Online Quizzes and Surveys

Quizzes versus Surveys

Quizzes and Survey uses the same technology except that Surveys do not have right or wrong answers and can be submitted anonymously. Quizzes are automatically scored by Canvas (except for text answers) and can be used to assess students' understanding. Surveys can be used to collect feedback from your students asynchronously. Both Quizzes and Surveys can be graded or ungraded. Graded surveys are used when you want to give students points for responding to a Survey.

Notes:

- Graded surveys display in the Gradebook and SpeedGrader, while ungraded surveys do not.

- Student Analysis for Surveys must be downloaded as a CSV file. Item Analysis is not available for Surveys.

You can filter survey statistics for the first 10 sections of your course.

> Tip: You can use online quizzes as a formal assessment or a review or self-assessment tool.
>
> For example, you can put a past exam online as a practice test for student to review at home before they take the actual exam in class. Although you cannot force students to provide answers to every questions, students cannot see the answer key without at least scrolling through all the questions. Furthermore, you can make use of Canvas' comment function to provide guidance on commonly made mistakes.

Create a Quiz with Individual Questions

Step I. Create a Quiz

1. Go to your course in Canvas (*courses.uchicago.edu*, CNetID log-in).

2. In Course Navigation on the left, click the **Quizzes** link.

   Assignments
   Discussions
   Quizzes
   Library Reserves
   University of

3. On the top right, click the maroon **Add Quiz** button.

   + Quiz

4. In the **Details** tab, provide a name for your quiz.

   Details   Questions

   Week 1 Quiz

> Tip: You can also create a quiz under **Modules.** In the appropriate module, click the **+** sign > Select **Add Quiz** in the dropdown menu > [**New Quiz**].

> Tip: Use a descriptive name for easy identification later.
>
> The Quiz Index Page automatically groups all the quizzes and surveys (published and unpublished) in a course into one of 3 groups: Assignment Quizzes, Practice Quizzes, and Surveys. Within each group, the quizzes and surveys are sorted alphabetically by their titles. If you want them sorted in a particular way, you will need to name them accordingly.

5. In the **Quiz Instruction** box, provide information you would like students to see before they begin taking the quiz. You can use formatted text, images, sample math equations, or use the media commenting tool to record an introduction to the quiz.

Quiz Instructions:

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6. Complete the remaining quiz details:

   a. **Quiz Type**: Choose from Graded Quiz, Practice Quiz, Graded Survey, Ungraded Survey.

   b. **Assignment Group**: Assignment groups can be used for weighing grades. Select available options from the dropdown menu or create new ones by going to **Assignment** in the Course Navigation on the left.

   c. Options:

     i. **Shuffle Answers**: Check this box if you want to randomize the order of answers available for selection.

     ii. **Time Limit**: Set a time limit by entering the number of minutes students have to complete the entire quiz. An unfinished timed quiz will be automatically submitted when the time limit expires. If no time limit is set, students will have unlimited time to complete the quiz.

     iii. **Allow Multiple Attempts**: Check this box if you want to allow students to attempt the quiz more than once.

       1. **Quiz Score to Keep**: Select whether to keep the **Highest**, **Latest** or the **Average** score.

       2. **Allowed Attempts**: Specify the number of attempts students can make. If unspecified, students have unlimited attempts.

     iv. **Let Students See Their Quiz Responses (Incorrect Questions Will be Marked in Student Feedback)**: When unchecked, students will only see the final scores. When checked, students will be able to see what they answered, any feedback you have included, and which answer choices they got (right and) wrong.

     v. **Show one question at a time**: You can show one question at a time and lock questions after answering.

   d. Quiz Restrictions

     i. **Require an access code**: Require students to enter a password before taking the quiz.

     ii. **Filter IP Address**: Leave blank and do not use unless you know the range of IP Address students will use to take their exams. Typically, this is only possible if they take their exams in a computer lab.

e. Assign

  i. **Assign to**: You can assign the quiz to everyone, a course section, or an individual student. This option is useful for assigning different course sections different due dates, or accommodating students with special needs.

  ii. **Due**: Set the date and time that the quiz is due.

  iii. **Available from**: Set the date and time when the quiz will become available for students to take the quiz.

 iv. **[Available] Until**: Set the date and time when students can no longer take the quiz.

