# Table of Contents

1.0 Workshop Overview .................................................................................................. 5  
   ROADMAP ...................................................................................................................... 6

2.0 Student Experience.................................................................................................... 7  
   Review: Accessing Tests and Surveys......................................................................... 8
   Hands-on Activity........................................................................................................ 10

3.0 Creating Advanced Questions ............................................................................... 11  
   Advanced Question Types........................................................................................ 12
   Creating Jumbled Sentence Questions ....................................................................... 13
   Creating Fill in Multiple Blanks Questions ................................................................. 17
   Creating Hot Spot Questions..................................................................................... 20
   Creating Opinion Scale/Likert Questions ................................................................ 23
   Creating Quiz Bowl Questions................................................................................... 25
   Creating Calculated Numeric Questions ................................................................ 28
   Hands-on Activity........................................................................................................ 30
   About Metadata ........................................................................................................ 31
   Adding Metadata to Questions ............................................................................... 33
   Ask Dr. C ....................................................................................................................... 35
   Hands-on Activity........................................................................................................ 36

4.0 Creating Pools.......................................................................................................... 37  
   About Pools................................................................................................................. 38
   Creating a Pool............................................................................................................. 41
   Importing a Pool.......................................................................................................... 42
5.0 Advanced Test Creation ........................................................................................................ 44

Overview: Creating Tests Using Pools and Assessments ............................................. 45
Specifying Question Settings ..................................................................................... 47
Finding Questions ........................................................................................................ 48
Adding the Questions ................................................................................................. 52
Hands-on Activity ........................................................................................................ 54
Creating Question Sets .............................................................................................. 55
Creating Random Blocks ........................................................................................... 58
Hands-on Activity ........................................................................................................ 61
Ask Dr. C ....................................................................................................................... 62

6.0 Creating and Using Surveys .................................................................................... 63

The Survey Lifecycle ................................................................................................... 64
Creating and Deploying Surveys .............................................................................. 65
Hands-on Activity ........................................................................................................ 68
Best Practice: Use Surveys Throughout Your Course .............................................. 69
Viewing Aggregate Survey Results ........................................................................... 70
Hands-on Activity ........................................................................................................ 72

7.0 Workshop Wrap Up .................................................................................................. 73

Spotlight on YOUR Course ........................................................................................... 74
1.0 Workshop Overview

In this workshop, you will be introduced to the advanced features and functions of assessments.

First, you will learn how to create advanced question types and add metadata to questions. Then, you will explore Pool Manager and learn how to create a database of questions for reuse in multiple assessments.

We will then look at advanced test creation strategies, as you learn to create tests by:

- Searching pools and tests by question type and metadata
- Adding random blocks of questions to tests

Finally, you will become familiar with the key differences between creating tests and surveys, and learn how to create a survey and view survey results.
ROADMAP

2.0 Student Experience:
Take a Test
Access and take a test with advanced question types.

Take a Survey
Access and take a survey, giving your opinions.

3.0 Creating Advanced Questions
Create Advanced Questions
Add Jumbled Sentence, Fill in Multiple Blanks, Hot Spot, Opinion Scale/Likert, Quiz Bowl, and Calculated Numeric questions.

Create Questions with Metadata
Assign metadata to new and existing questions.

4.0 Creating Pools
About Pool Manager
Learn how Pool Manager can be used in conjunction with Test Manager.

Creating Pools
Learn the differences between creating a test and creating a pool.

Importing pools
Learn how to add questions from another course.

5.0 Advanced Test Creation
Create a Test by Finding Questions
Search for questions by question type and metadata.

Create a Test with Question Sets
Create a test that draws a random selection of questions.

Create a Test with a Random Block of Questions
Create a test that draws a random selection of questions from a pool.

6.0 Creating Surveys
About Surveys
Note the differences between surveys and tests.

Create and Deploy a Survey
Poll student opinion and conduct class evaluations.

View Aggregate Statistics
View survey results, including student responses for each question.
2.0 Student Experience

In this section, you will explore both a test and a survey as a student. This will allow you to experience a variety of more advanced question types. You will also discover the essential differences between a survey and a test.

These experiences will provide an introduction to the instructor activities you will complete later in the workshop, and provide some context for the decisions you will make as an instructor.

Learning Outcomes

After completing this section, you will be able to:

- Describe how advanced question types appear to students
- Explain survey taking from a student’s perspective
Review: Accessing Tests and Surveys

Students typically access tests and surveys from Content Areas.

![Assessments]

After you select a test or survey, click Begin for the test or survey to appear. Any instructions provided by the instructor are located at the top of the test.
Figure 1.2

Take Test: First Aid on the Water

Instructions
Name: First Aid on the Water
Instructions: Read each question carefully. Check your spelling before clicking Save.
Multiple Attempts: This Test allows 2 attempts. This is attempt number 1.
Force Completion: This Test can be saved and resumed later.

Test/Survey Status

Question 1

[10 points] Save Answer

As essential tenant of first aid, is that when you find an unconscious person, you first [ ], then [ ], and finally [ ].

Question 2

[10 points] Save Answer

In first aid, the mnemonic ABC stands for [ ], and [ ].
Hands-on Activity

For this activity, use your Student Course.

Advanced Quiz

Take the Advanced Quiz in the Assessments Content Area and do the following.

- Note the question types and layout. Jot down the question types.
- Answer the questions.
- Review your results and read the feedback.

