrics guide:
4. Enter feedback, categories and keywords as appropriate.
5. Enter Instructor Notes if required.
6. Click Submit.

What the file response question will look like to students:

```
How would you promote good hygiene in biology laboratories? Use a poster to illustrate your ideas.
```

Fill In Multiple Blanks

Fill in Multiple Blanks makes a statement, but leaves out key words that the student will supply.

1. From Create Question select Fill in Multiple Blanks.
2. Enter a short title and the question text or statement specifying up to ten variables in square brackets.
   Note: Variables must be letters, numbers (0-9), periods, hyphens or underscores. No spaces are allowed in variable names. An error will occur if duplicate variables are attempted.
3. Select to Allow Partial Credit if desired.
4. Click Next.
5. On the new screen, your question/statement is displayed so that you can enter the answers to the blanks in your question/statement. If you need to modify your base statement at this point, click Previous.
6. Select the Number of Answers possible for the first variable in the question/statement.
   Note: this question type relies on perfect spelling to be graded correctly so if spelling variants exist for the correct answer you may wish to enter all variants.
7. Enter the possible answers for the other variables within the question text. Multiple responses for each variable may be permitted.
8. Click Next.
9. Enter feedback, categories and keywords as appropriate.
10. Enter Instructor Notes if required.
11. Click Submit.

What the fill in the multiple blanks question will look like to students:

```
A precipitation reaction between Ag and Cl will form _______.
While the formula for burning _______ can be denoted: CH₄ + 2O₂ --> CO₂ + 2H₂O
```

**Fill In The Blank**

Fill in the Blank makes a statement, but leaves out a key word that the student will supply.

1. From Create Question select Fill in the Blank.
2. Enter a short title and the question text or statement.
3. Select the Number of Answers possible for the blank in the question/statement.
   Note: This question type relies on perfect spelling to be graded correctly so if spelling variants exist for the correct answer you may wish to enter all variants.
4. Enter the possible answers. Multiple responses may be permitted e.g. 10 or ten.
5. Enter feedback, categories and keywords as appropriate.
6. Enter Instructor Notes if required.
7. Click Submit.

What the fill in the blank question will look like to students:

```
A precipitation reaction between Ag and Cl will form _______.
While the formula for burning _______ can be denoted: CH₄ + 2O₂ --> CO₂ + 2H₂O
```

**Hot Spot**

An image is presented along with a statement. The student is asked to identify a certain element (‘Hot Spot’) within the image which matches the question requirements. The student clicks the area on the image they want to select. A Clear button is available if the student wants to change their mind and select a different area within the image.

1. From Create Question select Hot Spot.
2. Enter a short title and the question text or statement.
3. Use the Browse My Computer or Browse Content Collection button to locate the image file.
4. Click Next.
5. Click and drag the mouse over the area in the image you wish to specify as the Hot Spot (i.e. the desired area for students to click).
   If you make an error, click Clear below the image and re-specify the Hot Spot area.

6. Enter feedback, categories and keywords as appropriate.

7. Enter Instructor Notes if required.

8. Click Submit.

What the hot spot question will look like to students:
(See image on right.)

Jumbled Sentence
Jumbled sentence questions will ask a student to complete a statement by selecting options from drop down menus. The number of options that appear in the drop down can exceed the number of items needed to fill the gaps.

Example statement: When you are preparing to use a chemistry laboratory you must first _______, then ______________ and finally ______________.

1. From Create Question select Jumbled Sentence.

2. Enter the Question Text, putting square brackets around each variable to be selected.
   Note: Variables must be letters, numbers (0-9), periods, hyphens or underscores. No spaces are allowed in variable names. An error will occur if duplicate variables are attempted.

3. Click the check box if partial credit is allowed.

4. Enter the answers that are to appear in the drop down menus. Up to 20 answers may be selected.
   Note: The same answers will appear in each drop down. Answers will appear in the order you type them. There may be more answers than drop downs i.e. some answers may not be used.

5. Click Next.

6. Enter the correct answers by selecting them from the drop down menus in the example question.

7. Enter feedback, categories and keywords as appropriate.

8. Enter Instructor Notes if required.

9. Click Submit.

What the jumbled sentence question will look like to students:
Matching

Matching questions asks students to pair items in one column to items in another column. There can be different numbers of items in the columns to make it more difficult. Partial credit is allowed by default.