📝 See also: "What is the difference between assignment due dates and availability dates?" *community.canvaslms.com/docs/ DOC-2628*

Step II: Create Individual Questions
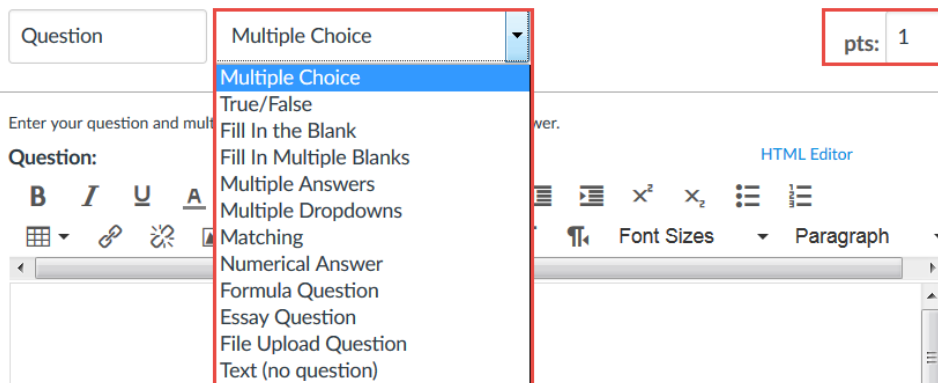
1. In your quiz, select the **Questions** tab at the top.

Details | **Questions**
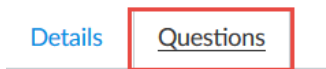
2. Click the **New Question** button to create a new quiz question.

➕ New Question   ➕ New Que
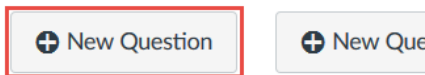
3. (Optional) Provide a **short name for the question**. The short name is viewable by instructors only and can help you identify quiz questions more easily, especially if you intend to use question group or question bank. Students always see quiz questions in an automatically generated numbered order (i.e. Question 1, Question 2) regardless of the question name.

Question | Multiple Choice ▼ | pts: 1

4. Select the desired **question type** from the dropdown menu and enter the points for the question.

Question | Multiple Choice ▼ | pts: 1

Multiple Choice
True/False
Fill In the Blank
Fill In Multiple Blanks
Multiple Answers
Multiple Dropdowns
Matching
Numerical Answer
Formula Question
Essay Question
File Upload Question
Text (no question)

Enter your question and mult...   ...wer.

Question: HTML Editor

B *I* U A   ☰ ☰ x² x₂ ☰ ☰
⊞ ▼ 🔗 ⚡ A   ¶◀ Font Sizes ▼ Paragraph ▼

💡 Tip: Canvas supports 11 question types. When you select a question type, you will see a definition and basic instructions below the dropdown menu and above the question area.

