Moodle: Quizzes

The Moodle Quiz activity enables the teacher to design and build quizzes consisting of a large variety of question types, including multiple choice, true-false, numeric calculated and short answer questions. Moodle quizzes can be time-limited and configured to allow multiple or single attempts. Each attempt at a question can be automatically marked, and the teacher can choose whether to give feedback and/or show the correct answer.

At the end of a quiz, student attempts can be reviewed, enabling the teacher to download and collate marks in a variety of formats.

Note: Staff considering the use of Moodle quizzes for summative assessment should consult the Summative E-Assessment Checklist and contact their Faculty Learning Technologist for additional support.

Adding the Quiz activity

The first step in creating a Moodle quiz is to add the Quiz activity to your Moodle module.

1) Within your Moodle module, turn editing on.
2) Navigate to the section in which you would like to add the Quiz activity. Click on the Add an activity... dropdown menu*.

*Note that if you have the activity chooser turned on, a link to Add an activity or resource will appear, rather than the above dropdown menu.
3) Select Quiz from the list of options.

Configuring the Quiz activity

On the page that follows, you are presented with a number of configurable options that will determine how and when the quiz will function. (*Note that you may need to click on the expand icon next to each of the following headings in order to display any additional configurable options.)

Name — this is the name of the quiz that you and your students will see displayed on the front page of the Moodle module, for instance, Quiz 1 — Principles of Manufacture.

Description — the description field is an optional but useful field to display information to students before they attempt the quiz. For instance, you may wish to remind students about quiz timings, pass grades, expected content or other useful information. You may also use the description field to outline any contingency plans if anything goes wrong, such as power cuts or network outages.

Timing — the timing options can be tailored depending on how you intend to use the Quiz activity. Where appropriate, you can specify quiz opening and closing times, as well as any time limit* on attempts.

The When time expires option (click ‘show more’ to see it) is used to determine how the quiz will behave if the time expires whilst a student is making an attempt.

It is recommended to only ever use the Open attempts are submitted automatically option so that the student’s current progress is always saved.

(*Note that if a quiz attempt time limit has been set, a countdown timer will be displayed within the quiz navigation block — as discussed on page 7.)

Grade — if you are collating student grades within the module Gradebook, the grade category option
allows you to specify which Gradebook category the quiz grades will appear within. If you are not using Gradebook, this setting can be left as *Uncategorised*.

Where applicable, a **grade to pass** can be entered here.

Use the **Attempts allowed** field to specify how many times a student may attempt the quiz.

If you specify that more than one attempt is allowed, the **Grading method** option is unlocked — this can be used to determine how the final grades are calculated across multiple attempts.

**Layout** — the layout options determine how the quiz questions are ordered and across how many pages the questions will appear. It is recommended to create **a new page every 5 questions**.

**Question behaviour** — when enabled, the **Shuffle within questions** option shuffles the parts making up each question (e.g. each answer in a multiple choice question appears in a random order to each student). This setting only applies to questions that have multiple parts.

The **How questions behave** option enables the provisioning of feedback and multiple tries together on the same question. The most common selections here are **deferred feedback**, requiring students to finish the quiz before receiving feedback (which can then be immediate or at a later date) and **immediate feedback**, more suitable for formative assessment.

It may be a requirement for students to enter an answer to each question and then submit the entire quiz before any grading takes place and any feedback is made available to the students — this is **deferred feedback** mode. Alternatively, you may wish for students to submit each question as they go along to get immediate feedback and, if they do not get the question correct immediately, have another try for fewer marks — this would be **Interactive with multiple tries** mode.

**Review options** — these options are crucial and control what information students can see when they review a quiz attempt or look at the quiz reports (as discussed on page 8).

**During the attempt** is only relevant for some behaviours, like **Interactive with multiple tries**, which may display feedback during the attempt.

**Immediately after the attempt** applies for the first two minutes after **Submit all and finish** is clicked.

**Later, while the quiz is still open** applies from two minutes after **Submit all and finish** is clicked until the quiz close date (if no close date has been set, this phase never ends).

**After the quiz is closed** applies after the quiz close date has passed (if the quiz does not have a close date, this state is never reached).

Clicking on the help icon will open a new window displaying detailed descriptions of the various reviewing options.