1. From Create Question select Matching.
2. Enter a short title and the question text or statement describing the terms you wish to match.
3. Select the preferred Partial Credit and Answer Numbering settings.
4. Select the number of questions you want to use.
5. Enter the ‘questions’ and ‘answers’ in the boxes provided.
6. If you would like some additional answers to make the correct answers more difficult to guess, click Add unmatched answer choices and select the desired number. Enter the answer text.
7. The answer order defaults to Manual and displays the answers in the order they were entered. You have the choice to manually rearrange the order (drag answers into the desired order), else click the Randomly button to let the LMS select the order.
8. Enter feedback, categories and keywords as appropriate.
9. Enter Instructor Notes if required.
10. Click Submit.

What the matching question will look like to students:

<table>
<thead>
<tr>
<th>Essendon</th>
<th>A. Bombers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Collingwood</td>
<td>B. Dockers</td>
</tr>
<tr>
<td>Gold Coast</td>
<td>C. Hawks</td>
</tr>
<tr>
<td>Fremantle</td>
<td>D. Magpies</td>
</tr>
</tbody>
</table>

Multiple Answer

Multiple answer questions are very similar to multiple choice questions (below) except that there may be more than one correct answer.

1. From Create Question select Multiple Answer.
2. Enter a short title and the question text or statement.
3. Select the number format to be used, orientation of the question (vertical or horizontal), partial credit, and whether the answers should appear in random order.
4. Select the number of answers which this multiple choice question will use. If you want to use fewer than four answers, this may be selected by clicking the Remove button next to one or more of the default entries.
5. In the answer area, enter the correct and incorrect answers in the desired order. On completion of a test/survey, the feedback will appear for the student if you have allowed feedback options for that test/survey.
6. Indicate the correct answers by clicking the radio button that is positioned at the right of each correct answer.
7. Enter feedback, categories and keywords as appropriate.
8. Enter Instructor Notes if required.
9. Click Submit.

What the multiple answer question will look like to students:

Newton’s three famous laws of motion include these concepts (select three):

- Speed
- Velocity
- Mass
- Vector
- Energy
- Gravity

**Multiple Choice**

Select the single correct answer from those offered.

1. From Create Question select Multiple Choice.
2. Enter a short title and the question text or statement.
3. Select the number format to be used, orientation of the question (vertical or horizontal), partial credit, and whether the answers should appear in random order.
4. Select the number of answers which this multiple choice question will use. If you want to use fewer than four answers, this may be selected by clicking the Remove button next to one or more of the default entries.
5. In the answer area, enter the correct and incorrect answers in the desired order. On completion of a test/survey, the feedback will appear for the student if you have allowed feedback options for that test/survey.
6. Indicate the correct answer by clicking the radio button that is positioned at the top left of the correct answer.
7. Enter feedback, categories and keywords as appropriate.
8. Enter Instructor Notes if required.
9. Click Submit.

What the multiple choice question will look like to students:

Who is credited as being the first person to reach the South Pole?

- Frederick Cook
- Roald Amundsen
- Robert E. Peary
- Ernest Shackleton
- Edmund Hillary
Opinion Scale/Likert

Opinion scale/Likert questions may be used to gauge levels of agreement, likelihood, acceptance, importance or frequency.

1. From Create Question select Opinion Scale/Likert.
2. Enter a short title and a statement with which respondents may agree or disagree (e.g. 'I like chocolate').
3. Select the preferred Answer Numbering and Answer Orientation settings.
4. Select the boxes for Allow Partial Credit and Show Answers in Random Order as required.
5. Amend any or all of the six automatically provided responses to suit the statement text.
6. To remove any response (if required), click the Remove button associated with that response.
7. Enter feedback, categories and keywords as appropriate.
8. Enter Instructor Notes if required.
9. Click Submit.

What the opinion scale / Likert question will look like to students:

```
All chemistry students should have basic first aid training.

```

Ordering

Ordering questions allow you to provide a statement and options that students will be asked to put in order.

1. From Create Question select Ordering.
2. Enter Question Text. This will most likely be in the form of a statement.
3. Enter the possible answers in their correct order. You can increase the number of answers using the drop down at the top of the Answers section.
4. Click Next.
5. Correct answer order is show in the left column; display order is shown in the right column. Put your cursor on an item in the right column and drag into the desired order for students to see.
6. Enter feedback, categories and keywords as appropriate.
7. Enter Instructor Notes if required.
8. Click Submit.

