



University
of Rochester

Using AI Features in Blackboard Ultra to Streamline Course Design

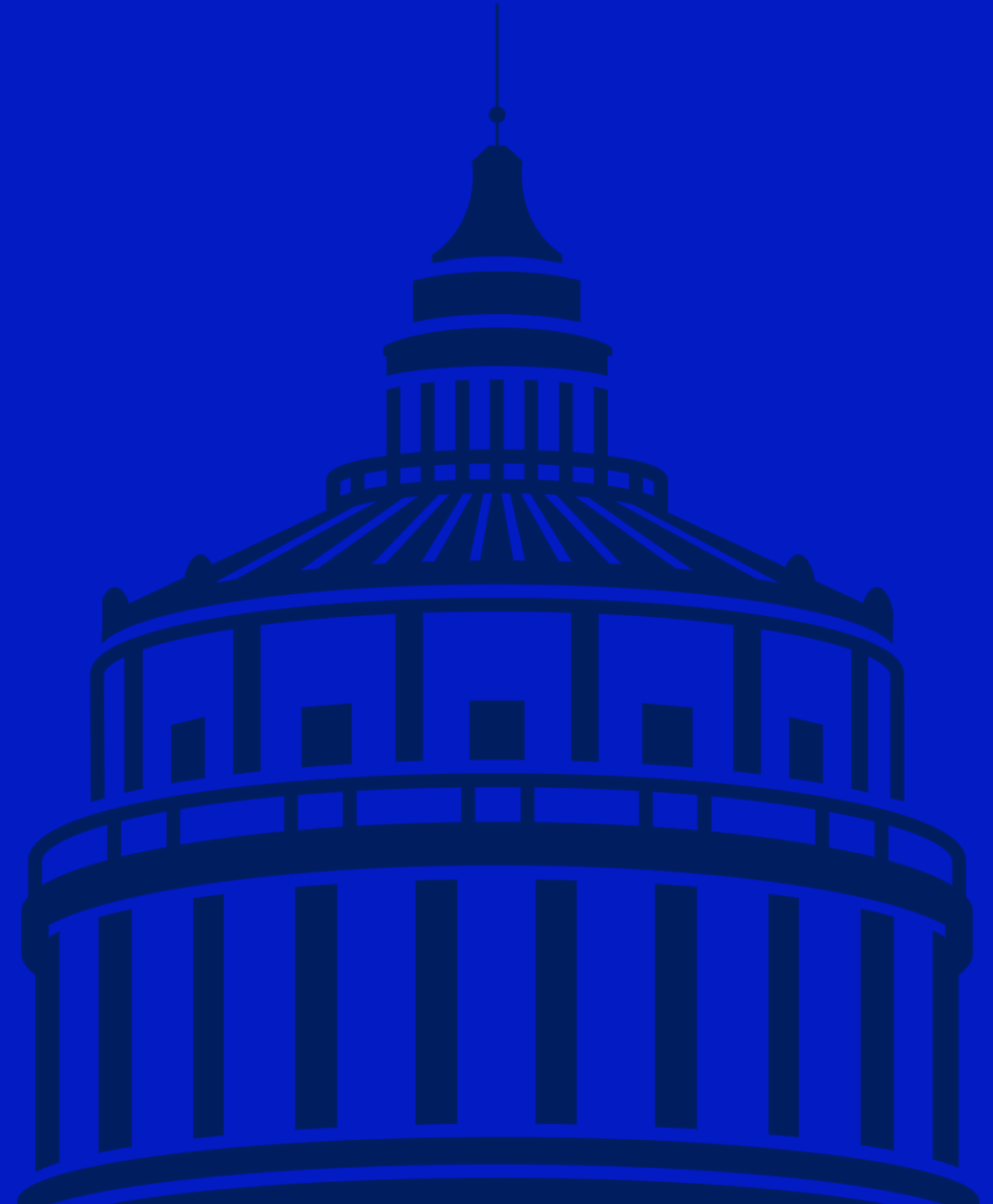
Eric Fredericksen, EdD

Associate Vice President for Online Learning
Professor in Educational Leadership

Lisa Brown, EdD

Assistant Director

University IT & URMCI Institute for Innovative Education



Introducing the AI Design Assistant

Support Course Design with AI

- Blackboard has a number of AI tools built-in to support course design.
- Blackboard's AI is safe and secure – your information will not be saved, shared, or used to support any other course design.

