Contents

The following sections give brief details on using Blackboard to obtain information from students. This information will most likely be useful for those with an existing form setup who are revisiting it in order to make changes or to download data. Prior knowledge is assumed, namely that you have defined your process for data collection and that you are familiar with the Blackboard environment as well as the quiz and survey tools.

If you haven't already set up a Blackboard data collection form and wish to find out more, the FAQ on the following page provides an introduction.

Data collection with Blackboard FAQ

Who this guide is for?

This guide will be useful to administrative and/or academic staff who wish to collect information from students using Blackboard.

Why would I want to use Blackboard to collect information from students?
Blackboard can be a quick, convenient way to gather data from students. This is because:

- University of Manchester students will all have access to Blackboard and will most likely be familiar with the platform. There are Knowledge Base articles to help them if they need support.
- The results from the data collection quiz can be easily downloaded in a spreadsheet format which enables further analysis.
- Students do not have to enter identifying information as the system will recognise them when they login.
- There are a number of settings available that enable restrictions on the completion of the form. For example: It is possible to control how many times a data collection form can be submitted, to limit the release to a particular date range or to a specific subset of students.
- Any data that students enter into Blackboard is held within the University or with its hosting partners and is regularly backed up and subject to controls to ensure data security and integrity.

What types of information can be collected?

Blackboard quizzes are commonly used to collect information such as student project selection preferences when allocating final year projects and supervisors. However, it could be used for a wide variety of purposes including, but not limited to:

- Holding online elections for student representatives
- Soliciting preferences as to when an event should take place
- Soliciting feedback

Who can I collect information from?

You can use Blackboard to collect information from students who are members of a Blackboard course unit or community space.

What types of information cannot be collected?

Most types of text-based information can be collected (see the section below on question types to see full details). You should, as ever, be mindful of compliance with the Data Protection Act (more detail on this can be found at: http://www.dataprotection.manchester.ac.uk).

How do I use Blackboard to collect student data?

Your eLearning team can support you in setting up your initial data collection form on Blackboard. Contact us via the Support Centre webform: eLearning Support

Blackboard data collection method – Quiz or Survey

In Blackboard you can use either a Test (Quiz) or a Survey to gather data from students. The key difference is the response data you receive. If you use a quiz, then the responses are identifiable by respondent. If you use a survey, then the results are anonymous. The tool you use will depend on what data you are collecting and for what purpose. For example, quizzes have been used as part of a final year project selection process, whilst surveys have been used to elicit votes for student representatives.

Setting up a Quiz/Survey

1. Navigate to the area in Blackboard where you want to add the data collection form.
2. On the dark grey menu bar, move your mouse cursor to the **Assessments** option and select **Test** or **Survey** from the **Assessments** dropdown.
3. Click **Create**. Give the test/survey a name, a description and a set of instructions. It is recommended that you provide clear instruction and reassurance that this is not an assessment.

Editing existing Quiz/Survey questions

1. Navigate to the quiz/survey in Blackboard.
2. Ensure **edit mode** is switched **on**. This setting can be found top right on the light grey toolbar 

3. Move your mouse pointer over the quiz/survey title and click the chevron that appears to the right-hand side. Select **Edit the Test**. You can now edit and add questions.

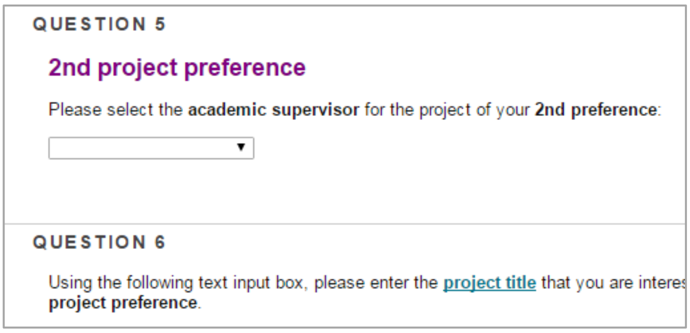
IMPORTANT: after the first response to the form is received, many question types cannot be changed, e.g. the dropdown options on Jumbled Sentence questions can't be changed, additional options can't be added to or removed from multiple choice questions.