What the ordering question will look like to students:

(See image at right).
Quiz Bowl

Questions may be presented in the format of the Jeopardy® television quiz show. A statement is presented and students must respond in the form of a question which could generate that statement (e.g. ‘Australia’s leading university’ could be an answer to the question ‘What is the University of Melbourne?’). Students would be expected to answer the statement with a matching question. Due to trademark restrictions, LMS refers to these questions as Quiz Bowl rather than Jeopardy® style.

1. From Create Question select Quiz Bowl.
2. Enter the question in the form of a statement. For example, ‘This educational institution commenced teaching in 1854’.
3. Select Allow partial credit if students can receive credit even for answers not phrased in the form of a question. Enter the % of credit allowed for this.
4. Include or remove the interrogatives that must appear in the student response. In this example, ‘Who is the University of Melbourne?’ and ‘What is the University of Melbourne?’ may be accepted though ‘Where is the University of Melbourne?’ would not. Four possible interrogatives are automatically provided – remove or amend these as required.
5. Indicate the number of accepted answer phrases which must follow the possible interrogatives and enter these phrases into the text boxes provided. In this example, ‘is the University of Melbourne’, ‘is University of Melbourne’ and ‘is Melbourne University’ are acceptable phrases. Repeating the interrogative is not required.
6. Enter feedback, categories and keywords as appropriate.
7. Enter Instructor Notes if required.
8. Click Submit.

What the quiz bowl question will look like to students:

This educational institution commenced teaching in 1854.
**Short Answer**

Short answer questions are similar to essay questions, but shorter. The short answer question must be manually marked by teaching staff before results for the entire test will be available to students.

1. From **Create Question** select **Short Answer**.
2. Enter the **Question Text**.
3. Select the number of lines that this short answer should allow.
4. Enter an example **Answer** (optional) to give students and markers an indication of the style of answer you are after. Note: The example answer will be available to students taking the test. Do not enter the correct answer here.
5. Click **Add Rubric** if the use of a rubric is required by staff to mark this question.
6. Enter feedback, categories and keywords as appropriate.
7. Enter **Instructor Notes** if required.
8. Click **Submit**.

**What the short answer question will look like to students:**

![Example of a short answer question]

**True/False**

This is very similar to the Either/Or question type, but is limited to True/False questions.

1. From **Create Question** select **True/False**.
2. Enter a question which may be answered as ‘true’ or ‘false’.
3. Select the preferred **Answer Orientation** settings.
4. Indicate the correct response by selecting True or False.
5. Enter feedback, categories and keywords as appropriate.
6. Enter **Instructor Notes** if required.
7. Click **Submit**.

**What the true / false question will look like to students:**

![Example of a true/false question]
Respondus Tests and Surveys

The University of Melbourne has a campus-wide license for the Respondus software. Respondus is a Windows application that enhances the functionality and usability of Blackboard’s test and survey tools.

Respondus allows staff to develop tests and surveys offline and to publish them directly to one or to multiple subjects in the LMS simultaneously. Questions can be imported from Microsoft Word (DOC), Rich Text Format (RTF) and comma/tab separated text documents. Graphics, video, and audio content as well as mathematical and scientific equations can be easily inserted into questions. Question banks provided by text book publishers can also be used to construct tests and surveys (free if the textbook is the adopted class text). Tests can now also be exported in iPod Quiz format. Example documents for importing questions can be accessed on the LMS website at:


Respondus can also be used to retrieve existing tests, surveys and question pools from the LMS. In addition, staff can generate reports to show question response statistics in LMS tests and surveys, and/or all student grades at a particular time.

Install Respondus

We recommend that you accept the default settings for where the program is installed. It is important to note that you are not able to download the software directly from the Respondus website, nor are you able to use the University of Melbourne licence information to activate a copy previously downloaded from their site.

Note: As with all software available to University of Melbourne staff, you will need administrator access to your computer to install this software. If you do not have sufficient access rights, please contact the ITS Help Desk (8344 0888).

1. In the Manage Content tab of the LMS, click the Institution Content link and navigate to the Respondus folder.
2. Download the Respondus4Campus.zip file to your computer by right-clicking the file and selecting Save As.
3. Extract the files in the zipped package to a folder on your computer.
4. Close all applications before continuing with the Respondus installation.
5. Double click Respondus4Campus.exe to begin the installation.
6. Click Next.
7. Select I accept the terms of the licence agreement. Click Next.
8. Select a location on your computer for installation of Respondus. Click Next.
9. Select a location on your computer for storage of project documents. Click Next.
10. Click Install.
11. Select Yes to install the Respondus Equation Editor.
12. Select a location on your computer for installation of the Respondus Equation Editor. If you are happy with the default setting, click OK.
13. Select whether you wish to view the Respondus Equation Editor readme file.
14. Click Finish.
Activate Respondus
The first time you start Respondus the licence details must be entered to activate the software. Our license does permit you to install a copy of the Respondus software on a home computer. However, please note that you are not permitted to provide the Respondus software or password information to anyone who is not affiliated with our institution. Such an action is a violation of our licensing agreement with Respondus.