Blackboard's AI Tools

- Generate Learning Modules
- Generate images
- Generate Test/Quiz Questions
- Document layout
- Generate Knowledge Checks
- Generate prompts for
 - Discussions
 - Journals
 - Assignments
- Generate Rubrics

Generate Learning Modules

- Learning Modules provide students with a structured and well-organized course framework that is aligned with quality online course design and best practices. It helps with the organization of course materials and activities into segmented pieces
- Learning Modules provide students with a clean experience by offering “pages” of content and a table of contents
- Use the AI feature in Blackboard to quickly generate learning modules`

AI-Generated Modules

- Create
- Auto-Generate Modules
- Copy Content
- Upload
- Content Market
- Content Collection

Auto-Generate Learning Modules

Define Learning Modules

Description

Enter course description or learning objectives...

Select course items

Selected course items will be used to help improve suggestions.

Title prefix

None

☒ Include images

☒ Include descriptions

Complexity

Low High

Number of Learning Modules

1 20

Advanced options



This is auto-generated content and needs to be checked for accuracy and bias



Understanding Online Learning

Explore the benefits and challenges of online learning. Learn about different online learning platforms and the role of technology in creating an effective online learning experience.



Planning Course Objectives

Learn how to set clear and measurable learning objectives for online courses. Understand the importance of aligning course objectives with assessments and instructional materials.



Designing Engaging Content

Discover strategies for creating interactive and engaging online learning content. Explore multimedia tools and techniques to enhance learner engagement and participation.



Building Effective Assessments

Learn how to design assessments that effectively measure student learning in online courses. Explore different types of assessments and assessment strategies to provide valuable feedback to students.

Add Imagery

- Images in a course can support student engagement.
- Add images to the course banner, learning modules and on documents
- Blackboard has an image repository as well as the ability to generate images with AI

Use the AI Design Assistant to generate images

History of Higher Education (EDU493.1.FALL2025W...
in America (1636-1789)

Hidden from students

Description

Add a description

Maximum 750 characters

Advance in sequence

Students can access a module's content in sequence.

A course link cannot be added to a learning module when a forced sequence is activated.

☐ Forced Sequence

Image

Add image

Cancel Save

Insert image

Image Source

Upload from Device

Upload from Device

Stock images from Unsplash

Generate images

Maximum size: 1,000 MB

or

Upload file

Insert image

Image Source

Generate images

Describe an image

The colonies in America 1636-1789

Generate



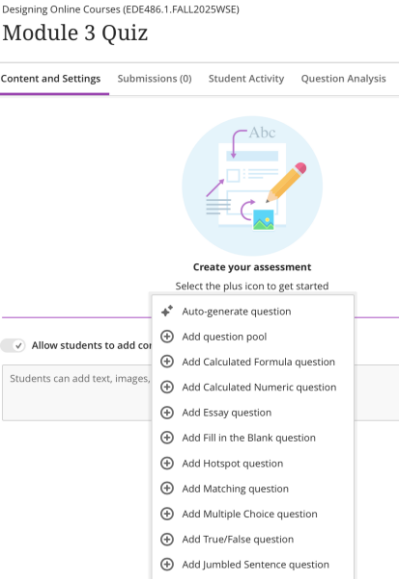


Cancel Next >

Automate Quizzes

- Create questions about your course in a “low-stakes” assessment that can be auto-graded
- Provides prompt feedback from the professor without faculty involvement
- Make sure these are auto-graded and auto-posted
- Include automated feedback on questions
- This can also encourage students to complete readings and other learning activities
- Use the AI feature to generate questions based on content.

Use the AI Design Assistant to generate questions



Designing Online Courses (EDE486.1.FALL2025WSE) Auto-Generate Questions

Define questions

Description

Students will be able to apply and demonstrate instructional design concepts.

Select course items 3

Selected course items will be used to help improve suggestions.

Question Type

Inspire me!

Complexity

Low High

Number of questions

1 20

Advanced options

Generate

This is auto-generated content and needs to be checked for accuracy and bias

C Application

D Analysis

Question 6

Bloom's taxonomy is only applicable to the cognitive domain.

