Create and Manage a Quiz in Moodle

Overview
This page contains instructions to help you create quizzes in Moodle by various methods, and to perform some basic tasks in relation to quizzes.

When to use
For advice on when to use online assessment, see the page Using Technologies to Support Assessment.

Benefits
Moodle's Quiz activity allows you to design and build quizzes containing many question types (e.g. multiple choice, true/false, short answer). Moodle stores all quiz questions in a question bank, from which they can be imported into different quizzes—for example, for revision purposes.

Guide

Getting started
Video Series - How to Add a Quiz to your Moodle Course
Overview, setup of formative and summative quizzes, group quizzes, team quizzes, categorised questions, grading, importing quizzes from Word/Blackboard

Step by step instructions
- Create a quiz shell
- Add questions to a quiz
• Add and edit question bank categories
• Reactivate a quiz
• Grant an extension for a quiz
• View quiz reports

If you are likely to want to use the questions in more than one quiz, you can build your quiz in two different ways:

• Create the quiz / Create the questions in a question bank / Add questions to the quiz - or
• Build a question bank / Create the quiz / Add questions to the quiz from the bank.

Create a quiz

To create a quiz, first create the quiz shell, then add questions to the shell, either creating them as you go or using existing questions in the course question bank.

1. On the Moodle course home page, in the relevant section, click Add an activity, select Quiz from the drop-down list and click Add.

2. On the Adding a new Quiz page, click Expand all at the upper right of the page.

3. In the General section, enter a Name, and an introductory Description if necessary.
4. In the **Timing** section:

- **Enable** and select dates to Open the quiz and Close the quiz.
- **Enable** and set a Time limit, if using.
- Select the appropriate option for **When time expires**.
- If you are allowing a grace period, **Enable** and nominate a **Submission grace period**.
5. In the **Grade** section:
   - Select the **Grade category** within the Gradebook where you want this assignment to belong.
   - Set the number of **Attempts allowed**, the **Grade to pass** and, if multiple attempts are allowed, which **Grading method** Moodle should use.

6. In the **Layout** section:
   - Select whether you want the **Question order** to be randomised, and where you want **New page** breaks to fall.
   - Click **Show more** and select, at **Navigation method**, whether you want Moodle to force students to answer questions sequentially.
7. In the **Question behaviour** section:

- At **Shuffle within questions**, select whether you want multiple choice or matched question options randomised.

- Select **How questions behave. Deferred feedback** (students must submit entire quiz before they see any grade or feedback) and **Interactive with multiple tries** (students submit each question and get immediate feedback as they progress through the quiz) are the most common choices.

- If you allowed multiple attempts, click **Show more** and select **Each attempt builds on the last**, if you want each new quiz attempt to contain the results of the previous attempt. This allows students several attempts to complete a quiz.

8. Under **Review options**, select what you want the student to be able to see when they view their attempt or report at various stages.
9. In the **Appearance** section, make choices about how you want the quiz to display:

- Do you want to **Show the user's picture** during the attempt, and on the review screen, to make it easier to check that they are logged in as themselves in an invigilated exam?
- How many **Decimal places in grades** do you want to display to the students for this quiz?
- How many **Decimal places in grades** do you want to display to the students for individual questions in this quiz?
- Click **Show more** and select whether you want the normal blocks to display during the student's quiz attempt.
10. Under **Extra restrictions on attempts**:

- Do you want to **Require password** for students to access this quiz?

- The **Require network address** setting is for proctored quizzes, to ensure that only students in a certain room can gain access to the quiz. Obtain the IP addresses for all rooms in which the quiz will be taken, and enter them in this field, separated by commas.

- Enable and select whether you want to set up the 2 levels of **Enforced delay**.

- Click **Show more** and select whether you want to set up **Browser security** and restrict students’ view and activity further (read the relevant help text 📚).
1. **Overall feedback**: Enter the Feedback text the students will automatically see, depending on which range of scores they fall within, as defined by the grades or percentages in the Grade boundary fields.

2. Complete any other necessary page sections, then click Save and display to access the page for adding
questions to the quiz.
2. For assistance adding questions to the quiz, see the instructions below and this MoodleDocs page.

Add questions to a quiz

You can add questions to a quiz in 3 ways:

- create them one at a time within the quiz
- retrieve them from a question bank
- import them from a file on your network or computer, or from one of your uploaded course files

To create questions one at a time within a quiz:

1. On the course home page, with editing turned on, click the link for the quiz.

2. On the quiz’s home page select Edit quiz.

3. On the Editing quiz page, click Add a question.
4. In the Choose a question type to add window, select the question type and click Add.