Advanced Quiz Question Types

- List the types of questions you encountered in the Advanced Quiz.

Survey

Access Getting Started on the Course Menu and take the Attitudes About Writing survey.

- Note the question types and layout.
- Answer the questions.
- Review your answers.

For Discussion:

- How can you use the advanced question types in your course?
3.0 Creating Advanced Questions

In this section, you will learn how to create the advanced question types you just explored from the student perspective. In addition, you will learn how to add metadata to questions to allow questions to be categorized and searched.

Learning Outcomes

After completing this section, you will be able to:

- Create advanced question types
- Explain the advantages of adding metadata to questions
- Add metadata to questions
Advanced Question Types

In this section, we will look at the following advanced question types:

- Jumbled Sentence
- Fill in Multiple Blanks
- Hot Spot
- Opinion Scale/Likert
- Quiz Bowl
- Calculated Numeric

Figure 1
Creating Jumbled Sentence Questions

Jumbled Sentence questions require students to complete a sentence by selecting words or phrases from a drop-down list. The same drop-down list appears for all blanks and can include both correct answers and distracters. In the following example, the jumbled sentence contains three blanks, but there are six possible answers. Three of the answers are correct and three are distracters. Up to 20 different words or phrases can appear on the list. The words or phrases will appear in the same order for each drop-down list.

Figure 2.1 – Jumbled Sentence question from the student perspective

Type the question text as the students will see it, but replace the missing information with variables in square brackets, for example, “Color is to spectrum as [y] is to [z].” The [y] and [z] represent the places in the sentence where a drop-down list will appear. Variables can consist of letters, digits (0-9), periods ( . ), underscores ( _ ) and hyphens ( - ). Variable names must be unique and cannot be reused.

Next, create the drop-down list the students will select from to complete the sentence. As stated earlier, the list can include only correct answers or it can contain both correct answers and distracters. On the next page, select the correct answer for each variable.
Advanced Test Creation: Creating Jumbled Sentence Questions

You can allow partial credit so each correct answer is allotted a fraction of the total point value. If you want to allow partial credit, the Allow Partial Credit option for answers must be enabled in the test Question Settings.

**QUICK STEPS: creating jumbled sentence questions**

1. On the Create Question drop-down list, select Jumbled Sentence.
2. On the Create/Edit Jumbled Sentence Question page, type text in the Question Text box, adding the variables in square brackets. Format the question or statement with the Text Editor, if you want.
3. Select whether to Allow Partial Credit.
4. Select Number of Answers from the drop-down list.
5. Type answers in the Answer text boxes.
6. Click Next.
7. On the next Create/Edit page, use the drop-down list to select the correct Answer Items.
8. Optionally, type Feedback for correct and incorrect answers.
9. Click Submit.
Figure 2.2

Create/Edit Jumbled Sentence Question

As essential tenet of first aid, is that when you find an unconscious person, you first [x], then [y], and finally [z].

<table>
<thead>
<tr>
<th>Question Text</th>
</tr>
</thead>
<tbody>
<tr>
<td>As essential tenet of first aid, is that when you find an unconscious person, you first [x], then [y], and finally [z].</td>
</tr>
</tbody>
</table>

| Path: body |

<table>
<thead>
<tr>
<th>1. Question</th>
</tr>
</thead>
<tbody>
<tr>
<td>Question Title</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2. Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allow Partial Credit</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3. Answers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Answers</td>
</tr>
</tbody>
</table>

| Answer 1 | make them aware of danger | Remove |
| Answer 2 | ensure their airway is clear | Remove |
| Answer 3 | check their breathing | Remove |
| Answer 4 | move the person so that they remain stable | Remove |
| Answer 5 | check for circulation | Remove |
| Answer 6 | check for awareness by | Remove |
**Figure 2.3**

**TIP:** Add an extra answer in the first position with a neutral word or character, such as none, blank, or a hyphen so students do not see a possible correct answer when they first view the question. Answers must contain at least one character.
Creating Fill in Multiple Blanks Questions

In a Fill in Multiple Blanks question, students are presented with text containing up to 10 blanks. Students complete the sentence by typing the appropriate word or phrase for each blank.

![Figure 3.1 - Fill in Multiple Blanks question from the student perspective](image)

To create a Fill in the Multiple Blanks question, first add the question text as the students will see it, but replace the missing information with variables in square brackets, such as letters or the correct answers, for example, “In first aid, the mnemonic ABC stands for [x], [y], and [z].” Next, you will type the correct answers, including variations in spellings, plurals, and common abbreviations.

<table>
<thead>
<tr>
<th>QUICK STEPS: creating fill in multiple blanks questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. On the Create Question drop-down list, select Fill in Multiple Blanks.</td>
</tr>
<tr>
<td>2. On the Create/Edit Fill in Multiple Blanks Question page, type text in the Question Text box, adding the variables in square brackets. Format the question or statement with the Text Editor, if you want.</td>
</tr>
<tr>
<td>3. Select whether to Allow Partial Credit.</td>
</tr>
<tr>
<td>4. Click Next.</td>
</tr>
<tr>
<td>5. On the next Create/Edit page, select the Number of Answers from the drop-down list for each Answer.</td>
</tr>
<tr>
<td>6. Type answers in the Answer Text boxes.</td>
</tr>
<tr>
<td>7. Click Next.</td>
</tr>
<tr>
<td>8. On the next Create/Edit page, optionally, type Feedback for correct and incorrect answers.</td>
</tr>
<tr>
<td>9. Click Submit.</td>
</tr>
</tbody>
</table>
Figure 3.2

The Question Text appears at the top of the next page to refer to as you fill in the answers.
In first aid, the mnemonic ABC stands for [airway], [breathing], and [circulation].