True

False

Correct answer

Question 7

Match the following authors with their contributions to instructional design.

Prompts

1. Benjamin Bloom

2. Robert Gagne

3. David Merrill

4. Walter Dick

Answers

Developed the taxonomy of educational objectives.

Proposed the nine events of instruction.

Emphasized problem-centered learning.

Created the Dick and Carey instructional design model.

Create Engaging Content

- Documents can be used to support course content and provide direction. Documents can have specific layouts and contain images.
- Documents have an AI feature for layout, image selection and knowledge check creation.

Boring Text -> AI Layout

About Sharks

Hide



Sharks are a group of [elasmobranch cartilaginous fishes](#) characterized by a [ribless endoskeleton](#), [dermal denticles](#), five to seven [gill slits](#) on each side, and [pectoral fins](#) that are not fused to the [head](#). Modern sharks are classified within the [division Selachii](#)^{[1][page needed]} and are the [sister group](#) to the [Batomorphi](#) ([rays](#) and [skates](#)). Some sources extend the term "shark" as an informal category including [extinct](#) members of [Chondrichthyes](#) (cartilaginous fish) with a shark-like morphology, such as [hybodonts](#). Shark-like chondrichthyans such as [Cladoseleche](#) and [Doliodus](#) first appeared in the [Devonian](#) Period (419–359 million years), though some fossilized chondrichthyan-like scales are as old as the [Late Ordovician](#) (458–444 million years ago).^[2] The earliest confirmed modern sharks (Selachii) are known from the [Early Jurassic](#) around [200](#) million years ago, with the oldest known member being [Agaleus](#), though records of true sharks may extend back as far as the [Permian](#).^[3]

Sharks range in size from the small [dwarf lanternshark](#) (*Etmopterus perryi*), a deep sea species that is only 17 centimetres (6.7 in) in length, to the [whale shark](#) (*Rhincodon typus*), the largest fish in the world, which reaches approximately 12 metres (40 ft) in length.^[4] They are found in all seas and are common to depths up to 2,000 metres (6,600 ft). They generally do not live in freshwater, although there are a few known exceptions, such as the [bull shark](#) and the [river sharks](#), which can be found in both seawater and freshwater, and the [Ganges shark](#), which lives only in freshwater.^[5] Sharks have a covering of [placoid scales](#) (denticles) that protects the skin from damage and [parasites](#) in addition to improving their [fluid dynamics](#). They have [numerous sets of replaceable teeth](#).^[6]

Several shark species are [apex predators](#), which are organisms that are at the top of their [food chain](#) with select examples including the [bull shark](#), [tiger shark](#), [great white shark](#), [mako sharks](#), [thresher sharks](#) and [hammerhead sharks](#). Some sharks are [filter-feeding planktivores](#), such as the [whale shark](#) and [basking shark](#), which are among the [largest fish](#) ever lived.

Adds Formatting, Images, Knowledge Checks

Understanding Sharks



Sharks are a group of [elasmobranch cartilaginous fishes](#) characterized by a [ribless endoskeleton](#), [dermal denticles](#), five to seven [gill slits](#) on each side, and [pectoral fins](#) that are not fused to the [head](#). Modern sharks are classified within the [division Selachii](#)^{[1]([logs needed](#))]} and are the [sister group](#) to the [Batomorphi](#) ([rays](#) and [skates](#)). Some sources extend the term "shark" as an informal category including [extinct](#) members of [Chondrichthyes](#) (cartilaginous fish) with a shark-like morphology, such as [hybodonts](#). Shark-like chondrichthyans such as [Cladoseleche](#) and [Doliodus](#) first appeared in the [Devonian](#) Period (419–359 million years), though some fossilized chondrichthyan-like scales are as old as the [Late Ordovician](#) (458–444 million years ago).^[2] The earliest confirmed modern sharks (Selachii) are known from the [Early Jurassic](#) around 200 million years ago, with the oldest known member being [Agaleus](#), though records of true sharks may extend back as far as the [Permian](#).^[3]

Sharks range in size from the small [dwarf lanternshark](#) (*Etmopterus perryi*), a deep sea species that is only 17 centimetres (6.7 in) in length, to the [whale](#)

What are the primary threats to shark populations as mentioned in the text?