Common settings: allow students to see only their attempt under ‘immediately after the attempt’ and ‘later, while the quiz is still open’. The closing date then becomes the date on which marks and right/wrong answers are revealed.

**Appearance** — this setting determines whether or not a student’s Moodle profile picture is displayed on the quiz results page. There are also additional settings for determining the use of decimal points in student grades.
Extra restrictions on attempts — these settings determine additional restrictions that can be associated with quiz attempts, such as password entry or enforced delays between multiple attempts by a single student. Browser security attempts to prevent students from browsing other sites while taking the quiz, but is easily circumvented and not recommended.

Overall feedback — overall feedback is text that is shown after a quiz has been attempted. By specifying additional grade boundaries (as a percentage or as a number), the text shown can depend on the grade obtained (see screen shot below).

![Grade boundary and feedback settings](image)

Note that within the **Overall feedback** field, alongside text comments, you can add hyperlinks, equations and multimedia content such as images or videos.

Common module settings — only applies if you are assigning group access to the Quiz activity. More information on assigning groups to particular resources can be found in the Moodle: Interactive guide.

Restrict access — access from/to dates determine when students can see a link to the Quiz activity on the front page of the Moodle module – they do not determine the open and close dates for the quiz. **Therefore, in the majority of cases there is no need to enable this setting.**

Once you have finished configuring the Quiz activity, click **Save and display** at the bottom of the page.

You will be returned to the module home page. As the overview page notes, **no questions have been added yet.** To begin adding questions to your quiz link, click on the quiz **Edit quiz**.

![Quiz overview page](image)

Adding questions to your quiz

Clicking on the **Edit quiz** button opens the **quiz editing page** (screen shot overleaf) where you can begin adding questions to your quiz. There are a number of options available on this page:
1) **Maximum grade** — this is the overall maximum grade that students can obtain on this quiz. The default value is set to 100.

2) **Add** - clicking this option offers three ways of adding questions to the quiz:
   a. **A new question** — adds a brand new question to the quiz
   b. **From question bank** - allows you to select and add a question from a question bank
   c. **Add a random question** — clicking this option enables you to add a random question from a question bank. (Further instructions on using question banks can be found in Moodle Docs [https://docs.moodle.org/35/en/Question_bank](https://docs.moodle.org/35/en/Question_bank))

3) **Shuffle** — if checked, every time the quiz is attempted, the order of the questions in this section will be shuffled into a different random order.

To add a brand new question to the quiz:

1) Click **Add – a new question** (2a).
2) From the list* that follows, select a question type to add and then click **Next**.

(*Note that for each question type in the list, a description is displayed. This guide will only discuss Multiple Choice Questions – information on additional question types can be found in Moodle Docs: [https://docs.moodle.org/35/en/Question_types](https://docs.moodle.org/35/en/Question_types))

### Question types

**Multiple Choice Questions (MCQs)**

Multiple Choice Questions enable the selection of single or multiple responses from a pre-defined list. The Multiple Choice Question type has a number of configurable options:

- **Category** — the category dropdown menu enables you to specify where your question is stored. As discussed in Moodle Docs, questions can be stored within particular categories/questions banks so that they can be re-used later.

- **Question name** — you can assign specific names to your questions — for instance, *Just-in-time manufacturing*. Note that students **do not** see the question name — it is for your reference only.

- **Question text** — this is the field in which to write the question text that you want your students to see. Note that alongside text, you can add hyperlinks, equations and multimedia content such as images or videos.

- **Default mark** — the default mark for all question types is 1, however you can assign specific weightings to
particular questions by changing the default mark on a question by question basis. Moodle will use these default marks to calculate an overall score out of the specified maximum grade set for the quiz (as discussed on page 4).

**General feedback** — general feedback is shown to the student after they have completed the question. Unlike specific feedback, which depends on the question type and what response the student gave, the same general feedback text is shown to all students. You can use general feedback to give students a fully worked answer or a link to additional resources.

**One or multiple answers** — you can specify whether there is a single correct answer or a combination of correct responses from the pre-defined answer list.

**Shuffle the choices** — if enabled, the order of the answers is randomly shuffled for each attempt, provided that Shuffle within questions in the activity settings is also enabled (see Question Behaviour — page 2). If you are using all of the above as one of your available choices in the pre-defined answer list, it is advised to disable the shuffle the choices option.