1. Double-click the desktop shortcut for Respondus 4 Campus-Wide.
2. Enter the details found in the 2014_Respondus_licence.txt file downloaded in the zip package.
3. Click Licence.
4. Sign up for the optional Respondus newsletter or click Close to finish the setup process.
5. On the Choose CMS Personality page, from the drop down menu select Blackboard 6.3-9.x
6. Respondus will open to the Open or Create page.

Note: Information on using Respondus to create questions is not included here. Instead, refer to the extensive online help available within the Respondus software.

Connect Respondus to the LMS
It is possible to author a test or survey offline using Respondus and to publish directly to a single subject or to multiple subjects in the LMS. Information must be entered about the LMS and the user account. This information can be stored for future use, enabling this task to be bypassed after the initial setup.

1. Open the test in Respondus.
2. Click the Preview & Publish tab.
3. Click Update Settings on the left menu.
4. From the Choose Server drop down menu select Add New Server.
5. Select Yes, check for preconfigured server settings then click Next.
6. Enter a name to describe the Blackboard server (e.g. ‘UniMelb LMS’).
7. Enter your UniMelb username and password and select the box to Save my Username and Password.
8. Select Run Connection Test then click Next.
9. When the test completes successfully, click Next.
10. Click Finish.

Publish a test/survey
1. Open the Respondus test/survey file you wish to publish to a subject in the LMS.
2. Click the Settings tab in Respondus.
3. Set the availability, attempt and feedback options using the Availability and Other Settings options on the left menu.
4. Click the Preview & Publish tab in Respondus.
5. Click Publish to Blackboard on the left menu.
6. Click the Publish Wizard button.
7. Select the preferred publishing method (i.e. single subject, multiple subjects or local file).
8. Select the existing server UniMelb LMS.
9. Click Next.
10. From **Choose Course to publish to** select the subject(s) to receive the test/survey.

11. Adjust the settings as required.

12. Click **Next**.

13. From the subject map that appears select the location within the subject where the test/survey is to be located, then click **Next**.

14. When the test/survey is published successfully, click **Finish**.

Note: It is recommended you wait 5 minutes for the test to appear in the LMS before logging into the LMS to ensure the test/survey settings are as expected.

**View results and statistics**

You can view results and statistics for a Respondus test or survey the same as you would for a Blackboard test or survey. For more information see Results on page 12 and Statistics on page 14.
Grade Centre

Teaching staff are able to view grades for all students and assessment items but students can only see their individual grades for the assessment items which staff have selected to make available.

Some grades are automatically added to the Grade Centre from work generated in other areas of the LMS, such as tests, assignments, and discussion board threads. Student grades may also be manually added to or amended via the Grade Centre. Basic Grade Centre information pertinent to the topics covered in this workshop was covered during the relevant section, but some generic information is also included below.


**Enter a grade**

1. From the Control Panel select Grade Centre >> Full Grade Centre.
2. Identify the grade you wish to enter then click the appropriate cell in the spreadsheet.
3. Enter a new grade or edit an existing grade, then press Enter.

Note: The next cell becomes active. Another grade may be added while the grade in the previous cell is being saved.

**Delete a grade**

1. From the Control Panel select Grade Centre >> Full Grade Centre.
2. Identify the grade you wish to delete then click the cell in the spreadsheet.
3. Press Delete or Backspace on the keyboard.
4. Press Enter.

**Add my Grades to the subject menu**

The My Grades tool can be added to the subject menu to provide each individual student with a single source of all their marks in a subject.

1. Ensure Edit Mode is ON.
2. Click the plus sign + above the subject name in the menu.
3. Select Tool Link.
4. Enter a name to be displayed in the subject menu.
5. Select My Grades as the Type.
6. Ensure Available to Users is selected.
7. Click Submit.

Note: Students are only able to see their own grades; they do not have access to other students’ grades.

Please report any errors or omissions in this guide to lms-guides@lists.unimelb.edu.au

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