A Correct answer
Shark finning

B Climate change

C Natural predators

D Correct answer
Overfishing

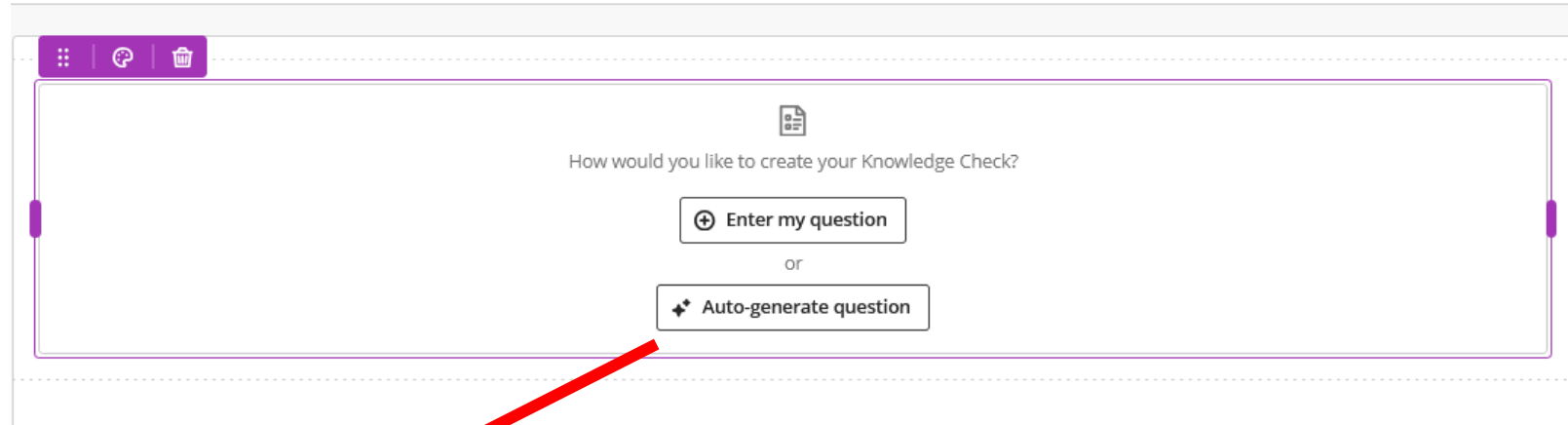
Cancel

Apply layout

Create Knowledge Checks

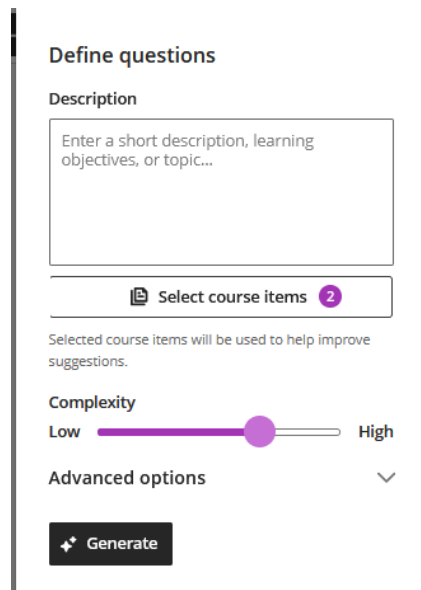
- Knowledge Checks are an ungraded quizzing feature
- Supports student learning and retention
- Blackboard has a feature to use AI to generate these questions and insert into Documents
- Uses the information within the document as well as other Blackboard content as sources

Adds Formatting, Images, Knowledge Checks



How would you like to create your Knowledge Check?