5. Enter the **question** in the Rich Content Area. You can use formatted text, images, video, sample math equations, or link to course content. You can also use the media commenting tool to record a question.
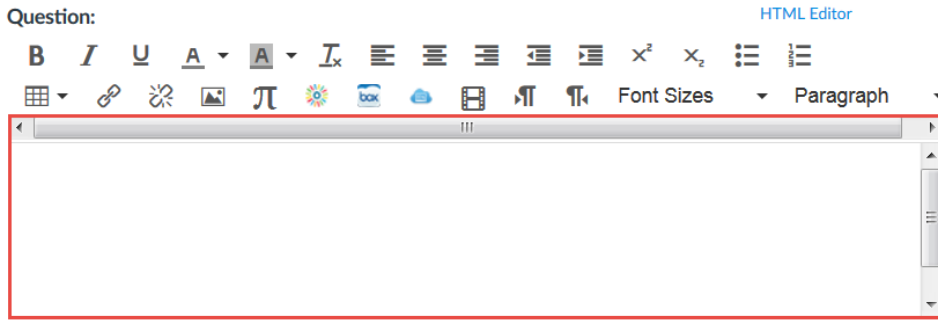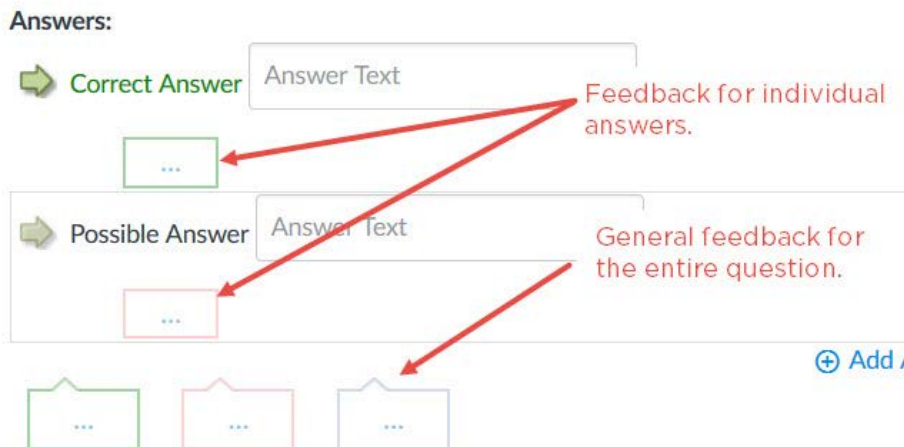

6. Provide the **answer options**. Correct answers are labeled green; wrong answers are labeled pink. Mark answers correct by clicking the arrow in front of the Answer Text text box.
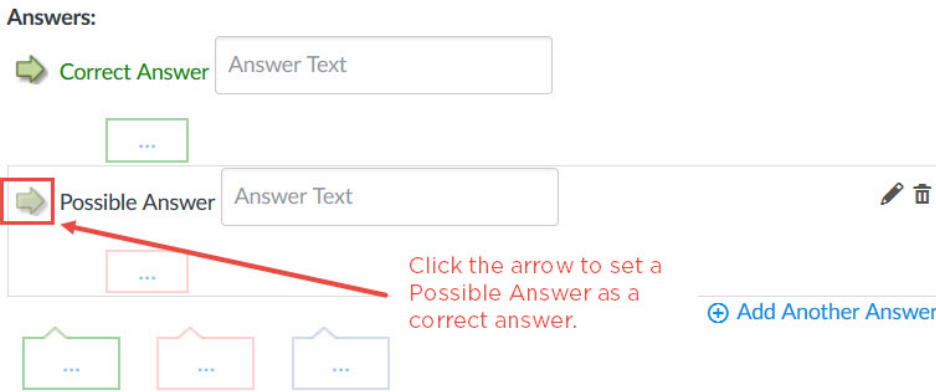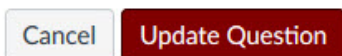

Click the **+ Add Another Answer** link to provide additional answer options.
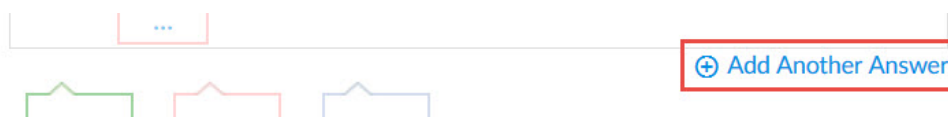
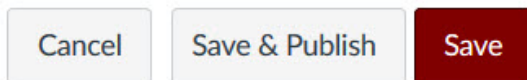7. (Optional) Provide **feedback** for individual answers and/or general feedback.

8. Click the maroon **Update Question** button to save.

9. You will then see each question in its own question box. Check the **Show Question Details** [1] option to review answer options and correct answers. The total number of points is automatically tabulated at the top [2].

10. Repeat #2-8 to add more questions.

11. Click the maroon **Save** button to save the quiz.

12. Click the **Preview** button at the top or bottom of the page to preview the quiz. You can submit your answers to review the quiz from the students' perspective.

