Designing AI-Resistant Assessments: Strategies for Authentic Evidence of Learning



Pedagogy, Learning, and AI in Your Classroom Series

Workshop Goals

What aspects of my assessment can students outsource to generative AI?

What strategies increase AI-resistance and promote authentic learning?



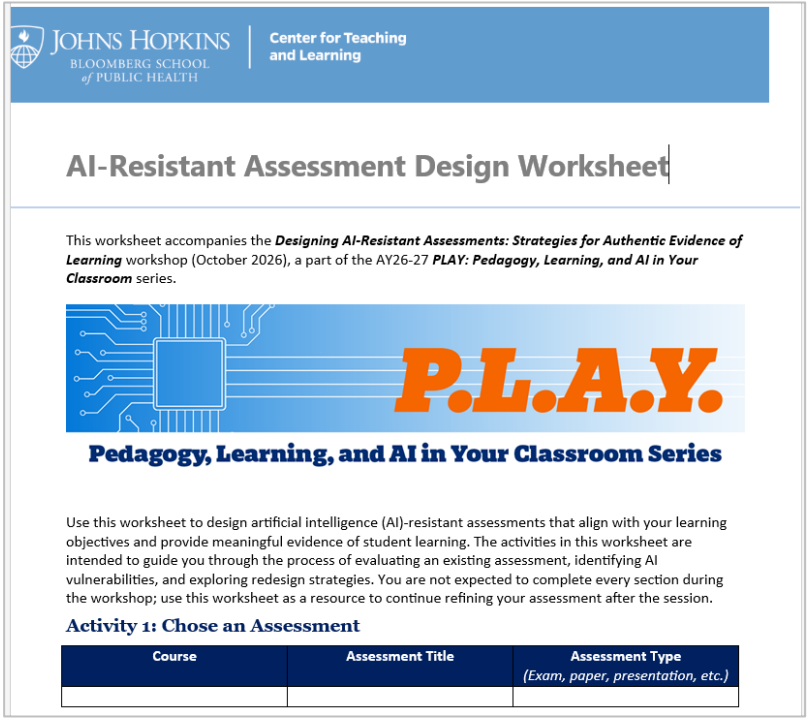


AI: Generative Artificial Intelligence

Faculty Photo by Daniel Thomas on Unsplash; Students Photo by Vitaly Gariev on Unsplash

Introducing the *AI-Resistant Assessment Design Worksheet*

- **Download** the worksheet from the Zoom chat
- **Complete** the activities **when prompted** during the workshop
- **Continue** working in the worksheet after the workshop



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AI-Resistant Assessment Design Worksheet

This worksheet accompanies the ***Designing AI-Resistant Assessments: Strategies for Authentic Evidence of Learning*** workshop (October 2026), a part of the AY26-27 ***PLAY: Pedagogy, Learning, and AI in Your Classroom*** series.

P.L.A.Y.

Pedagogy, Learning, and AI in Your Classroom Series

Use this worksheet to design artificial intelligence (AI)-resistant assessments that align with your learning objectives and provide meaningful evidence of student learning. The activities in this worksheet are intended to guide you through the process of evaluating an existing assessment, identifying AI vulnerabilities, and exploring redesign strategies. You are not expected to complete every section during the workshop; use this worksheet as a resource to continue refining your assessment after the session.

Activity 1: Chose an Assessment

Course	Assessment Title	Assessment Type *(Exam, paper, presentation, etc.)*

What aspects of my assessment can students outsource to generative AI?



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What can generative AI convincingly do?



- Generate ideas
- Summarize readings
- Write responses
- Produce an essay draft
- Complete discussion posts
- Create presentation content
- Solve problems

Robot Photo by Franck V. on Unsplash

Examples of AI-Vulnerable Assessments

Epidemiology	Health Policy and Management	Biostatistics
		

EPI Student Image by @dishescreas on Canva Pro; HPM Student Image by @gishellarose on Canva Pro; BIOS student Image by@cundra703s-images on Canva Pro

Worksheet Activities 1 and 2: AI-Vulnerability Scan (5m)

What aspects of my assessment can students outsource to generative AI?

Activity 1: Chose an Assessment

Course	Assessment Title	Assessment Type *(Exam, paper, presentation, etc.)*

Briefly describe the assessment

Learning Objectives: What should students be able to *demonstrate* or do during the assessment?
1.