Designing your form and adding questions

There are some questions you don't need to ask in your form. Blackboard will make some information available automatically when you use a quiz. This information is: first name, last name, user name. You can also get the spot ID. We discuss how to get this below, in the section entitled 'Importing Student ID Number Information'.

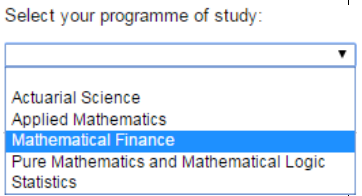
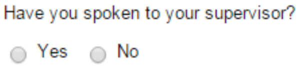
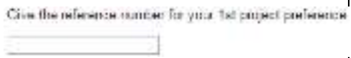
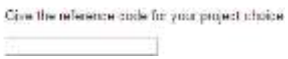
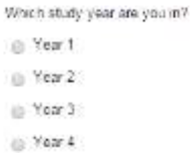
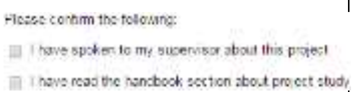
For other types of data/response you need to collect, the question types listed in the Table 1 on the are generally most suitable (see next page for Table 1).

When adding the questions, you may want to include sectioning to give some structure to the form. Blackboard doesn't support question sectioning, but you can instead achieve the same effect by including large clear titles at the top of the **Question Text** entry box when creating the first question in a new section.



After creating your questions, you should set the **Points** next to each question to 0 as you do not want to give the false impression that the data collection form is part of any assessment. However, where you have a particular need to monitor responses to a specific mandatory question (such as acknowledging an important declaration statement), you could set a fixed number of points and monitor completion in the grade centre.

Table 1: Form design – matching data field types to Blackboard question types

Field type	Blackboard question type	Example	Important notes
Dropdown selector	Jumbled Sentence		Students can provide selections from a dropdown list of options. For example, this could be used to gather project selections in order of preference. If you need to add a large number of options to a jumbled sentence question type, this tool can help you do this without having to type in all of the options: [Blackboard Question File Generator](http://man.ac.uk/QZaF4K) (http://man.ac.uk/QZaF4K)*. However there is a **maximum limit of 100 choices** that can be included in a single Jumbled Sentence question.
Two option Yes/No choice	Either/Or		Can be used for Yes/No questions.
Text area	Short Answer		Provides a free-text box for open ended questions.
Text field for *numeric* input	Calculated Numeric question		This provides a small text box which accepts only numeric input and warns user if other input given. This is useful for capturing numeric reference numbers or similar numeric data values, e.g. a numeric code to identify a project choice.
Text field for *any* input	Fill in the blank question		This provides a small text box and can be useful if you want students to submit a very short plain text answer of less than 20 characters, e.g. an alphanumeric code to identify a project choice. Select **exact match** and enter *** in the **Answer 1** field to enable any text to be entered.
Radio buttons for a *single* choice	Multiple Choice		Useful for students to select a radio button next to a *single* choice. It is recommended that this is used with <10 options. If you have more than 10 options, consider using a Jumbled Sentence or Short Answer question type. The minimum number of options that must be included is 2.
Check boxes for *zero or many* choices	Multiple Answer		Useful for students to select *one or more* check boxes next to choices. It is recommended that this is used with <10 options. The minimum number of options that must be included is 2. You can use the multiple answer to request that students tick boxes to acknowledge certain conditions, (although there must be at least two statements listed).

*Log in to Blackboard *before* selecting this link

Configuring your Quiz Settings

If you are setting up a quiz from scratch, after adding the questions you will be prompted to enter the Test Options. You can also access and update these test options at any time after the quiz creation by selecting the chevron to the right of the quiz title, and selecting **Edit the Test Options** from the dropdown menu. Particular elements you may want to consider are noted below.