13. When the quiz is ready, click the **Publish** button to publish the quiz and make it available to students.
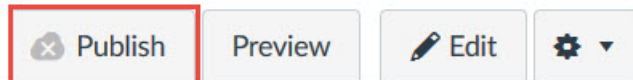
💡 Tip: Publish only after you are certain the quiz is ready. Although you can make changes to the quiz after it is published, **students who have already opened or completed the quiz will not see any of the changes**, which may affect their grades.

Step III: Add Existing Individual Questions from Question Bank

All quiz questions created within a course are automatically filed under the **Unfiled Questions** bank for the course. Instructors can add, rename and bookmark question banks for a course. They can also access quiz questions they have created in all their courses.

🔖 Definition: Question Banks (called Question Pools in Chalk) houses questions that can be added to quizzes across courses or accounts.

1. In the **Question** tab in a quiz, click the **Find Question** button at the bottom of the page.

2. A pop-up window will show you all the question banks and questions available to you in Canvas. Click the link on the left panel to select a question bank. Then check the appropriate questions on the right to add to the current quiz. (See image on the next page.)

Find Quiz Question

Click the link to select an existing question bank.

×

View Course Question Banks

Cardiology 3 Disc Questions
CPPWeb Test, 16 questions

Disc Forum/Google Doc Embed
CPPWeb Test, 4 questions

Mignon
Cecilia-Test, 2 questions

Slides Template
CPPWeb Test, 3 questions

Unfiled Questions
Cecilia Quizzes Workshop, 1 questions

Select All | Clear All

☑ Mignon1
What does Wilhelm's initial im|

Check the box to select a question to add to the current quiz.

☐ Mignon2
What was Mignon's circumstances when Wilhelm first met her?

Add questions to the question group:

[No Group] ▼

Add Questions   Cancel

3. Click the **Add Questions** button.

Add Questions   Cancel

Randomization

Randomization can help assess students' actual comprehension and reduce cheating. Canvas supports 3 types of randomization.

I. Shuffle Answers: Randomize the Order in which Answers Appears

1. In a quiz, go to the **Details** tab. (See also Step 6c on page 2.)
2. Under **Options**, check the **Shuffle Answers** box.

This will randomize the order of answers available for selection. This applies only to question types that offer students answer choices.

II. Formula Question: Randomize a Single Variable

A formula question involves a mathematical formula with a single variable. The exact value of the variable is randomly generated per student per quiz attempt and thus the correct answer changes accordingly.

1. In the **Questions** tab, click the **New Question** button.

Details   Questions

⊕ New Question   ⊕

2. Select **Formula Question** as the question type.

Question   Formula Question ▼   pts: 1

3. Type the question prompt text and formula with variables in brackets in the Rich Content Editor [1]. You can include video, images, or math equations. Click the **Need help?** link [2] for more advanced options.

Enter your question, build a formula, and generate a set of possible answer combinations. Students will see the question with a randomly variables filled in and have to type the correct numerical answer.

Question:
You can define variables by typing variable names surrounded by brackets (i.e. "What is 5 plus [x]?") Need help? [2]

HTML Edito

$10-[x]\text{^}3 = ?$ [1]

4. To set the range of the variable:

   a. After you have finished typing the formula in the Rich Content Editor, parameters to define the formula will appear. Set the variable definitions for the formula. Specify the minimum and maximum numbers for variable X. Setting a minimum will prevent a division by zero.

   Variable Definitions
   Once you have entered your variables above, you should see them listed here. Yo

Variable	Min	Max
x	1	4

   b. Select **Decimal Places** in the drop-down menu, and click the **Recompute** button to verify that Canvas will insert a number into the formula that is within the variable definition.

   i can specify the range of possible values for each variable below.

   Decimal Places   **Example Value**
                            Recompute

   0

5. Define the formula to calculate the correct answers.

   a. Type the formula definition in the formula field. Make sure the formula does not contain any brackets or equal signs.