5. On the Adding a [question type] question page, select a question Category, enter a Question name and some Question text, then complete the remainder of the fields as required, clicking Help for assistance if necessary.

Multiple choice question with multiple answers allowed: When you set up the answers for a question of this type, not only must the questions’ combined Grade amounts add up to 100%, but you must also assign a negative Grade for the incorrect answers. If you don't, a student who selects incorrect answers as well as all
the correct answers will be marked as if they answered the question correctly.

6. If the question is complex and you want to check how it will display to the student, scroll to the bottom of the page and click **Save changes and continue editing**. Then:
   - Click **Preview**, and the question will display in the *Preview question* window.
   - If necessary, adjust the **Attempt options** and click **Start again with these options** to see how the revised question behaves.
   - If necessary, change **Display options** and click **Update display options** to check the display.
   - Close the window when you are happy with the way the question behaves.

7. Click **Save changes**. The question displays on the *Editing quiz* page. Click the arrows ‼️ ‡ to change its position within the quiz.

To retrieve questions from a question bank:

1. On the *Editing quiz* page, at the upper right, next to **Question bank contents**, click **Show**.
2. Make your choice from the **Select a category** list.
3. Select the check box(es) of the question(s) to be added to the text.
4. Click the double arrow next to the check box to add a single question, or click **Add to quiz** to add multiple questions to the quiz. The questions are added.
5. You can also add random questions from the chosen category to the quiz.

Click **here** for more detailed instructions on using question banks.
To import questions:

1. On the course home page, in the Settings block, select Course administration > Question bank > Import.
2. On the Import questions from file page:
   - Select the File format.
   - Complete the General fields as desired.
   - Choose a file to import.
   - Click Import.

Click here for more detailed instructions on importing questions into your Moodle course.
Import questions from file

File format

- Aiken format
- Blackboard
- Embedded answers (Cloze)
- Examview
- Gift format
- Learnwise format
- Missing word format
- Moodle XML format
- WebCT format

General

Import category: Cattle

Get category from file

Check box: Get context from file

Match grades: Error if grade not listed

Stop on error: Yes

Import questions from file
Add a question to a question bank

Every Moodle course comes complete with a question bank, where all questions created for the course are stored.

If you are using a question bank, we recommend performing full back-up ahead of any major change.

To add questions to the bank:

1. On the course home page, in the Settings block, select Course administration > Question bank > Questions.
2. On the Question bank page, from the drop-down list Select a category you want to add a question to. You can also select whether and how questions already created for that category display.
3. Click Create a new question.
4. In the Choose a question type window, select the question type and click Add.
5. On the Adding a [question type] question page, complete the question, answer and feedback fields as required, clicking the Help button for assistance if necessary.
6. If the question is complex and you want to check how it will display to the student, scroll to the bottom of the page and click Save changes and continue editing. Then:
   - Click Preview, and the question will display in the Preview question window.
   - If necessary, adjust the Attempt options and click Start again with these options to see how the revised question behaves.
   - If necessary, change Display options and click Update display options to check the display.
   - Close the window when you are happy with the way the question behaves.
7. Click Save changes. The new question displays, highlighted, on the category page.
Add and edit question bank categories

To start with, each course's question bank contains a single, 'Default' category. Create more, to make it easier to find questions, and to enable you to use random questions and matching questions more easily.

Within the course question bank, you can create hierarchies of parent categories and subcategories.

1. On the course home page, in the **Settings** block, select **Course administration > Question bank > Categories**.
2. On the **Edit categories** page:
   - Select an appropriate **Parent category** from the drop-down list. Select **Top** to make this new category a top-level category.
   - Enter a **Name** for your new category.
   - Enter any **Category info** that will be useful for users compiling quizzes.
   - Click **Add category**. The new category displays in the list at the top of the page.
3. To edit the new category, click the **Edit this category** icon next to the category's name.
4. On the **Editing a category** page, change the **Parent category**, **Name** and **Category** as desired, and click **Save changes**.
Edit categories

Question categories for 'Course: Moodle Documentation'

- **Cattle (0)**
  All questions about cattle

- **Default for MoodleDoc (7)**
  The default category for questions shared in context 'MoodleDoc'.

Question categories for 'Category: Sandpit'

- **Default for Miscellaneous (0)**
  The default category for questions shared in context 'Miscellaneous'.

**Add category**

- **Parent category**: Cattle
- **Name**: Friesian cattle
- **Category info**: All questions about the Friesian breed

**Add category**
Reactivate a quiz

To reactivate a quiz that has passed its close date:

1. Click Turn editing on.
2. Click the Update icon next to the quiz.
3. On the Update quiz page, click open the Timing section and change the date in the Close the quiz fields to the new, extended close date.
4. Save your changes.

