AI in Education
Integrating AI into Assignments

DATE

NAME
TITLE
UNIT
CONTACT
Today’s primary learning objectives

• Examine strategies and methods for designing assessment activities
• Explore ways instructors and students can use AI chatbots for assignments
• Examine strategies and issues related to using AI for grading
Acknowledgements

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• **Smartsheets** for automating registration.
• **Outlook** and **Zoom** for event coordination.
• **Google** for web search...
Let’s stay human
Why should you care about AI?

• AI in education can be motivational
• AI skills are valuable
• Students want to learn about AI
• Using AI could make our lives easier
Explore MagicSchool.ai

- Access MagicSchool.ai
- Explore the various tools for students and teachers
Using AI in student assignments
Clarifying the terms

- Formative
- Summative
- Assessment
- Evaluation
- Feedback
- Practice
What are some guiding principles?

- Good assessment design comes first
- AI alone cannot pass the course
- Stay true to the high standards of scholarship
- Expert use requires expertise
Teaching strategies that can align with AI

Leverage multiple modalities
- More in-class activities
- Multiple modes of expression

Clarify grading practices
- Robust citation practices
- Clear assessment criteria

Assess learning throughout
- Focus on the process
- Leverage formative feedback

Meaningful activities
- Personalize assessments
- Use authentic tasks

More advanced learning
- Emphasize metacognitive reflection
- Prioritize higher-order thinking
A method for designing assignments

1. Why should we care about the assignment?
2. What are students supposed to learn to do? (a.k.a. learning outcome).
3. How will they demonstrate what they learned?
4. How will you measure what they demonstrate?
5. What do they need to practice?
6. What tools would enhance that practice?
Improving an assignment over time

1. Define goals and assess needs
2. Design and test a solution
3. Talk to students and colleagues
4. Get feedback, adapt, iterate

Diagram: A cycle with steps:
- Define goals and assess needs
- Design and test a solution
- Talk to students and colleagues
- Get feedback, adapt, iterate
Harvard instructors video playlist

- Short videos of Harvard instructors describing how they use AI
- Harvard Office of the Vice Provost for Advances in Learning

tinyurl.com/harvard-genAI-playlist
More examples of AI-powered lessons

- [AI Pedagogy Project](http://example.com) from metaLAB (at) Harvard
- [Exploring AI Pedagogy](http://example.com) from the MLA-CCCC Joint Task Force on Writing and AI
- [TextGenEd: Continuing Experiments, January 2024 Collection](http://example.com) from WAC Clearinghouse
How might you integrate students using AI into your assignments?
Using AI for grading
What purpose does grading serve?

- Motivation
- Track completion and progress
- Feedback
- Checkpoint for advancement
- Evaluation of quality
What are some guiding principles?

- Trust and transparency are foundational
- Empower humans in the loop
- Leverage AI for process-oriented tasks
- Aim to improve quality, not just efficiency
Calibrating grading criteria for AI

<table>
<thead>
<tr>
<th>Grade</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A+</td>
<td>Far exceeding AI outputs, an exemplar</td>
</tr>
<tr>
<td>A</td>
<td>Significantly better than AI</td>
</tr>
<tr>
<td>B</td>
<td>Better than AI, but still could be improved</td>
</tr>
<tr>
<td>C</td>
<td>Some human value added beyond generic AI outputs, needs work</td>
</tr>
<tr>
<td>D</td>
<td>Barely better than generic AI outputs, minimal human value added</td>
</tr>
<tr>
<td>F</td>
<td>Generic AI output, no human enhancement</td>
</tr>
</tbody>
</table>
AI tools at Stanford

At Stanford as of June 2024:

• Some developer AI tools are approved
• No AI chatbot is centrally supported for general use
• UIT security reviews are under way
• Limited chatbot pilots in SoM, GSB, and other units

See [GenAI Tools Evaluation Matrix](#) for latest status updates.
Responsible use of AI

• Privacy
• Security
• Access

Learn more at Responsible AI at Stanford
What can our guiding principles tell us?

1. Be transparent with students
2. Never put private or sensitive information into a chatbot
3. Get informed consent before you put student work into a chatbot
4. Don’t put copyrighted materials into a chatbot without permission
5. Help students make smart and informed choices
6. Take responsibility for anything you do using AI
7. Use the most accessible or affordable tools whenever possible
8. Provide alternatives where possible for those who can’t or don’t want to use AI
How might you use AI for grading-related tasks?
Design an AI-enhanced assignment
Design sprint activity

• Create a rough concept for an assignment that integrates AI.
• Work individually, in pairs, or in small groups.
• Practice using a methodical approach to designing assignments
• Capture your ideas to share.
Worksheet for designing an AI-powered assignment

bit.ly/Al-assessment-worksheet
What is your initial assignment concept?

What next steps might you take to further refine it?
Continue to engage

- Use AI chatbots for your work tasks
- Read the AI Teaching Guide on the Teaching Commons website
- Attend upcoming CTL workshops on AI
- Talk about AI with colleagues and students
Wrap-up activity

Insert link or QR code to your survey activity here.
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We encourage you to organize your colleagues to engage with AI topics. Consider how you might adapt, remix, or enhance these slides for your own needs.