Content Link Description:

This text is displayed with the content link to the Quiz *before* the students enter the quiz. Use this text to highlight important messages such as completion deadlines. Also, students may be accustomed to undertaking quizzes for *summative* assessment, therefore it is recommended you include reassurance that this is not an assessment, as well as clear instructions.

Test Description and Test Instructions:

Both the Test Description and Instruction text is displayed at the top of the test screen at the point the students enter their responses. This should be used to convey and reinforce important instructions to the students on completing the form. For example, it is recommended that emphasis is given to reminding the students that they must select the Submit button after they have given their responses else their submission will not be received.

Both these text fields can be edited, but not from the **Test Options** screen. Return to the Content Area which features the link to the quiz. Select the chevron to the right of the quiz title, and selecting **Edit the Test** from the dropdown menu (as opposed to Edit the Test Options). Select the chevron next to the Test Canvas title at the top of the screen and select **Edit** from the dropdown menu. The Description and Instruction text can be edited from this screen.

Test Availability:

If you want to make the test unavailable to students you can select the **No** radio button in the **Make the link available** setting in the **Test Availability** section. Or you can set specific availability dates using the **Display After** and **Display Until** date settings further down in this section of options.

You may want to allow **Multiple Attempts**, although, if you do this it should be made clear in the instructions that only the most recent attempt will be accepted. You should also ensure the test/survey is no longer available to students before downloading the data. So you may want to set a **Display Until** date that is before the date on which you intend to close the form for submissions and download the data.

Self-Assessment Options:

Deselect the **Include this Test in Grade Centre score calculations** checkbox - the quiz is not a summative assessment.

Show Test Results and Feedback to Students:

Deselect the **Score per Question** checkbox and check only the **Submitted** checkbox. Then, after the student has submitted the form, they will see the answers they have submitted on screen. You may wish to ask them to print and save this information for their reference. Without a record, students can forget or incorrectly recall their responses.

Testing the form – Student Preview

If you would like to test the form (as the student would see it) before students start to use it, you can use the Student Preview mode. To do this:

1. Ensure your data form is visible to students (i.e. remove any date restrictions and/or set the **Make the link available** option to **Yes** in the Test Options.
2. Click the **Enter Student Preview** button at the top right of the light grey toolbar.
3. Whilst the student preview mode is active you will see an orange strip at the top of your screen.
4. Navigate to and click on your data collection form.
5. Complete and submit the form.
6. Click **Exit Preview** at the top right of the orange student preview bar.
7. In the 'Exit Student Preview' dialogue box, select the option to 'Keep the preview user and all data'. This ensures your responses will appear in the grade centre.
8. Click **Continue**.
9. You can now go to the Full Grade Centre and complete the steps to download and format the responses as described above.

Downloading and analysing quiz data from Blackboard

If you are downloading Survey data, note that it is anonymous and so the data available to download will not contain student names or IDs. You can download quiz or survey data by following the steps below. Note that steps 1-3 may be necessary to ensure all data is included in the download.

Collating all responses:

1. Open the **Full Grade Centre** for the course unit and locate the column in the table for the Blackboard Quiz used to capture the form data.
2. Select the title of the column to trigger column sorting of the quiz submissions. Review all the status icons for submissions.
   - A yellow icon with a white exclamation mark OR a green icon with a white tick both indicate the user has fully submitted their response.

- A blue icon with a light blue portion indicates that the user started the form and some data was saved, but they did not select the submit button. This is could be because they wanted to return to change one of their responses before selecting submit OR because they simply forgot to select the Submit button.

3. Decide if any action is necessary based on any incomplete submissions. Users may need to be reminded to re-enter the quiz attempt and select submit. However, you may choose to force their submission through yourself.
    - To do this, select the table cell for the user in the column for the quiz, click on the chevron that appears and select their last Attempt.
    - Review their partially saved responses so far and decide if it is appropriate to force their submission through.
    - If so, select the **Test Information** bar to make visible further information. Under Status, select **Submit Attempt** and follow the prompts.