or



Define questions

Description

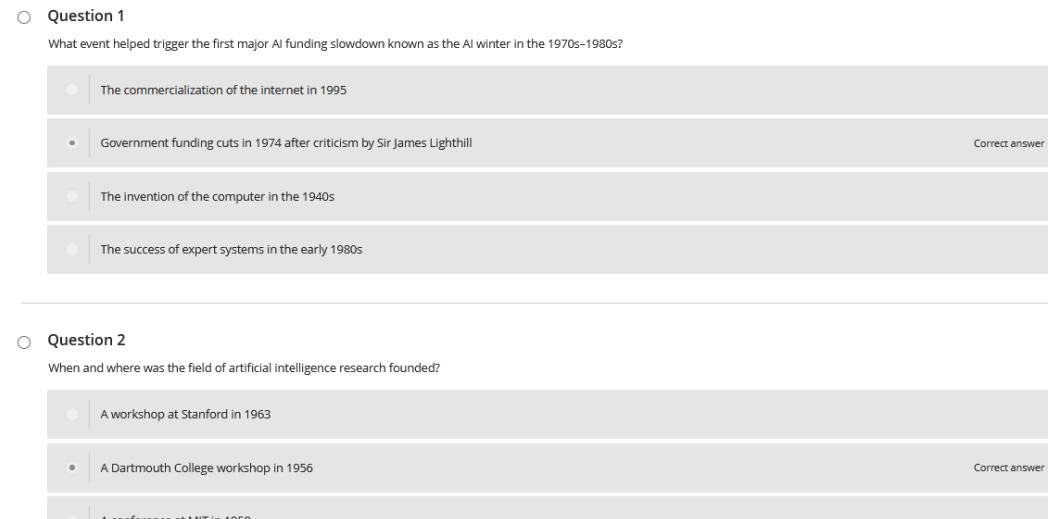
Enter a short description, learning objectives, or topic...

Selected course items will be used to help improve suggestions.

Complexity

Low High

Advanced options



☐ **Question 1**

What event helped trigger the first major AI funding slowdown known as the AI winter in the 1970s-1980s?

- ☐ The commercialization of the internet in 1995
- ☒ Government funding cuts in 1974 after criticism by Sir James Lighthill Correct answer
- ☐ The invention of the computer in the 1940s
- ☐ The success of expert systems in the early 1980s

☐ **Question 2**

When and where was the field of artificial intelligence research founded?

- ☐ A workshop at Stanford in 1963
- ☒ A Dartmouth College workshop in 1956 Correct answer
- ☐ A conference at MIT in 1950

Generate Prompts (for journal, discussion, assignment)

- The AI features in Blackboard can be used to generate prompts for journals, discussion boards, and assignments

AI Design Assistant - Definition

Auto-Generate Assignment

Define the assignment

Description

Enter a description or set of keywords...

Select course items

Selected course items will be used to help improve suggestions.

Desired cognitive level

Inspire me!

Complexity

Low High

☒ Generate assignment title

Generate

Auto-Generate Journal

Define the journal

Description

Enter a description or set of keywords...

Select course items

Selected course items will be used to help improve suggestions.

Desired cognitive level

Inspire me!

Complexity

Low High

☒ Generate journal title

Generate

Auto-Generate Discussion

Define the discussion

Description

Enter a description or set of keywords...

Select course items

Selected course items will be used to help improve suggestions.

Desired cognitive level

Inspire me!

Complexity

Low High

☒ Generate discussion title

Generate

AI Design Assistant - Results

Auto-Generate Journal

Define the journal

Description

Enter a description or set of keywords...

 Select course items

Selected course items will be used to help improve suggestions.

Desired cognitive level

Inspire me!

Complexity

Low  High

☒ Generate journal title

 Generate

 This is auto-generated content and needs to be checked for accuracy and bias

☐ Exploring the Art of Illusion

Reflect on one of the magic tricks you have learned so far in the course. Write about the under various elements involved, such as misdirection, sleight of hand, and psychology. Discuss how work-related experiences where you have tried to apply similar principles of deception or districk.

Cognitive level: Evaluate

☐ Unveiling the Secrets of Deception

Imagine you have been given a challenge to design a new magic trick that has never been performed, setup, and performance. Consider the different techniques and concepts you have learned. Believe your trick will be successful and how it aligns with the principles of magic and illusion. I your creation.