Grant an extension for a quiz
To extend an individual's submission times or grant them special access to a quiz:

1. On the course home page, click **Turn editing on**.
2. Click the Update icon 👤 for the relevant quiz.
3. On the *Editing quiz* page, in the **Settings** block, under **Quiz administration**, click **User overrides**.
4. On the resulting page, click **Add user override**.
5. On the *Edit override* page, **Search** for the individual student, then make the appropriate changes. You can:
   - require this student to use a password to enter the quiz
   - specify different **Open** or **Close** dates or times (in the event of extenuating circumstances or special needs)
   - allow this student a different number of quiz attempts.
6. Click **Save**. The overrides overview page displays, showing all current overrides and their details. Add another user override or return to the *Editing quiz* page.
View quiz reports

To access reports relating to a quiz:

1. On the course home page, click the quiz’s link.
2. In the Settings block, click Quiz administration > Results.
3. Select from the list of the 4 types of reports available: Grades, Responses, Statistics or Manual Grading.

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1. Quiz only applied to Grouping 2 (Problem)

2. Settings

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Grades

The Grades report tells you about student quiz attempts, displaying the overall grade, and a summary of each correct/incorrect answer. It also reports on the State (student progress through a quiz), the time the quiz was started/completed and the total time the student took to complete it. You can re-grade quiz attempts by selecting Re-grade selected attempts. A bar graph summarises the grade range and frequency.

Responses

The Responses report is visually similar to the Grades report, but it shows the responses students gave to quiz questions, not the marks they earned. You can view the question text/correct answer to compare students’ responses.

Statistics

The Statistics report provides statistical ("psychometric") analysis of the quiz and the questions it contains. The report is divided into 3 sections:

- a summary of the whole quiz
• an analysis showing all questions in table format, and
• a bar graph of the percentage of correct answers (the "Facility index") and the "discriminative efficiency index".

The summary section contains the following data items:

- Quiz name
- Course name
- Open/Close dates (only if selected in Quiz settings)
- Number of complete graded first attempts
- Total number of complete graded attempts
- Average grade of first attempts
- Average grade of all attempts
- Median grade (for all attempts)
- Standard deviation (for all attempts)
- Score distribution skewness (for all attempts) - a measure of the asymmetry relative to Gaussian distribution
- Score distribution kurtosis (for all attempts) - a measure of the shape of probability distribution
- Coefficient of internal consistency (for all attempts) - a measure of whether each quiz question is testing the same concept. The higher the number the greater the consistency.
- Standard error (for all attempts)

The quiz structure analysis shows the following:

- Quiz number
- Question name
- Attempts
  - Facility index describes - percentage of students who answered the question correctly
  - Standard deviation - the variation of scores for the question
  - Random guess score - the score a student would get for randomly guessing
  - Discrimination index - the correlation between the score for a question relative to the student's score for the whole quiz. If a person does well in a question, they should do well in the quiz. The higher the number the better the correlation.
  - Discriminative efficiency - the Discrimination index as a fraction of the maximum possible marks for the question. For a question with a very high average score (a high Facility index) it is very hard for a student to achieve a high Discrimination index on that question.

Below this section is a bar graph illustrating the Facility index and the Discriminative efficiency.

Details about the data items are available on the Moodle Docs Quiz statistics report page.

**Manual Grading**
The Manual Grading report enables instructors to manually grade written submissions within a quiz.

It contains the following information:

- Question number
- Question name
- Items to grade
- Items already graded
- Total submissions

To grade submissions, in the To Grade column select Grade. All the quiz responses to be graded will display. Read each submission, provide comments and a final mark and repeat the process until all submissions are graded. The comments and marks are exported to the Gradebook when you select Save and go to next page after marking each submission.

Further information

For more information about generating course logs and statistics, go to the Generate reports in Moodle page.

Advanced guide

- Want to give feedback with quiz grades? Click the link for instructions.
- Want to download grades and feedback for a single quiz from the Gradebook? Click the link for instructions.
- Want to grant an individual student special access to, or an extension on, a quiz? Click the link for instructions.

Additional information

External resources

- Effective quiz practices
- Adding questions to a quiz (Moodle Docs)
- Importing questions into your Moodle course (Moodle Docs)
- Using question banks
- Quiz statistics report (Moodle Docs)

Further assistance

If you experience technical or other issues, consult the Where to get help page.
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https://teaching.unsw.edu.au/moodle-quiz