Downloading the data:

4. When you have done this for all partial submissions, you are ready to download all the quiz data. Select the action menu in the column title. Select the **Download Results** option in the menu. The default options are appropriate and do not need to be changed.

    - **WARNING**: There is currently a bug when downloading which affects certain browsers. When downloading data using Chrome, the filename defaults to 'download' with no file extension. This can lead to problems when attempted to open the file.
    Solution: Simply rename the file to include the '.xls' extension, e.g. 'download.xls'.

5. Open the downloaded data file using Microsoft Excel. The formatting of the data may be initially confusing as it may need to be "cleansed" of redundant columns and information. See the section Cleaning Downloaded Data.

Analysing survey data

You can also see an overview of the results directly within Blackboard:

1. Go to the column title in the Grade Centre click on the chevron.

2. From the dropdown menu that appears select **Attempts statistics**. You will see the proportion of respondents who selected each possible answer for each question.

Cleaning downloaded data

1. The Excel file will contain many columns of information which are not needed. Some of the column data may also contain 'raw HTML' which is confusing to read. This typically occurs where you have short answer (free text) questions. To remove all HTML tags:
    - Select **CTRL+F** to open the Find/Replace tool.
    - Enter <*> as the term to find.
    - Select the **Replace** tab. Leave the **Replace with** field as empty so that content which matches on '<*>' will be removed. Select **Replace All**.

2. Now remove all columns which are not needed.
   Typically for each question this means deleting the columns:

   Question ID, Question, Possible Points, Auto Score and *Manual Score*
   (each of which are appended with the question number).

   This should leave only the column labelled "*Answer*" remaining for each question. You also may want to copy the **Question text** to the column header for the appropriate Answer field prior to deleting the Question column so that it is clear what answers related to.

3. Look out for any user Usernames that have the suffix '_previewuser'. These are generated by the system when you use the student preview mode and elect to 'keep the preview user and all data' when you exit the mode. You should delete (or ignore) any such rows from your spreadsheet.

Importing student ID number information

The student ID number information is not included in the downloaded quiz results data. If you require a column containing student ID number (SPOT ID) in your spreadsheet follow the below instructions:

Download all user information:

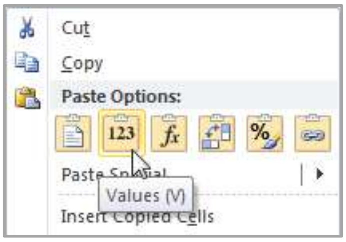
1. Open the full Grade Centre for the course unit.
2. In the **Work Offline** dropdown at the right of the dark grey toolbar, select the **Download** Option.
3. In the **Data** section, check the radio button next to **User Information Only**.
4. Click **Submit** and **Download**.
5. Save the file to your local drive (ensuring that the file has the .xls extension as noted above).

Use Microsoft Excel to lookup and import student ID numbers:

6. Open the saved file and copy the columns entitled Username and Student ID, paste these into the A and B columns of a **new worksheet** in your original responses file. This will be our 'lookup' worksheet.
7. Rename the new worksheet containing the student ID numbers to "lookup" - make sure you rename with the exact same spelling and case as this is important for step 10.
8. Click onto the original responses *worksheet* and insert a **new column** anywhere to the right of the Username column, i.e. ensure that the Username column remains in column A. Give your new empty column the title 'Student ID'.
9. Click into the first data row of this new column (Row 2).
10. Enter the following formula into the formula bar:

    =VLOOKUP(A2,lookup!A:B,2,FALSE)

11. Highlight the cell you just populated and drag or copy the formula down to the bottom of your column so that all of the student ID number values appear.
12. The Student ID column in your responses worksheet should now be populated with the Student ID numbers. Do a brief check to ensure this is the case.
13. To make this new data standalone (i.e. to remove the dependency on the lookup worksheet), select all the data your **Student ID column** in the responses worksheet, then select CTRL+C to **Copy** the column data and then right click and select under the **Paste** options select the "123 button" (Values) to paste the *actual values* in place of the formula.



14. Finally, you can then safely delete the "lookup" worksheet you added.