   Formula Definition
   Next you'll need to write the formula or formulas used to

   Formula

   $10-(x\text{^}3)$ Sa

   b. Select the **Decimal Places** drop-down menu to set the number of decimal places you want used for the result.

   Result

   0

   Decimal Places

c. Select the **Save** button to save your formula [3].

Formula Definition

Next you'll need to write the formula or formulas used to comput

Formula

10-(x^3)| Save

d. Go back to the **Recompute** button in Variable Definitions, click to check the result Canvas calculates.

6. In the **Generate Possible Solutions** field

a. Specify the number of possible solutions you want Canvas to generate.

b. In the **error margin** field, enter the margin of error for the student's answer. Responses are based on relative error in addition to absolute error. Margins of error can be created as a percentage or as a point value (up to three decimal places).

c. Click the **Generate** button to view final answer.

Generate Possible Solutions

Finally, build as many variable-solution combinations as you need for your quiz.

Offer   4   possible value combinations (max 200)

allow an error margin of +/-   0   Generate

> 💡 Tip: After you click **Generate**, check the list of possible variables and solutions for duplicate values. If you are not satisfied with the set, click **Generate** again to generate a new set.

7. Click the **Update Question** button.

Cancel   **Update Question**

III. Question Group: Randomize a Question

Question groups allow you to place multiple questions within a group for students to answer. You can choose the number of questions that should be answered from the group and how many points to assign each question. Creating a question group randomizes questions within a quiz.

1. In the **Questions** tab, click the **New Question Group** button.

Details   Questions

    ⊕ New Question   ⊕ New Question Group   🔍 Find Q

> 💡 Tip: Use a descriptive name to help you identify the question group later. For example, if you are grouping your questions by topic and difficulty level, you might want to label your question bank something along the lines of, "Photosynthesis, easy."

2. In the dialogue box, provide a name for the question group [1], the number of questions that students should answer from this group of questions [2], and the number of points each question should carry [3].

Group [1]   Pick 1[2] questions, 1[3] pts per question

Q Link to a Question Bank

Cancel   Create Group

NB: If you tell Canvas to pick all the questions in a question group, the result is randomization of the order of the questions.

3. Click the **Create Group** button.

Cancel   Create Group

4. Adding questions to the question group

    a. To add individual questions to the group, click the **Add** icon on the top right of the Question Group box.

    Then follow the instructions outlined on p. 3 under "Create a Quiz with Individual Questions, Step II: Create Individual Questions."

    b. You can also **Find Questions** from an existing question bank and add them to the question group. See follow the instructions outlined on p. 5, under "Create a Quiz with Individual Questions, Step III: Add Existing Individual Questions from Question Bank."

    uestion Group   Q Find Questions

5. Click the maroon **Save** button to save and preview the quiz.

Cancel   Save & Publish   Save

Reordering Individual Questions or Question Groups

Drag-and-drop method:

1. Hover over the drag handle next to the question or group. A pointer icon will appear.
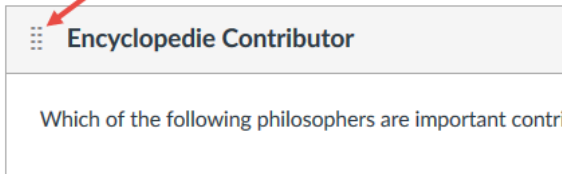
2. Click and drag the question or group to the desired location.
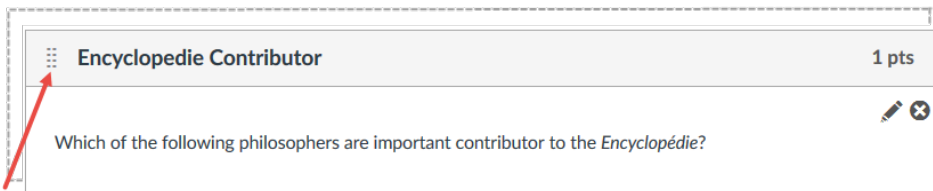
Using the move dialog menu

1. Click the drag handle next to the quiz question or group.

2. In the dialog box, select which question group you want to move the question into [1]; *or* the new location where you want to place the question [2].