1. **Question Text**

   In first aid, the mnemonic ABC stands for [airway], [breathing], and [circulation].

2. **Answers for: airway**

   - **Number of Answers**: 1
   - **Answer 1**: airway

3. **Answers for: breathing**

   - **Number of Answers**: 1
   - **Answer 1**: breathing

4. **Answers for: circulation**

   - **Number of Answers**: 2
   - **Answer 1**: circulation
   - **Answer 2**: circulatory

**Figure 3.3**
Creating Hot Spot Questions

With Hot Spot questions, students are presented with an image and are asked to select a particular area. For example, a human anatomy question could present a diagram of the digestive system and ask students to click the esophagus.

Figure 4.1 – Hot Spot question from the student perspective

Ensure you have the image file ready before beginning to create the question. You can upload the image file from your local computer or link to it from the Course Files or Content Collection. Images must be .jpg, .gif, or .png files. Although there are no limitations, take into consideration the size of the image and make adjustments using an image editing application before uploading the file.
**QUICK STEPS: creating hot spot questions**

1. On the **Create Question** drop-down list, select **Hot Spot**.

2. On the **Create/Edit Hot Spot Question** page, type text in the **Question Text** box. Format the question with the Text Editor, if you want.

3. Browse for the image file, as shown in the following illustration. After you upload the file, the file name appears.

4. Click **Next**

5. On the next **Create/Edit** page, the image appears. Press and drag the mouse pointer over an area in the image to specify the hot spot area for the correct answer. Start with the upper left corner of the rectangle and drag down to the lower right. If needed, click **Clear** to remove the rectangle and start again.

6. Optionally, type **Feedback** for correct and incorrect answers.

7. Click **Submit**
An open rectangular box surrounds the hot spot on the image. The hot spot can only be in the shape of a rectangle. Circles, triangles and other polygons are not available as hot spot areas.
Creating Opinion Scale/Likert Questions

Opinion Scale/Likert questions are designed to measure students’ attitudes or reactions using a comparable scale. By default, there are five answer choices ranging from Strongly Agree to Strongly Disagree, and a sixth option allowing students to select Not Applicable. You can change the text of the answer choices and adjust the number of answers from 2 to 20.

<table>
<thead>
<tr>
<th>Question 4</th>
<th>10 points</th>
<th>Save Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>How concerned are you about the need for first aid on the water?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Very Concerned</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Concerned</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Neither Concerned or Unconcerned</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Not Really Concerned</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Not Concerned At All</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Not Applicable</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Figure 5.1 – Opinion/Likert question from the student perspective

Opinion Scale/Likert questions are ideal for surveys. If they are included in a test, the instructor must select a correct answer. If just an opinion is needed, change the point value to zero so as not to affect the test total.

▶ QUICK STEPS: creating Opinion Scale/Likert questions

1. On the **Create Question** drop-down list, select **Opinion Scale/Likert**.
2. On the **Create/Edit Opinion Scale/Likert Question** page, type a question or statement in the **Question Text** box. Format the question or statement with the Text Editor, if you want.
3. Select **Answer Numbering** and **Answer Orientation** from the drop-down lists or leave the defaults.
4. Select **Number of Answers** from the drop-down list or leave the default of 6.
5. Select the correct answer.
6. Optionally, type **Feedback** for correct and incorrect answers.
7. Click **Submit**.
Edit the default answers to fit your question or statement. Answer boxes can be removed at any time using the Remove button to the right of each text box.
Creating Quiz Bowl Questions

With Quiz Bowl questions, students are presented with an answer to which they must provide the question. The student’s response must be in the form of a question that begins with an interrogative, such as who, what, or where. For example, the statement, "It is the only country that is a continent," requires the answer, "What is Australia?"

**TIP:** Add instructions to the initial statement asking students to respond in the form of a question. Remind students to use a question mark. Incorrect end punctuation will result in no credit for the response.

When you create a Quiz Bowl question, you enter:

- The statement to which students must answer with an appropriate question
- All possible interrogatives the question could begin with—who, what, where, and so on
- All possible correct answer phrases, including variations in spellings, plurals, and common abbreviations

By default, when Blackboard Learn scores the question, a correct response contains any one of the interrogatives you added, immediately followed by any one of the phrases you added, including end punctuation.

To award students partial credit for responses including a correct phrase, but missing the correct interrogative, enable the **Allow Partial Credit** option for answers in the test Question Settings.
Quick Steps: Creating Quiz Bowl Questions

1. On the Create Question drop-down list, select Quiz Bowl.
2. On the Create/Edit Quiz Bowl Question page, type a statement in the Question Text box to which students can provide the question. Format the statement with the Text Editor, if you want.
3. Select the Number of Interrogatives from the drop-down list. Up to 20 interrogatives can be added.
4. If necessary, type or edit the Interrogatives. Remove interrogatives using the Remove function to the right of each text box.
5. Type Answer Phrases.
6. Optionally, type Feedback for correct and incorrect answers.
7. Click Submit.
# Create/Edit Quiz Bowl Question

* Indicates a required field.