Activity 2: AI Vulnerability Scan

Imagine a student has unrestricted access to generative AI. Which parts of this assessment could AI complete successfully?

Part	Yes/No
Generate ideas	
Summarize readings	
Write responses	
Produce an essay draft	
Complete discussion posts	

How vulnerable is your assessment to generative AI?

How vulnerable is your assessment to generative AI?

- Very Vulnerable
- Somewhat Vulnerable
- Minimally Vulnerable
- Not Sure



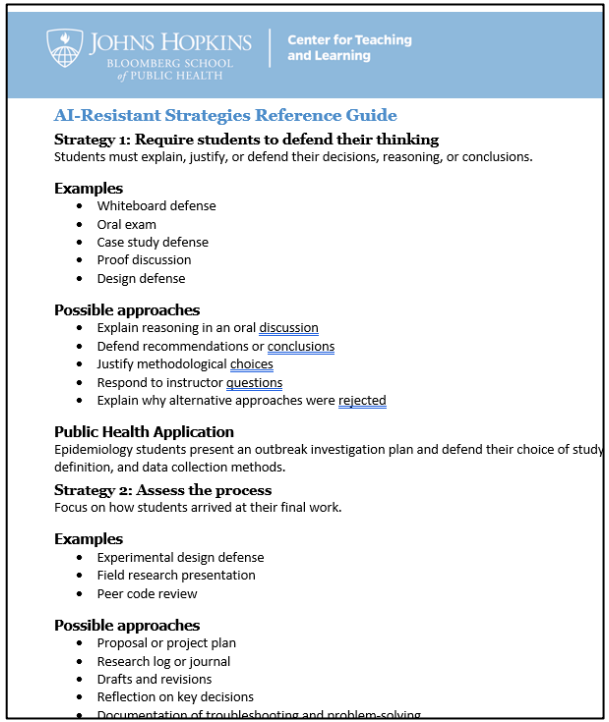
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What strategies increase AI-resistance and promote authentic learning?



Students Photo by Vitaly Gariev on Unsplash

Five Strategies



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AI-Resistant Strategies Reference Guide

Strategy 1: Require students to defend their thinking

Students must explain, justify, or defend their decisions, reasoning, or conclusions.

Examples

- Whiteboard defense
- Oral exam
- Case study defense
- Proof discussion
- Design defense

Possible approaches

- Explain reasoning in an oral discussion
- Defend recommendations or conclusions
- Justify methodological choices
- Respond to instructor questions
- Explain why alternative approaches were rejected

Public Health Application

Epidemiology students present an outbreak investigation plan and defend their choice of study definition, and data collection methods.

Strategy 2: Assess the process

Focus on how students arrived at their final work.

Examples

- Experimental design defense
- Field research presentation
- Peer code review

Possible approaches

- Proposal or project plan
- Research log or journal
- Drafts and revisions
- Reflection on key decisions
- Documentation of troubleshooting and problem-solving

Strategy 1: Require students to defend their thinking

Strategy 2: Assess the process

Five Strategies, Cont'

Strategy 3: Create opportunities for real-time interaction

Strategy 4: Use authentic professional tasks

Strategy 5: Apply learning to unique contexts

Strategies 1 and 2: Making Student Learning Visible

1. Students must explain, justify, or defend their decisions, reasoning, or conclusions

2. Focus on how students arrived at their final work

Strategies 1 and 2: Public Health Applications

International Health students maintain a project journal (written or recorded) documenting how they adapted a program design to cultural, economic, or political constraints identified during research.

Epidemiology students present an outbreak investigation plan and defend their choice of plan design, case definition, and data collection methods.