3. Click the maroon **Save** button.

Canvas' Built-in Quiz Analytics

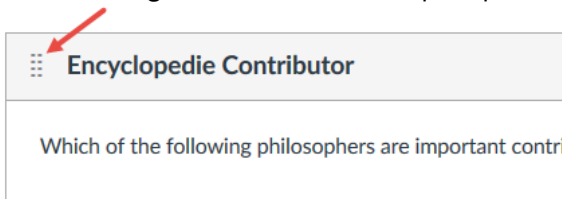Once your quizzes have been published and have at least one submission, you can view quiz statistics via Canvas's built-in analysis tool or download comma separated value (CSV) files. Canvas's built-in analytical tools are valid for quizzes under 100 questions or 1000 attempts.

1. Open a quiz.

2. On the top right, click the **Quiz Statistics** link.

3. On the **Quiz Summary** page under **Quiz Summary** you will see the quiz average score, high score, low score, standard deviation (how far the values are spread across the entire score range), and average time of quiz completion. Below them is the grade distribution in a bar chart.

Under **Question Breakdown** you will see detail analytics for each quiz question.
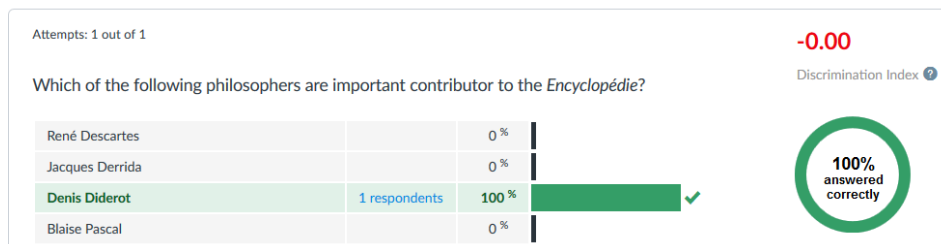
a) Numeric and graphic representation of the total number and total percentage of students who answered the quiz question correctly (green bar with a check mark) and incorrectly (black striped bar). Click the **[x respondents]** link to view the names of the students who selected an answer choice.

See also: "Once I publish my quiz, what kinds of quiz statistics are available?" community.canvaslms.com/docs/DOC-2981

Tip: If you have more than 10 course sections, generate a Student/Item Analysis report.

Tip: If a student had multiple assignment attempts, you can view past attempts in SpeedGrader. Quiz stats will only display the kept score for the student (highest, latest, or average score).

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b) **Discrimination Index**. True/False and Multiple Choice quiz questions include an item discrimination index, which attempts to look at a spread of scores and reflect differences in student achievement.

4. To see details of the quiz results:

Section Filter ▼ [1]   📊 Student Analysis [2]   📊 Item Analysis [3]
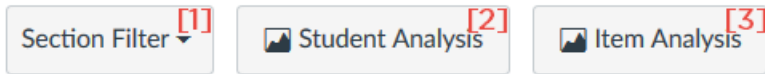
a) Use the **Section Filter** drop-down menu at the top right to filter quiz statistics for one of the first 10 sections of your course.

b) Click the **Student Analysis** button to download a CSV file that tabulates all quiz attempts, answer choices, number of correct and incorrect answers, and total score by students.

c) Click the **Item Analysis** button to download a CSV file that tabulates

   ▪ number of students who answered the quiz,

   ▪ number of students in the top 27%, middle 46%, and bottom 27%,

   ▪ total number of questions in the quiz,

   ▪ number of students who answered correctly and incorrectly,

   ▪ ratio of students who answered correctly and incorrectly,

   ▪ number of students in the top 27%, middle 46%, and bottom 27% who got the question right

   ▪ variance and standard deviation of scores on this question

   ▪ difficulty index

   ▪ alpha score for the whole quiz

   ▪ point biserial of the correct answer

   ▪ point biserial of the first incorrect answer or distractor (followed by the second, etc)

🔖 Definition: The **Discrimination Index** measures how well a single question can tell the difference between students who do well on an exam and those who do not.