Cognitive level: Create

☐ Analyzing the Psychology of Illusion

Research a famous magician or illusionist and their signature trick. Analyze the psychological to the cognitive biases or perceptual illusions that may contribute to the success of their trick. Co a convincing illusion. Reflect on how these psychological concepts can be applied in other area

Create Rubrics for Grading

- Rubrics can be used to provide specific feedback to students AND provide you with a quick way to grade based on your criteria
- Rubrics are beneficial for instructors because they make grading more consistent and efficient
- Rubrics are beneficial for students because they help communicate expectations for an assignment, and as a result, can help improve what the student produces
- Use the AI feature in Blackboard to generate rubrics

AI Design Assistant – Rubric Generation

Assessment grade

- ☐ **Post assessment grades automatically**
Automatically posts the grade when the assessment is graded. The feature covers automatically and manually graded assignments, and tests with auto-graded question types. Turn the setting off if you want to manually control grade publication.

Assessment security

- *** **Access code**
[Add access code](#)

-  **Proctored assessment**
[Configure proctoring settings](#)

Additional Tools

-  **Time limit**
[Add time limit](#)

-  **Use grading rubric**
[Add grading rubric](#)

New Assignment 8/13/25

Assignment Settings

 **Add Grading Rubric** 

Course Rubrics

Your rubric can be percentage-based or point-based. For point-based rubrics, select the checkbox to assign the rubric's possible points to the maximum points of the content.

[Show more](#)

Create

Generate

Course Profile

Possible Points: 5

[View](#)

[Add](#)

- ☐ Use rubric's possible points

Final Project

Possible Points: 10

[View](#)

[Add](#)

- ☐ Use rubric's possible points

Instructional Resources and Tools assignment

Possible Points: 5

[View](#)

[Add](#)

- ☐ Use rubric's possible points

LOT Assignment

Possible Points: 10

[View](#)

[Add](#)

- ☐ Use rubric's possible points

Generate Rubrics

Designing Online Courses (EDE486.1.FALL2025WSE)

Generate Rubric

Define rubric

Description

Please use the following table to help you identify your learning objectives and then consider the assessment methods and instructional activities for your course. As we have discussed in class, you should:

1. Start with articulating the learning objectives,
2. Then determine the means of assessment that will provide you with evidence that students have achieved those learning objectives,
3. Then identify the learning activities that align with those assessments and will help students be prepared to be successful.

You should reference Bloom's Taxonomy of the Cognitive Domain to help you articulate the learning objectives for your course. PLEASE underline the action verb from Bloom's Taxonomy in your learning objectives. PLEASE do NOT use the terms UNDERSTAND, LEARN, or BE FAMILIAR WITH.

Rubric Type

Percentage

Complexity

Low

High

Columns

2

5

Rows

2

7

Advanced options

Generate

This is auto-generated content and needs to be checked for accuracy and bias

Rubric preview

This can be edited in the existing rubrics panel

Criteria	Exemplary	Proficient	Needs Improvement
Clarity of Learning Objectives	100% The learning objectives are exceptionally clear, specific, and utilize action verbs from Bloom's Taxonomy effectively. Students can easily comprehend what is expected of them.	60% The learning objectives are clear and mostly use action verbs from Bloom's Taxonomy. There may be minor areas lacking clarity, but students understand the general expectations.	30% The learning objectives are vague and do not consistently use action verbs from Bloom's Taxonomy. Students struggle to understand what is expected of them.
40% of total grade			
Alignment of Assessments	100% The assessments are perfectly aligned with the learning objectives, providing clear evidence of student achievement related to those objectives.	60% The assessments are mostly aligned with the learning objectives, but there may be some gaps in ensuring that all objectives are fully assessed.	30% The assessments lack alignment with the learning objectives, making it difficult to determine if students have achieved the intended outcomes.
35% of total grade			
Relevance of Learning Activities	100% The learning activities are highly relevant and effectively support the learning objectives, engaging students and enhancing their understanding.	60% The learning activities are relevant to the learning objectives, but may not fully engage all students or connect with the intended outcomes as strongly as possible.	30% The learning activities are not relevant to the learning objectives, failing to support student understanding or engagement.
25% of total grade			

Cancel

UNIVERSITY OF ROCHESTER

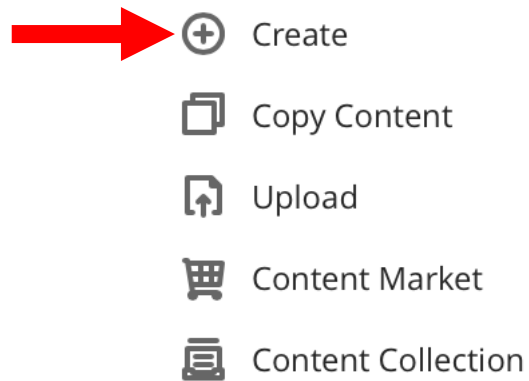


21

Student Interaction with AI

Create interactive experiences for students

- AI Conversations is a tool in Blackboard that allows you to create an AI persona that students can interact with in a role-play situation