## 1. Question

<table>
<thead>
<tr>
<th>Question Title</th>
<th><img src="image" alt="Image" /></th>
</tr>
</thead>
</table>

**Question Text**

It is the only country that is a continent.

Your answer must be in the form of a question, such as *What is ___?* Please use a question mark at the end of your question.

**Path:** body

## 2. Options

<table>
<thead>
<tr>
<th>Allow Partial Credit</th>
<th><img src="image" alt="Image" /></th>
</tr>
</thead>
</table>

### Partial Credit %

0

## 3. Interrogatives

<table>
<thead>
<tr>
<th>Number of Interrogatives</th>
<th><img src="image" alt="Image" /></th>
</tr>
</thead>
</table>

**Interrogative 1**

What

**Interrogative 2**

where

## 4. Answer Phrases

<table>
<thead>
<tr>
<th>Number of Answer Phrases</th>
<th><img src="image" alt="Image" /></th>
</tr>
</thead>
</table>

**Answer Phrase 1**

What is Australia?

**Answer Phrase 2**

Where is Australia?

---

Figure 6.2
Creating Calculated Numeric Questions

With Calculated Numeric questions, students are presented with a question to which they must reply with a numeric answer. The question does not need to be a mathematical formula; it can be a text question that requires a numeric answer. It resembles a Fill in the Blank question in which the correct answer is a number.

![Figure 7.1 - Calculated Numeric question from the student perspective](Image)

You can specify an exact numeric answer or you can specify an answer and an allowable range.

**QUICK STEPS: creating calculated numeric questions**

1. On the Create Question drop-down list, select Calculated Numeric.
2. On the Create/Edit Numeric Answer Question page, type text in the Question Text box. Format the question with the Text Editor, if you want.
3. Type the Correct Answer using numbers.
4. If applicable, type the Answer Range.
5. Optionally, type Feedback for correct and incorrect answers.
6. Click Submit.
Figure 7.2

Create/Edit Numeric Answer Question

1. **Question**
   - Question Title
   - Question Text

   If the average human body temperature under normal conditions is 36.5 degrees Celsius and 36.5 degrees Celsius, what is the temperature in Fahrenheit?

2. **Answers**
   - Correct Answer
   - Answer Range +/-

   If you add an **Answer Range**, the question will be scored as correct if it falls anywhere within the range.
Hands-on Activity

For this activity, use your Practice Course.

From the Tests page:

- Create a test containing three or four of the advanced question types. Select question types you might use in your own course.
About Metadata

Metadata describes data and helps you organize content. Tag questions with metadata to help you retrieve them later. You can add the following types of metadata:

- Category
- Topic
- Levels of Difficulty
- Keywords

There are no standard metadata values for each type; you assign metadata values to suit your course content and pedagogical requirements. For example, for a course on Popular Culture, you might develop the following classification scheme listed in the following table:

<table>
<thead>
<tr>
<th>Metadata Type</th>
<th>Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Categories</td>
<td>the ‘60s, the ‘70s, the ‘80s, the ‘90s, the 21st Century</td>
</tr>
<tr>
<td>Levels of Difficulty</td>
<td>Easy, Moderate, Hard</td>
</tr>
<tr>
<td>Topics</td>
<td>TV, Movies, Music, Sports, Hobbies, Food</td>
</tr>
<tr>
<td>Keywords</td>
<td>Enter keywords specific to each question. Example: What powdered drink mix was made popular by NASA? Keywords: powdered drink, Tang, NASA</td>
</tr>
</tbody>
</table>
Tagging questions with metadata is valuable as it helps you find questions later to be reused in additional tests or to create random blocks for tests. For example, if the classification scheme above was used, you can:

- Create a test containing moderately difficult questions about music from the ‘70s
- Create a test containing questions about TV and movies from the ‘80s and ‘90s
- Add bonus questions to a test by searching for questions assigned a hard level of difficulty

**NOTE:** The more specific the metadata assigned to a question, the easier it will be to find the question later.

**Overview: Creating and Assigning Metadata Values**

You can create the metadata values and assign a specific value to a question during question creation or by editing an existing question.

The following list provides an overview of the steps you take to create and assign metadata while creating the question: What powdered drink mix was made popular by NASA?

1. Type the question text and answer.
2. Add all the metadata values developed for Categories: the ‘60s, the ‘70s, and so on.
3. Add all the metadata values developed for Topics: TV, Movies, Music, and so on.
4. Add all the metadata values developed for Levels of Difficulty: Easy, Moderate, and Hard.
5. Assign the specific values for the current question:
   - **Category** = the ‘60s
   - **Topic** = Food
   - **Level of Difficulty** = Easy
6. Assign the Keywords for the current question: powdered drink, Tang, NASA

The metadata values you create are available for all questions in any test or pool. Therefore, you do not need to repeat all of the above steps for additional questions; you can create or edit a question and then go directly to step 5.
Adding Metadata to Questions

The process for adding metadata is the same regardless of the question type. In the following example, you will add metadata about the level of question difficulty as you create a multiple choice question.