An ideal discrimination index shows students who scored higher on the quiz getting the quiz question right, students who scored lower on the quiz getting the quiz question wrong, and students in the middle range on either side.

A +0.25 or higher score (green) is considered good. Zero shows all students getting the quiz question either right or wrong.

✏️ See also: "Once I publish my quiz, what kinds of quiz statistics are available?" *community.canvaslms.com/docs/ DOC-2981*

✏️ See also: "Quiz Item Analysis PDF" *s3.amazonaws.com/tr-learncanvas/docs/CanvasQuizIte mAnalysis.pdf*

Making Changes, Regrading, Fudge Points, and Using the Moderate Quiz Page

Making Changes

Although you can make changes (adding, deleting, updating questions) to a published quiz, students who have already opened or completed the quiz *will not see any changes you make*.

- If you have to edit a published quiz, you should notify your students of the changes by checking the **Notify users this quiz has changed** box at the bottom of the page near the Save button.

  NB: Students will always receive a notification on due date changes whether this box is checked or not.

✏️ See also: "Once I publish my quiz, how do I make additional changes?" *community.canvaslms.com/docs/ DOC-2977*

💡 Tip: You might need to adjust the number of allowed attempts if you want your students to re-take the quiz.

- Quiz data before any change is retained as part of any existing student submissions.

- If only the point value of the quiz is changed, student's submitted quiz will show the update point value, but the current grade *won't change in the Gradebook*.

- If you changed existing quiz questions, you might want to regrade the quiz, add fudge points, or use Moderate Quiz to grant students extra attempts, extra time for timed quizzes.

Regrading

When you make changes to Multiple Choice, True/False, and Multiple Answers questions in a published quiz, Canvas will give you the options for regrading them.

- Quiz regrade only applies to students who have already taken the quiz.

- Adding or removing a question as well as changing the point value for a multiple choice question does not trigger the quiz regrade feature.

- Adding or deleting answers from a true/false question with submissions disables the option to regrade that question.

- Quiz regrade applies only when you re-save the quiz in a 2-step process. This allows you to regrade multiple changes simultaneously. Changes are recorded in grading history in the Gradebook.

- When students view their quiz results, they see a notification if their quiz has been affected. The attempt history also reflects the regraded score.

Fudge Points

Using the SpeedGrader, you can manually add or remove points from a student's overall quiz score. These are called Fudge Points.

1. Open **SpeedGrader** and go to the entry of the student whom you want to give fudge points.

2. The Fudge Point field is at the bottom of the center pane, beneath the questions and answers. Enter negative points to remove points.

3. Click the **Update Score** button to change the student's quiz score.

Using the Moderate Quiz Page

The Moderate Quiz page allows you to view the number of quiz attempts each student has taken, time they took to submit, numbers of attempts left, and final scores. You can also grant students extra attempts, extra time for timed quizzes, and manually unlock quiz attempts.

1. Navigate to your quiz.

2. Click the **Moderate Quiz** link on the quiz sidebar on the right (available only after a quiz has been published).

3. Click the **pencil icon** on the right to make changes for an individual student.

Side notes

See also: "What regrade options are available for a quiz?" *community.canvaslms.com/docs/DOC-2989*

"How do I regrade a Multiple Choice quiz question?" *community.canvaslms.com/docs/DOC-5361*

See also: "How do I use grading history in the Gradebook?" *community.canvaslms.com/docs/DOC-2804*

Tip: In Quiz Regrade, Canvas changes score for all applicable students. In Fudge Points, instructors manually changes grades for applicable students one-by-one.

See also: "How do I use quiz fudge points in SpeedGrader?" *community.canvaslms.com/docs/DOC-2990*

See also: "Once I publish my quiz, how do I use the Moderate Quiz page?" *community.canvaslms.com/docs/DOC-2979*

Mobile Apps

The Canvas mobile apps natively supports quizzes that contain Essay, Multiple Choice, Multiple Answer, Fill in the Blank, Matching, Numeric, or True/False questions. Formula and Multiple-Fill-in-the-Blank questions are not supported. **Any quizzes that do not contain supported question types are redirected to the web version of Canvas.**

Currently, the app **does not** support one-question-at-a-time quizzes, quizzes with passcode restrictions, or quizzes with IP address restrictions.