Student Image by @pixabay on Canva Pro

Strategy 3: Create Opportunities for Real-Time Interaction

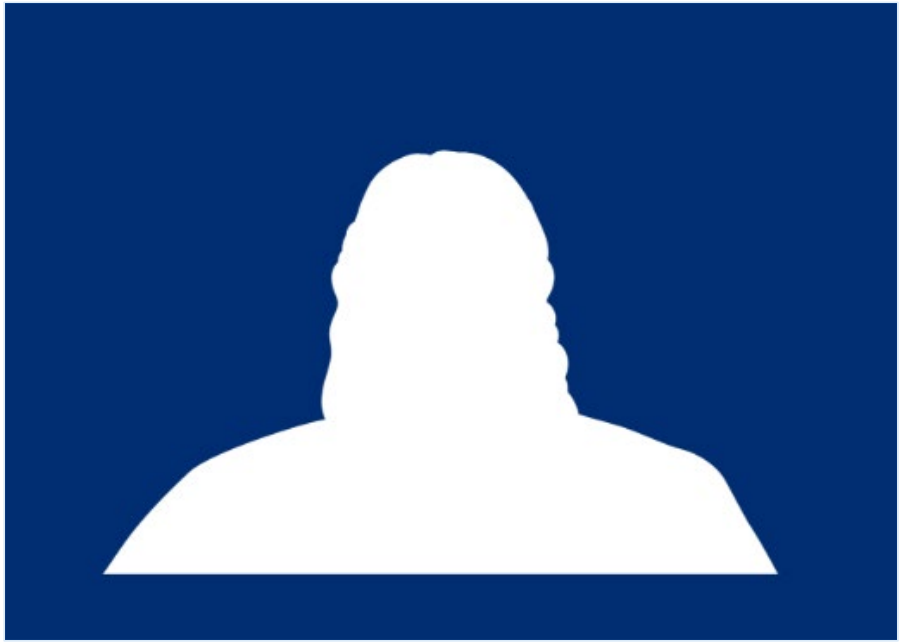
Require students to think, respond, and demonstrate understanding in real time, with limited opportunities to outsource work to AI tools

Possible approaches

- Live presentation with Q&A
- Small-group discussion
- Debate or structured argument
- Oral exam
- Follow-up questions after submission
- In-class demonstration

Strategy 3: Public Health Application

Health Policy students participate in a real-time policy debate on a proposed public health intervention and respond to questions from peers role-playing as policymakers.



Student Image by @superuser1945s-images on Canva Pro

Strategy 4: Use Authentic Professional Tasks

Ask students to perform work similar to what professionals in the field actually do

Possible approaches

- Consultation or advising scenario
- Professional presentation
- Stakeholder recommendation
- Client-facing deliverable
- Performance-based assessment
- Simulation of professional or workplace setting or interaction

Strategy 4: Public Health Application

Environmental Health students develop and present a policy brief addressing a local environmental exposure concern for a county health department in a role-playing exercise.



Student Image by @maridownload on Canva Pro

Strategy 5: Apply Learning to Unique Contexts

Require students to work within a context that is specific, authentic, or evolving

Possible approaches

- Local or institutional issue
- Current or evolving event
- Community-based project
- Student-collected data
- Course-specific case study
- Role-playing or scenario-based activity

Strategy 5: Public Health Application

Molecular Microbiology and Immunology students analyze an emerging pathogen scenario and recommend surveillance, prevention, or laboratory investigation strategies based on known microbiological principles.



Student Image by @drumstick on Canva Pro

Register Today!



Scale Simulation-Based Learning with AI

Tuesday, November 10, 2026 | 12:00 – 1:00pm | Zoom

CTL Events Calendar

Recap on Strategies

Strategy 1: Require students to defend their thinking
Students must explain, justify, or defend their decisions, reasoning, or conclusions.

Strategy 2: Assess the process
Focus on how students arrived at their final work.

Strategy 3: Create opportunities for real-time interaction
Require students to think, respond, and demonstrate understanding in real time, with limited opportunities to outsource work to AI tools.

Strategy 4: Use authentic professional tasks
Ask students to perform work similar to what professionals in the field actually do.

Strategy 5: Apply learning to unique contexts
Require students to work within a context that is specific, authentic, or evolving.

Worksheet Activity 3: Make the Assessment More AI-Resistant (5m)

What strategies increase AI-resistance and promote authentic learning?

Activity 3: Make the Assessment More AI-Resistant

AI often produces polished products, but it cannot independently demonstrate a student's reasoning, decision-making, or participation in course-specific experiences. Select 1-2 strategies that could strengthen your assessment.

Strategy	Yes/No
Strategy 1: Require students to defend their thinking. Students must explain, justify, or defend their decisions, reasoning, or conclusions.	
Strategy 2: Assess the process. Focus on how students arrived at their final work.	
Strategy 3: Use authentic professional tasks. Ask students to perform work like what professionals in the field actually do.	
Strategy 4: Create opportunities for real-time interaction. Require students to think, respond, and demonstrate understanding in real time, with limited opportunities to outsource work to AI tools.	
Strategy 5: Apply learning to unique contexts. Require students to work within a context that is specific, authentic, or evolving.	