**NOTE:** Ensure Question Metadata is enabled in the test Question Settings.

► **QUICK STEPS:** adding metadata to a question

1. On the Create Question drop-down list, select Multiple Choice.
2. On the Create/Edit Multiple Choice Question page, type the question and answers.
3. Under Categories and Keywords, click Add next to Levels of Difficulty.
4. Type a value in Add Tag. To add more values, repeat this step.
5. Click OK. The value is added to Levels of Difficulty.

To add metadata values for Categories, Topics, or Keywords; repeat steps 3–5.

![Figure 8.1](image-url)
Advanced Test Creation: Adding Metadata to Questions

5. Categories and Keywords

<table>
<thead>
<tr>
<th>Categories</th>
<th>None</th>
<th>Add</th>
</tr>
</thead>
<tbody>
<tr>
<td>Topics</td>
<td>None</td>
<td>Add</td>
</tr>
<tr>
<td>Levels of Difficulty</td>
<td>Easy</td>
<td>Add Tag</td>
</tr>
<tr>
<td>Keywords</td>
<td>None</td>
<td>Add</td>
</tr>
</tbody>
</table>

![Figure 8.2](image)

The level of the question’s difficulty now appears on the question’s Create/Edit page.

![Figure 8.3](image)

After the values are added, you can choose from the existing values next time you create a question.

**NOTE:** The label *None* next to the other metadata types indicates that no values have been assigned for those types.
In the following table, Dr. C discusses creating question metadata. Dr. C is our Blackboard Learn expert,

<table>
<thead>
<tr>
<th><strong>Your question</strong></th>
<th><strong>Dr. C’s reply</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Can I create metadata values outside of a question?</td>
<td>No, you always create values and assign metadata within questions. However, to save time, you can access a single question and create all your metadata values for each type of metadata. Then, when you create the next question, you only need to assign the specific value to the question.</td>
</tr>
<tr>
<td>Do I have to add values for all metadata types?</td>
<td>No, you can use just one if that is all you need to organize your questions. For example, you can assign only keywords to your questions. Keywords are the quickest type of metadata to assign, since you do not need to create the values first and then assign them.</td>
</tr>
</tbody>
</table>
Hands-on Activity

For this activity, use your Practice Course.

Add Metadata

- Select one of the metadata types—Categories, Levels of Difficulty, Topics, or Keywords—and brainstorm some values you might apply to questions in your course.
- Add metadata to the advanced questions you created in an earlier activity.
4.0 Creating Pools

In this section, you will learn how to create question pools using Pool Manager.

**Learning Outcomes**

After completing this section, you will be able to:

- Explain the advantages of using pools
- Create a pool and add questions to it
- Import a pool
About Pools

A pool is a collection of questions that can be stored for repeated use. Pools act like repositories for sets of questions and can be imported and exported for reuse.

Questions in a pool are almost identical to test questions; they can contain feedback, metadata, and all the other elements of a test question, but they do not contain point values.

Instructors typically use pools to create a database of questions they can reuse in multiple assessments. For example, an instructor for a course on Sustainable Living can create a question pool for each of the central topics in the course. In the illustration below, the instructor has created three pools in Pool Manager: Diet, Housing, and Energy.
Using Pools in Test Creation

Pools themselves are never deployed or made visible to students. However, during test creation, you can find questions to include by searching pools.

For example, our instructor can create a final exam consisting of questions taken from each of the topic pools.
Creating and Using Surveys: About Pools

Using Pools for Random Block Tests

You can also create a test containing a random block of questions drawn from a specific pool. Each time the test is taken, a random selection of questions is drawn from the specified pool.

For example, our instructor can create an end-of-unit quiz consisting of 20 questions taken from the Diet pool.

Tests Tool

Diet Unit Quiz

Random selection of 20 questions taken from 100 questions in the Diet pool
Creating a Pool

You create and manage pools in the Pool Manager. Access the Pool Manager from the Control Panel under Course Tools.

Creating a pool is almost identical to creating a test. The overall steps include the following:

1. **Build the pool**: Students will not see the pool name, description, or instructions, so the information you add is only for your purposes.

2. **Specify the pool Question Settings**: These are identical to test Question Settings, except there are no scoring options. For example, there is no option to add default point values, because pool questions do not have points assigned. You assign points to the questions after they have been added to a test.

3. **Add the questions**: The process in Pool Manager is identical to the process for adding questions to a test.
Importing a Pool

You can export a pool of questions from one course, and then import into another course.

Before importing the pool, ensure the file is readily available. For instance, you can export a pool and save the resulting zipped file locally on your computer to upload to another course.

Quick Steps: Importing a pool

1. On the Pool Manager page, click Import Pool.
2. On the Pool Import page, click Browse My Computer.
3. Click Submit. The Pool Import Complete page appears.
4. Click OK. The imported pool is added to the list on the Pool Manager page.
Hands-on Activity

For this activity, use your Practice Course.

Create a Pool

- Create a pool and add two or three questions.

Import a Pool

- Import the Astronomy Fun Facts pool. It will be provided by the facilitator or can be downloaded from the Workshop Resources Content Area.
5.0 Advanced Test Creation

In this section, you will find questions for advanced test creation. You will use the question pool imported in the last section, and use metadata to assist with finding appropriate test questions.