Also, the browser (for iOS in particular) better support quizzes with many mathematic and/or images questions.

For more information about mobile quizzes, see:

- How do I take a quiz in the Canvas app on my iOS device?
  community.canvaslms.com/docs/DOC-9866-18561202186
- How do I take a quiz in the Canvas app on my Android device?
  community.canvaslms.com/docs/DOC-9762-18555199527

Maximizing Quiz Security

While it is impossible to completely forestall cheating, a number of quiz settings in Canvas can help improve quiz security and make cheating in online quizzes more difficult. In many cases locking down a quiz (for example, not allowing students to review what they got wrong on a quiz) can hinder student learning, so be sure to weigh the pros, cons and the goals of the quiz before securing it.

Here's a summary of the quiz settings that may be helpful to improve security:

- Randomize questions
- Shuffle answers
- Set time limit
- Unselect "Allow multiple attempts"
- "Let Students See Their Quiz Responses" settings
- Show One Question at a Time
- Require access code (if students are taking the quiz at a specific time or in a certain location)
- Quiz availability
- Mute quizzes

For more information about these settings and quiz security, see:

- Quiz Settings to Maximize Security
  community.canvaslms.com/docs/DOC-3313-quiz-settings-to-maximize-security

Appendix: Question Type Supported by Chalk vs Canvas

The table below lists question types supported by Chalk and their Canvas equivalents. If you are migrating **Test, Surveys, and Pools** from Chalk into **Quizzes** in Canvas, it's best to delete or convert question types not supported by Canvas first. Questions with answers that include image files are known to cause issues. Test descriptions and attachments sometimes do not migrate as expected.

Chalk	Canvas	Description
Multiple Choice, Either/Or	Multiple Choice	Students choose one correct answer from a selection of answers. To create an 'Either/Or' question in Canvas, add a Multiple Choice question with 2 answer options.
True/False	True/False	Displays two answer options: true and false. There is no partial credit.
Fill in the Blank	Fill in the Blank	Students will see the question with a small text box to type their answer. Answers are not case-sensitive.
Fill in Multiple Blanks	Fill in Multiple Blanks	Enter your question, specify where each blank should go, then define the possible correct answer for each blank using the dropdown menu. Students answer the question by typing the correct answers into text boxes at each blank. Answers are not case-sensitive.
Multiple Answer	Multiple Answers	Student select ALL the answer choices marked as correct.
Jumbled Sentence, Opinion Scale/Likert	Multiple Dropdowns	e.g. "Roses are [color1], violets are [color2]" where [color 1] and [color 2] are dropdown menus. To create an Opinion/Likert Scale question, create a two-column table, enter the question or statement in the first column of each row, then enter the answer choices in the second column.
Calculated Numeric	Numerical Answer	Define the correct answer as any number within a range, or a number plus or minus some error margin. Student will be given an empty text box to type their numerical answer.
Calculated Formula	Formula Question	Enter your question, build a formula, specify the parameters for your variables, and generate a set of possible answer combinations. Students calculate the correct answer based on the randomly selected variables shown to them in the question.
Essay, Short Answer	Essay Question	Students compose their answers in a text box that instructors will manually review and score.
File Response	File Upload Question	Students upload a file as their answer.
Matching	Matching	Students match an answer choice to the prompt on the left by selecting from a dropdown on the right. Multiple rows can have the same answer, and you can add distractor answers on the right.
No Chalk equivalent	Text (no question)	This is not a question to be scored. It is useful for introducing a set of related questions.
Quiz Bowl	No Canvas equivalent	Quiz Bowl questions require the answers in the form of a question. Specify one or more interrogatives and one or more phrases that must be included in the answer.
Ordering	No Canvas equivalent	Students put a series of items in correct order.
Hot Spot	No Canvas equivalent	Students identifying an area in an image file.