**Number the choices** — this option enables you to specify whether the available choices in the pre-defined answer list appear numerically, alphabetically or as Roman numerals.

**Answers**

Each **Answer** field enables you to enter a single possible answer choice, set a corresponding grade and provide feedback based upon this choice. For instance, in the example below (Figure 1), a possible answer choice has been entered into the **Answer** field (1). Since this is the correct answer, a **Grade** of 100%* has been set (2) and therefore the **Feedback** field reflects this accordingly (3).

(*Note that in multiple-answer questions, the grades for each correct answer must add-up to 100%.)

![Figure 1 — setting a correct answer](image)

Following on from this, in the next example (Figure 2, overleaf), a second possible answer choice has been entered into the **Answer** field (1). However, since this is an incorrect answer, a **Grade** of None has been set (2) and **Feedback** has been entered to reflect the incorrect choice (3). The **Answer** and **Feedback** fields can contain hyperlinks, equations and embedded multimedia content. Note that the choice and feedback fields may be too small to allow you to read all the contents – click and drag at the bottom right (4) to enlarge the fields.
Moodle quizzes must always stipulate whether an answer is correct or incorrect regardless of whether any feedback information has been entered.

For incorrect answer choices, it is also possible to assign negative grading values so that the student has marks deducted from their maximum grade.

To add more choice fields, click Blanks for 3 more choices.

**Combined feedback**

This section enables you to add overall feedback for correct/partially correct/incorrect responses. This is particularly useful for multiple-response questions, in which it can be difficult to control the feedback students see if you are just using answer-specific feedback.

**Multiple tries**

For quizzes using the Interactive with multiple tries or Adaptive mode behaviour (thereby enabling students to have several attempts at getting a question correct), this option will control how much they are penalised for each incorrect attempt. The penalty is a proportion of the total question grade, so if the question is worth three marks, and the penalty is 33.33333%, the student will score 3 if they are correct on the first try, 2 if they are correct on the second try, and 1 if they are correct on the third try.

**Hints**

Hints can only be used in the Interactive with multiple tries mode (see Pages 1 & 2). To use hints, type a hint into the text box. When attempting the quiz, the hint will appear whenever a student gets the answer wrong, thereby enabling the student to reattempt the question. You can add as many hints as you like and the student will get as many tries as there are hints.

When you are happy with all of the above settings, click Save changes – you will now be returned to the Edit quiz page.

Repeating the above steps, you can now continue to add additional questions to your quiz.

You can preview individual questions by selecting the preview option when on the edit quiz screen.

To preview the whole quiz, return to the module home page, click on the link to the quiz and use the cog icon on the top right – select preview from the dropdown menu.

Once you have added all of the required questions and previewed your quiz, you do not need to do anything else – you can now return to the module front page and/or log out of Moodle. Students will be able to attempt the quiz during the specified time window.
Editing quiz settings

If you need to edit the quiz settings and/or add or remove questions, you can do so by:

1) Clicking on the link to your quiz from your module front page  
2a) Selecting Edit settings from the cog on the top right (use this option for editing the general quiz settings such as title, description, timings, etc.)  
2b) Selecting Edit quiz from the cog (use this option for adding, removing or editing questions*).

To edit a question, click on the question title from within the Edit quiz page.  

(*Note that in preview mode you can quickly edit an individual question by selecting edit question next to any question in the preview window.)

Attempting the quiz

Within the specified time window, students will be able to attempt your quiz. To make an attempt, students will need to:

1) Click on the link to the quiz on the module front page.  
2) On the page that follows, the student will be presented with the quiz title, description and timing information. The page will also stipulate how many attempts can be made. To begin an attempt, the student must click attempt quiz now. The student will receive a pop-up warning asking if they are sure they’d like to attempt the quiz; by selecting start attempt, the quiz attempt will begin.  
3) The page that follows displays the quiz questions. Depending on the question type, students may be required to check radio buttons, select items from dropdown menus or type in their answers. Depending on the number of questions, students may need to click next at the bottom of the page to advance to the next page of questions. Students may choose to flag questions that they find particularly difficult in order to return to them at the end of the quiz using the flag icon.  
4) In the top-right hand corner of the page there is a quiz navigation block (right). Students are able to click on individual question numbers to navigate directly to a particular question (1). Any flagged questions appear with a red corner (2).  
5) After making responses, students can click Finish attempt to end their attempt (3). This saves the student’s progress but has not yet submitted their responses for marking.  
6) The page that follows provides the student with a summary of their attempt, indicating whether any questions still need to be answered. And this point, the student has three options:  
   i. If there is sufficient time remaining, the student can select return to attempt to amend and/or answer further questions.  
   ii. Subject to the above timing restrictions, the student can also choose to exit the quiz and return to it at a later time or date (see below) — their current progress will be saved.  
   iii. Or, to submit their attempt for marking, the student can click submit all and finish.