Learning Objectives

After completing this section, you will be able to:

- Create a test by finding questions
- Create a test containing question sets
- Create a test containing a random block of questions drawn from a pool
Overview: Creating Tests Using Pools and Assessments

You can create a test by searching pools and other assessments to find appropriate questions to add. You can search for questions by question type, such as multiple choice, and by metadata, such as Category or Levels of Difficulty. For example, you can search pools and assessments to create a final exam containing moderately difficult, multiple choice questions drawn from review quizzes, self tests, and a question pool.

The steps to create a test by searching pools and assessments are:

1. Create a test
2. Specify the Question Settings
3. Find questions
4. Add the questions

Some of these steps are similar to routine test creation; we will focus on the differences.

Creating a Test

Add the test information, including:

- Name
- Description
- Instructions

► QUICK STEPS: creating a test

1. On the Tests page, click Build Test
2. Type the test’s Name, Description, and Instructions.
3. Click Submit

The Test Canvas page appears and you can begin to add questions to the test.
If you want to add questions to an existing test, access it from the Tests page. From the test’s contextual menu, select Edit to begin or continue adding questions.
Specifying Question Settings

The second overall step is to specify test Question Settings. Generally, the settings you specify will be applied to questions you add to the test by searching pools and other assessments. For example, if you do not select **Provide Feedback for Individual Answers**, the individual feedback will not be included in the test you are currently creating, even if the question you searched for contains individual feedback.

**QUICK STEPS: specifying question settings**

1. On the **Test Canvas** page, click **Question Settings** on the Action Bar.
2. Select the options by selecting the check boxes.
3. Click **Submit**.

**Figure 2**

**NOTE:** The default point value will only be applied to questions taken from pools. If you add questions from another test, the original point value is retained.
Finding Questions

The third overall step is to find questions. You can browse, preview, and select questions from the Question Finder.

**Figure 3.1**

**TAKE NOTE:**

A. Use the **Browse Criteria** and **Search current results** sections to narrow your search.

B. As you narrow your search, each search criteria is listed in the **Criteria Summary** section for easy reference.

C. Choose to copy or link to selected original questions.

D. By default, the questions appear with truncated text. Change the **Question Display** to display the question text in full.

E. Preview each question to view the question text and answer stems.
Creating Pools: Finding Questions

**QUICK STEPS: finding questions**

1. On the **Test Canvas** page, point to **Reuse Question** on the Action Bar to access the drop-down list.
2. Select **Find Questions**.
3. The **Find Questions** page opens.

![Figure 3.2 Test Canvas: New Test](image)

**Figure 3.2**

**Linking to or Copying an Original Question**

The first time you enter the Question Finder, a window appears asking you if you want to link to or copy the questions you select.

![Figure 3.3 Find Question Mode](image)

**Figure 3.3**

**NOTE:** If you do not see this window, ensure pop-ups are enabled on your browser.

Linking to a question means that a link to the original question is added to the test. This is not another instance of the question. Any change made to the original question will be reflected in this link in the new test. This option is ideal for questions that test knowledge on current events.
Creating Pools: Finding Questions

A copied question creates a new question that is a copy of the original. Any revisions made to the original question will not be reflected in the copy. Copying a question is valuable when you want to create similar questions with minor alterations.

**NOTE:** Although this window will not appear again, you can change your choice at any time while searching for questions in the Question Finder.

**Using Browse Criteria in the Search**

All questions appear in the list by default. To narrow your selection, browse based on certain criteria. Search by selecting from specific pools, tests, and question types.

Browse also by metadata criteria. The more metadata that was added to each question, the more specific your search can be, making it easier to find exactly what you are looking for. Expand a section to select the browse criteria.

![Figure 3.4](image-url)
Creating Pools: Finding Questions

**Search Current Results**

You can also search by words or phrases contained in question text. These words do not have to be identified in the question metadata when you create the question.

**NOTE:** As you narrow your search, each search criteria is listed in the Criteria Summary section for easy reference.
Adding the Questions

The Question Finder displays the result of all the questions matching your search criteria and indicates the type of question and the name of the test or pool that contains it.

The next step is to select the questions to include in the assessment.

**Figure 4.1**

- **A.** Preview and select questions.
- **B.** Selected questions are stored in the panel at the bottom of the Question Finder.
- **C.** Review or delete selected questions.
- **D.** Add questions to test.

**TAKE NOTE**

A. Preview and select questions.
B. Selected questions are stored in the panel at the bottom of the Question Finder.
C. Review or delete selected questions.
D. Add questions to test.
Assigning Point Values

After selecting the questions, you can assign or edit point values.

**QUICK STEPS: assigning point values**

1. On the Test Canvas page, click a question’s Update Points and Extra Credit field to edit it.
2. Type the points.
3. Click Submit.

![Figure 4.2](image)

Next Steps

After you add questions and assign point values, you can proceed with the typical next steps, including ordering the questions and deploying the test.
Hands-on Activity

For this activity, use your Practice Course.

Add Questions from Pools and Tests

- Add questions to the Unit 5 Quiz by searching the Astronomy Fun Facts pool for any questions containing the keyword Venus. Assign point values if necessary. Make the quiz available.

- Create a Midterm Exam. Search all pools and tests for multiple choice questions in the scientists category. Assign point values if necessary.
Creating Question Sets

As well as selecting specific questions to include in a test, you can specify that a random selection of questions be presented each time the test is taken. To do this, you create a Question Set or Random Block.

A Question Set is a collection of questions retrieved from selected Tests and Pools. From this set, you specify how many questions to present. The specific questions presented are randomly chosen for each time the test is taken.