**See the "AI-Resistant Strategies Reference Guide" section at the end of this worksheet for strategy descriptions and examples.*

Making AI-Resistant Assessments *Manageable*

- Rubrics
- Checkpoints
- Sample
- Group-based Tasks
  - Peer review
- Short, Oral Components
- Replace, Don’t Add
- Highest-Risk Assessments



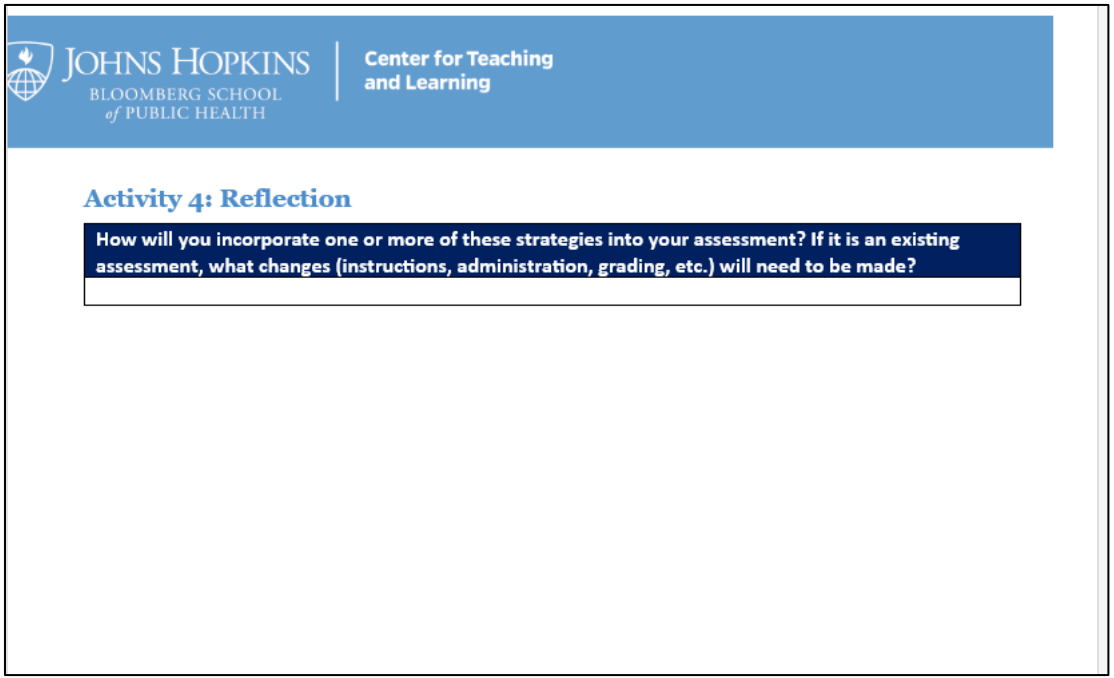
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How will ***you*** apply these strategies to redesign your assessment?



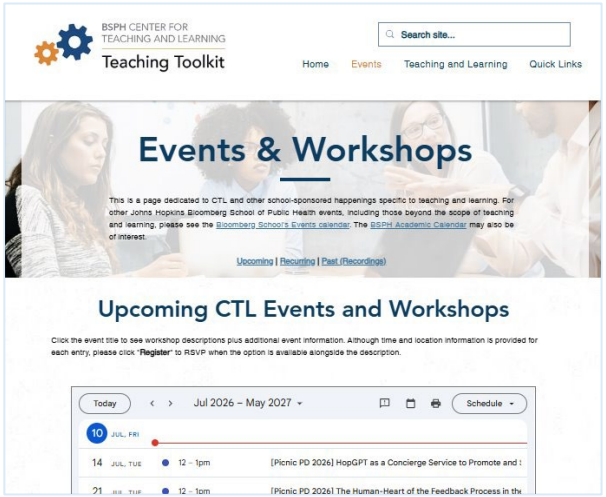
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Worksheet Activity 4: Reflection



Resources from CTL

CTL Events



Instructional Design Consultations (BSPH Only)



CoursePlus Faculty Guide