For students who choose to save their progress and return to their attempt at a later time (ii), they can
access the quiz and begin where they left off by clicking on the link to the quiz on the module front page and then select **continue the last attempt**.

Students can access their marks and/or feedback by:

1) Clicking the link to the quiz on the module front page

2) Depending on the **Review options** (see *Review Options — page 2*), the Moodle page that follows may include the overall grade, the total number of marks obtained and any general feedback. Students can view individual responses and answer-specific feedback by clicking on **Review** (where applicable).

More detailed student-orientated quiz guidance can be accessed here: [http://www.kent.ac.uk/elearning/moodle/quizzes.html?tab=information-for-students](http://www.kent.ac.uk/elearning/moodle/quizzes.html?tab=information-for-students)

**Reviewing and managing attempts**

Completed quiz attempts can be reviewed by the teacher both before and after the quiz has closed. To review quiz attempts:

1) Click on the link to the quiz on the module front page

2) On the page that follows, select **Attempts**. The number of completed quiz attempts will be listed here, for instance, **Attempts: 119**.

3) On the following page, there are a number of options that enable you to tailor how the quiz report is displayed on the page. You can filter the quiz review in order to see who has or hasn’t completed the quiz (1). In addition, you can specify whether to include attempts that are still in progress or never submitted (2). The page size (3) option enables you to specify how many individual quiz attempts appear on the page at one time and whether the individual marks for each question are included on the page (4). Any changes to these options need to be confirmed by clicking **show report** (5).

![Image of quiz attempt review options]

- **What to include in the report**
  - **Attempts from**: enrolled users who have attempted the quiz
  - **Attempts that are**: In progress, Overdue, Finished, Never submitted
  - **Show only attempts**: that have been regraded / are marked as needing regrading

- **Display options**
  - **Page size**: 30
  - **Marks for each question**: Yes

(5) **Show report**
Further down the page you will see a breakdown of the individual student responses, including:

- the student’s name
- their email address
- the state of the attempt (i.e. whether the attempt is finished or still in progress)
- the start and completion dates and times for the attempt
- the overall time it took to complete the attempt
- an overall grade for the attempt

If the **marks for each question** option is set to yes, you will also see a breakdown of the individual marks for each question per student*. A **green tick** indicates that the response was correct, an **amber tick** indicates that the response was partially correct and a **red cross** indicates that the response was incorrect – each of these can be clicked on to open up a pop-up window containing the student’s response to that specific question. The marks awarded are shown to the right of each response.

Any questions that require manual grading (e.g. short answer) will state that the question **requires grading**. Click **requires grading** to assign a mark to any manually graded questions.

You can open and review any completed attempt either by clicking on **review attempt** beneath the student’s name or by clicking on their **overall grade**.

(*Note you may need to use the horizontal scrollbar to view subsequent question responses.)*

**Deleting attempts**

Individual quiz attempts can be removed by selecting the required attempt using the checkbox next to the student’s name and then clicking **Delete selected attempts** at the bottom of the page.

**Downloading quiz data**

Quiz data can be downloaded in a number of different formats using the option above the students’ attempts. To download the marks for a quiz, select the relevant output format and click **Download**.

Further instructions on downloading individual response data can be found on Moodle Docs - https://docs.moodle.org/35/en/Quiz_responses_report.

**Help & Support**

For general help using Moodle, contact your Faculty Learning Technologist (FLT). If you are having problems accessing Moodle, contact the Helpdesk on 01227 82 4888, or email helpdesk@kent.ac.uk. Other training guides are available on the e-learning website: http://www.kent.ac.uk/elearning/moodle.html

For general training documents and information, visit Moodle Docs (http://docs.moodle.org).