For each question set, you can specify:

- The pools and tests from which it will be drawn
- The type of questions to be drawn
- The number of questions to be drawn

**QUICK STEPS: creating question sets**

1. Create or access a test.
2. On the Test Canvas page, point to Reuse Question on the Action Bar to access the drop-down list.
3. Select Create Question Set.
4. On the Create Question set page, search for questions using the Browse Criteria options.
5. Select the questions types to include in the test. Select the check box in the header row to select all questions.
6. Review your selected questions.
7. Click Submit.
The Question Set is added to the test.
Creating Pools: Creating Question Sets

**TAKE NOTE:**

A. Assign the total number of questions to present to students. To ensure students are presented with a question set each time, assign a number less than the total number of questions.

B. Type a point value per question. The point value you add will be assigned to every question in the set. You cannot assign separate point values for individual questions in the same question set.

C. View, edit, and delete Questions in the Set.

**NOTE:** When you add questions to a test using the Question Set feature, each question is linked. Therefore, if you change the original question, the revised version of the question will appear. After the test with the linked question is deployed, the questions will no longer reflect revisions made to the original.
Creating Random Blocks

Random Blocks also randomly select questions from a pool to be presented each time the test is taken. Unlike Question Sets, each random block can only be drawn from a single pool. You cannot draw random blocks of questions from tests or more than one pool.

**QUICK STEPS: creating random blocks**

1. Create or access a test.
2. On the Test Canvas page, point to Reuse Question on the Action Bar to access the drop-down list.
3. Select Create Random Block.
4. On the Create Random Block page, select a pool.
5. Select at least one question type to include in the test. All questions that meet the criteria will be added to the block.
6. Review your selected questions.
7. Click Submit.
Creating Pools: Creating Random Blocks

The random block of questions is added to the test.
Figure 6.4

**NOTE:** When you add questions to a test using the Random Block feature, each question is linked. Therefore, if you change the original question, the revised version of the question will appear. After the test with the linked question is deployed, the questions will no longer reflect revisions made to the original.
Hands-on Activity

For this activity, use your Practice Course.

Create a Random Block:

- Create a test containing a Random Block of five multiple choice questions. Add the test to the Assessments Content Area and make it available. Preview the test several times. Note how you are presented with different questions each time.
In the following table, Dr. C discusses using pools.

<table>
<thead>
<tr>
<th>▼ Your question</th>
<th>▼ Dr. C’s reply</th>
</tr>
</thead>
<tbody>
<tr>
<td>Can I convert tests into pools?</td>
<td>Yes, in Pool Manager, create a pool and then use the <strong>Find Questions</strong> feature to add questions from a specific test, or all tests.</td>
</tr>
<tr>
<td>Is it better to keep the same type of questions together in one pool? For example, should I keep all my multiple choice questions in the same pool?</td>
<td>It is not necessary to do this, but in some circumstances, this will be an advantage. For example, create a final exam containing a random selection of 50 multiple choice questions, 25 short answer questions, and 3 essay questions. Put each question type in a separate pool. This will allow you to assign different point values for the different types of questions, and will also ensure the same question types are grouped together in the exam.</td>
</tr>
<tr>
<td>Can I reuse a test given at the beginning of the course again at the end? What is the best way to achieve this?</td>
<td>Yes, you can copy the test. From the test, survey, or pool’s contextual menu, select <strong>Copy</strong>. The copied test appears in the list on the page. This copied test has the same name as the original with a number added. You also have the option to export and import a test if you want to use it in another course.</td>
</tr>
</tbody>
</table>
6.0 Creating and Using Surveys

You can use surveys to poll student opinion and conduct class evaluations. Survey results are anonymous, but you can see whether a student has completed a survey and view aggregate results for each survey question.

Learning Objectives

After completing this section, you will be able to:

- Describe the lifecycle of a survey
- Explain the differences between tests and surveys
- Create and deploy a survey
- View survey results
The Survey Lifecycle

There are four major stages in the survey lifecycle. You have already seen a survey from a student perspective. Now, from the instructor perspective, you will learn to create and deploy surveys, as well as view their results.
Creating and Deploying Surveys

Since survey creation and deployment is almost identical to test creation, we will focus on the differences:

- Survey Creation Settings do not include options for assigning scoring defaults because survey questions are not graded.
- When questions are added, you do not specify which answers are correct.
- Random blocks of questions cannot be added to surveys.

![Preview Survey: Attitudes About Writing](image)

Figure 1.1 - Survey from the student perspective
Creating Advanced Questions: Creating and Deploying Surveys

**QUICK STEPS: creating and deploying surveys**

3. On the Survey Manager page, click Build Survey.
4. On the Survey Information page, type the survey Name, Description, and Instructions.
5. Click Submit.
7. On the Survey Question Settings page, select the check boxes for your choices.
8. Click Submit.
9. On the Survey Canvas page, add the questions.
10. Navigate to the Content Area where you want to deploy the survey.
11. On the Create Assessment drop-down list, select Survey.
12. On the Create Survey page, select the survey from the Add Survey box.
13. Click Submit.
15. Click Submit. The survey is now added to the Content Area.

![Survey Manager](image)

The Create Survey page lists all the surveys created for the course. Select the survey to add to the Content Area.
Hands-on Activity

For this activity, use your Practice Course.