AI Conversations

- Create Interactive experiences for your students
- Determine conversation type
- Describe the Scenario
 - Socratic Questioning
 - Role-Play
- Describe the AI Persona
- Determine the reflection question
- <https://tech.rochester.edu/blackboard-conversations/>

AI Conversations

Virtual Eric

Content and Settings Submissions (8) Student Activity

AI Conversation Content

AI Conversation

☐ Give full credit to everyone ☐ Extra Credit 0 points

STEP 1 OF 3: Role-play

STEP 2 OF 3: Conversation Settings

Set the scene and define the student's role.

This scenario will be shown to the student to set context. [View examples](#)

Please review the backward design of your online course with Virtual Eric.

You should have created a first draft of your LOT (by yourself) with all your learning objectives, assessments, and learning activities before you start this process.

For **each** module of your course (do one module at a time):

1. Begin by reviewing your learning objectives, asking for feedback to make sure you have used action verbs from Bloom's Taxonomy.
2. Then share your assessments and seek guidance as to whether what you created will align with the learning objectives.
3. Lastly, provide all of your learning activities, instructional experiences, and resources, and request confirmation as to the alignment of these with the assessments and assignments.

Use this feedback and validation to revise and create the final version of your LOT. Please make sure to submit both the initial draft and the final version to the peer review area.

Conversation constraints

The conversation will automatically end if a provided constraint is met.

Student message limit

Enter number of messages

Conversation time limit (minutes)

Enter time limit in minutes

You can't edit the constraints because students have started their submissions

STEP 3 OF 3: Virtual Eric

Cancel Save

Reflection Question

0 points

In what ways did the conversation advance your understanding of the topic?

Students can use the editor to answer

AI Conversation Settings

Due date
[Sat Jun 13, 2026 11:59 PM \(EDT\)](#)

Formative Assessment
[Formative Tools](#)

Grade category
[Assignment](#)

Grading
[Points](#) | 0 maximum points
Post grades manually when assessment is graded. [Change grade posting setting.](#)

Attempts allowed
[Unlimited](#)

AI Conversations

Reference to textbook to
use as a resource for
interaction with students



AI Conversation Content

AI Conversation ☐ Give full credit to everyone ☐ Extra Credit 0 points

STEP 1 OF 3: Role-play

STEP 2 OF 3: Please review the backward design of your online course with Virtual Eric. You should have cr...

STEP 3 OF 3: AI Persona

Who should the AI be?
This allows you to define who the AI persona is, including the style in which they respond to the student.

 Edit image

* Name
Virtual Eric

* Personality and instructions
Supportive, expert in instructional design and backward design, Expert in Bloom's taxonomy, Effective advisor in discouraging the use of vague terms in learning objectives like "learn", "understand", and "be familiar with". When appropriate and necessary, remind students that learning objectives should address the question, What will students be able to do. Encourage students to submit something to react to. Encourage interaction with the students and among the students. Also, make a note of the level in Bloom's taxonomy.
Use Expert level understanding with the 2nd edition of this textbook - Wiggins and McGighe (2005) - Understanding by Design. Merrill Education / ASCD College Textbook Series. ISBN 978-1416600350 and reference specific pages and chapters in responses where appropriate.
Provide hidden personality traits and instructions for the AI persona

Complexity of responses
Low High

Reflection Question 0 points
In what ways did the conversation advance your understanding of the topic?
Students can use the editor to answer

AI Conversation Settings

Due date
Sat Jun 13, 2026 11:59 PM (EDT)

Formative Assessment
Formative Tools

Grade category
Assignment

Grading
Points | 0 maximum points
Post grades manually when assessment is graded. [Change grade posting setting.](#)

Attempts allowed
Unlimited

AI Conversations
retains a record of
every student
interaction for the
professor to review.



University
of Rochester

Questions?