Create a survey, by choosing one of the following options:

- Create a survey to assess the knowledge or past experiences of students entering your course.
- Create a survey to gain early feedback on students’ understanding of course content.
- Create an end-of-course evaluation to gather student opinions about your course.

Deploy the survey, selecting settings that will allow students to take the survey twice and allow them to see their submitted answers.
Best Practice: Use Surveys Throughout Your Course

Many instructors only use surveys to conduct an end-of-course evaluation. Although it is important to collect this information, the data can only be used to help the next group of students. Using surveys throughout your course gives you the opportunity to revise the course flow and content to match the background and needs of your students.

Here are some ideas for using surveys throughout your course.¹

At the Beginning of the Course

- Ask students to complete a brief survey about their current subject knowledge, what they hope to learn in the course, and their learning styles and preferences.
- Ask students a few questions to allow them to demonstrate their analytical thinking. For example, a professor in the Goldman School of Public Policy at Berkeley gauges the level of student thinking by asking questions about their approaches to uncertainty and risk.

During the Course

- After a lecture, ask students to complete a brief survey about the muddiest point—the least clear concept discussed in the lecture.
- Ask students to rate how challenging they found a lecture or module.

¹The Early Feedback Working Group & Tollefson, S. (2005). How am I doing? Early feedback from instructors to students and from students to instructors. Office of Educational Development Teaching Resources
Viewing Aggregate Survey Results

For each survey, you can view the aggregate responses to each question, including the distribution of student responses for each question.

► QUICK STEPS: viewing aggregate survey results

1. In the **Grade Center**, click the survey column’s Action Link to access the contextual menu.
2. Select **Attempts Statistics**.
3. On the **Test Statistics** page, review the statistics.
4. Click **OK** at the bottom of the page to return to the **Grade Center**.

![Figure 2.1](image)

In the Grade Center, a check mark indicates the survey has been completed.
The response rates provide the percentage of students who chose each answer.

### Test Statistics: Course Evaluation

<table>
<thead>
<tr>
<th>Name</th>
<th>Course Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attempts</td>
<td>6 (Total of 6 attempts for this assessment)</td>
</tr>
<tr>
<td>Instructions</td>
<td>Please take a moment to respond to the following survey questions. Your responses are anonymous.</td>
</tr>
</tbody>
</table>

#### Question 1: Opinion Scale/Likert

The faculty member demonstrated knowledge of the subject matter for this course.

<table>
<thead>
<tr>
<th>Response</th>
<th>Percent Answered</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Agree</td>
<td>50%</td>
</tr>
<tr>
<td>Agree</td>
<td>50%</td>
</tr>
<tr>
<td>Neither Agree nor Disagree</td>
<td>0%</td>
</tr>
<tr>
<td>Disagree</td>
<td>0%</td>
</tr>
<tr>
<td>Strongly Disagree</td>
<td>0%</td>
</tr>
<tr>
<td>Not Applicable</td>
<td>0%</td>
</tr>
<tr>
<td>Unanswered</td>
<td>0%</td>
</tr>
</tbody>
</table>

#### Question 2: Opinion Scale/Likert

The faculty member established a good working relationship with the class.

<table>
<thead>
<tr>
<th>Response</th>
<th>Percent Answered</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Agree</td>
<td>16.667%</td>
</tr>
<tr>
<td>Agree</td>
<td>50%</td>
</tr>
<tr>
<td>Neither Agree nor Disagree</td>
<td>33.333%</td>
</tr>
<tr>
<td>Disagree</td>
<td>0%</td>
</tr>
<tr>
<td>Strongly Disagree</td>
<td>0%</td>
</tr>
<tr>
<td>Not Applicable</td>
<td>0%</td>
</tr>
<tr>
<td>Unanswered</td>
<td>0%</td>
</tr>
</tbody>
</table>

Figure 2.2
Hands-on Activity

For this activity, use your Practice Course.

View Statistics

- View the Attempt Statistics for the survey: What Do You Know?
7.0 Workshop Wrap Up

The Workshop Wrap Up provides the opportunity to reflect on what has been learned by focusing your attention on the key concepts presented in the workshop. Also, the next page includes questions for brainstorming some ideas about how to use advanced question types, pools, and surveys in your online course.

In this workshop, you learned how to do the following:

- Create advanced question types, such as Jumbled Sentence, Fill in Multiple Blanks, Hot Spot, Opinion Scale/Likert, Quiz Bowl, and Calculated Numeric
- Explain the advantages of adding metadata to questions
- Add the four types of metadata to questions to help retrieve questions later
- Explain the advantages of using pools
- Create pools and add questions to them
- Import pools
- Create a test by finding questions
- Create a test containing question sets
- Create a test containing random blocks of questions drawn from pools and tests
- Describe the lifecycle of a survey
- Explain the differences between tests and surveys
- Explore ways to use surveys throughout your course
- Create and deploy a survey, and view survey results
Spotlight on YOUR Course

Now that you are familiar with the advanced assessments features, it is time to think about how you can take advantage of them in your course.

- Consider the array of question types you have at your disposal. Do you have any ideas for using the advanced question types?
- Will you use metadata to organize your questions? Do you have any ideas for a classification scheme, or is there an existing scheme you could apply?
- What type of question pools will you create? Can you take advantage of existing pools in other courses or turn tests into pools for a new course?
- How will you use surveys to achieve your pedagogical goals?